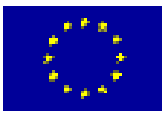


European Commission
Directorate-General for
Transport and Energy

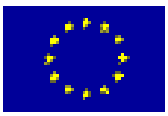
Mid-term/Ex-post evaluation of road safety projects financed during the period 1999-2004

TREN/A1/17 - 2003/Lot2/04/5

Final Report

August 2005

COWI



European Commission
Directorate-General for Transport and Energy

Mid-term/Ex-post evaluation of road safety projects financed during the period 1999-2004

TREN/A1/17 - 2003/Lot2/04/5

Final Report

August 2005

Report no.	P-61182-02
Issue no.	3
Date of issue	9 August 2005
Prepared	hgr,hpd,mkh
Checked	neo
Approved	hgr

Table of Contents

Table of Appendices

1 Executive summary

This mid-term/ex-post external evaluation was prepared by COWI under the existing COWI Service Framework Contract with DG TREN (TREN/A1/17-2003 Lot 2) covering ex-post and mid-term evaluations.

The evaluation study is part of DG TREN's mid-term review of the European Road Safety Action Programme [COM (2003)311 final].

The mid-term review is carried out in 2005, as this year represents the middle of the period with the objective of halving the number of fatalities by 2010. This objective was set in the White Paper "European Transport Policy for 2010: Time to decide" [COM (2001) 370 final]. The Commission adopted the European Road Safety Action Programme in 2003.

1.1 Objective and scope

The overall objective of the evaluation was to provide the Commission with information on the overall results of the projects supported by the EC from 1999-2004 as part of the implementation of the Road Safety Policy.

The evaluation aims at providing conclusions and recommendations on relevance, utility, effectiveness, efficiency and sustainability.

Scope of the evaluation
The scope of the evaluation is to evaluate the financial support by the Commission to research projects, procurement contracts and through targeted calls for proposals. The final evaluation sample includes 35 projects distributed as shown in the following table.

Number of projects included in the evaluation, divided into year and type of funding programme and contract type

	1999	2000	2001	2002	2003	Total
RTD grants	6	4	3	-	-	13 (37%)
Subvention contract	2	0	1	5	8	16 (46%)
Procurement contract	0	0	0	2	4	6 (17%)
Total	8	4	4	7	12	35 (100%)

The evaluation sample covers EC funding of approx. EUR 37 million and a total project value of EUR 64 million. In the period 1999 - 2004, the total amount of EU funding per year was approx. EUR 10 million for grants and approx. EUR 12 million for research projects. Prior to this evaluation, the EC commissioned an in-depth evaluation of 10 safety projects, 9 of which dealt with road safety. These 9 projects were therefore not included in the present evaluation.
The RTD grants were all given within the GROWTH programme. The grants amount to 37% of the number of projects in the evaluation sample, but account for 76% of the EU funding. The sample includes on-going as well as completed projects. A total of 15 projects, equivalent to 43%, were on-going at the time of the evaluation.

This financial support is only one part of the Commission's activities in implementing the policy. Other activities include the proposal of new legislation and collection of accident data.

The calendar time allocated to the evaluation was limited to a period of 3 months to allow DG TREN to do the midterm review of the Road Safety Action Programme based on the conclusions of this evaluation, an impact assessment and country profiles, studies which have been carried out in parallel. Therefore, the evaluation process was designed to mainly include project information provided by DG TREN directly or through the DG TREN website. Validation of the information was sought by contact to all 35 contractors. Furthermore, telephone interviews, based on question guides, were conducted with contractors from 5 completed projects and with 4 national road safety experts in the last stage of the evaluation. The interviews focused on results and impact.

Linking the Road Safety Action Programme and the supported projects

The Road Safety Action Programme (RSAP) was presented in 2003. It describes a number of Main Areas of Action for the Commission to contribute to the realisation of the target of halving the number of road fatalities.

The intervention logic for the RSAP was not developed at the design phase in an ex-ante evaluation. Therefore, the evaluation team established the following objective hierarchy to focus the evaluation and provide a basis for the assessment.

RSAP intervention logic

Global objective	Increase road safety within the Community, thereby contributing to an efficient and sustainable transport system.
Intermediate Objective	Halving the number of persons killed from 2000 to 2010
Specific objectives	1. Improve road user behaviour 2. Make vehicles safer 3. Improve road infrastructure
Main Areas of Action	1.1 Complying with basic road safety rules 1.2 Driver licensing, examination and training 1.3 Use of crash helmets 1.4 Safe commercial goods and passenger transport through guidelines and legislation 2.1 Consumer information (EuroNCAP) 2.2 Accident protection or passive safety 2.3 Accident prevention or active safety 2.4 Periodic technical inspection 3.1 Technical guidelines on infrastructure safety 3.2 Trans-European road network 3.3 Safety of tunnels 3.4 The new intelligent road concept and Galileo 3.5 Emergency services and care for road accident victims
Activities providing output	The projects funded under the RSAP
Input	Funding of projects

1.2 Main results

Relevance[1]

In general, the objectives of the 35 projects show a high degree of relevance vis-à-vis the problems and needs reflected in the RSAP.

However, the high degree of relevance is primarily due to the very broad description of Specific Objectives and Main Areas of Action in the RSAP. The evidence collected shows that the project objectives refer to the Main Areas of Action and Specific Objectives as outlined in the intervention logic, but this does not necessarily mean that evidence can be found that they correspond to the overall road safety problems (i.e. too many fatalities), addressed in the Intermediate Objective of "halving the number of persons killed from 2000 to 2010".

[1] Relevance is defined as the extent to which the project objectives correspond to the needs, problems and issues reflected in the RSAP.

This is caused by the fact that the nearly all-inclusive "Main Areas of Action" do not entirely fulfil the SMART criteria (i.e. being specific, measurable, realistic, accepted and timely) and lack a clear and systematic link to the global and intermediate objectives.

For many of the projects, this result is emphasised by the fact that there is no clear description of the actual baseline (the specific situation being addressed in the project). Such a description would have been helpful in assessing the relevance of the project objectives.

Effectiveness[2]

The assessment was undertaken for the completed projects. The evaluation shows that in general, the completed projects have produced the output outlined in their original project description. This indicates the contractors' capability and willingness to deliver the expected output.

The majority of the completed projects (18 of 20 projects) has achieved or is likely to achieve results in the Main Areas of Action, supporting the specific objectives. Those which are most likely to have a positive impact beyond the delivery of the agreed output are the projects which have already resulted in new legislation or in commercial products. For a number of the projects, the results are feasibility studies, dissemination of guidelines or input to further studies. The likelihood of such results eventually having an impact on a more global scale is unpredictable.

An important issue is the unclear linkage between the hierarchies of objectives in the RSAP described earlier. Although results are likely to support the Main Areas of Action, the impact on the overall objectives, corresponding to the problems and needs to be addressed, are often more diffuse.

The vague definition of objectives, addressing the problems, needs and issues at stake, and the missing of a systematic and documented linkage between the different levels of objectives, will cause low effectiveness of the projects in pursuing the global objectives.

Efficiency[3]

The efficiency of the financial performance of the individual projects has not been examined during this evaluation given that the 2004 in-depth evaluation carried out for 9 road safety projects included such an examination. However, the results from that study are taken as a useful input into the present evaluation and for the mid-term review of the RSAP as a whole.

---

[2] Effectiveness is defined as the extent to which specific objectives are attained and intended results are achieved, in accordance with the definition given in the Financial Regulation applicable to the general budget of the European Communities, art. 27 (2).

[3] Efficiency is defined here as the extent to which the best relationship between the resources employed and the results is achieved, in accordance with the definition given in the Financial Regulation applicable to the general budget of the European Communities, art. 27 (2).

In the present evaluation the relationship between the resources employed and the results achieved was assessed by using the results from the EC report on costs and benefits of road safety measures “Priorities in EU Road Safety. Progress report and ranking of actions”.[4] That report aimed at doing a cost-effectiveness analysis of different road safety measures. The report was used as one of the supporting documents for the White Paper and has thus influenced the focus of the RSAP.

The main reason for using that report as a starting point was that the project documentation examined in this evaluation provided very limited information on the expected results in terms of the resources used to achieve the results.

The findings for the projects under review can be summarised as follows in relation to the Commission report "Priorities in EU Road Safety":

- Only a minority of the projects (4) deals with measures assessed as being cost-effective

- Another minority of the projects (4) deals with measures assessed as maybe being cost-effective, but needing further research. Only one of these projects actually includes an analysis of cost-effectiveness

- The rest of the projects do not deal with measures assessed as being cost-effective.

Altogether, the picture is that cost-effectiveness is difficult to assess for the road safety projects under review, given the lack of project information on costs versus results. With this in mind, it is uncertain how cost-effective are the projects in general in terms of results and impact. The assessment suggests that the efficiency in terms of achieving the desired effects at a reasonable cost should be questioned. This difficulty is however a general problem for many road safety initiatives.

Finally, it must be noted that the evaluated projects are first steps in a sequence of activities (feasibility studies, research activities etc.), entailing a process of creating impact. Therefore, the assessment of resources versus effects is based on the assumption that actions developed on basis of the projects reviewed are actually carried out to ensure impact.

Utility[5]

The overall assessment is that the funded projects are likely to contribute to a positive impact on road safety and can therefore be of use for beneficiaries in member states, for the Commission and for other important stakeholders. Nevertheless, the extent and nature of this positive impact cannot be predicted, because a majority of the projects has no description of the actual baseline (the

[4] See "Priorities in EU Road Safety. Progress report and ranking of actions" [COM (2000) 125 final]

[5] Utility is defined as the extent to which effects correspond with the needs, problems and issues addressed. Therefore, the assessment concerns the completed projects.

number of accidents which can realistically be influenced). Furthermore, they deal with measures that are not considered priority measures with high efficiency according to e.g. a previous Commission report "Priorities in EU Road Safety".

For a few projects (3 out of 20 completed projects), evidence exists of the actual extent of the likely impact, but only one of these projects (DRL) deals with a measure which has previously been given priority in the Commission report "Priorities in EU Road Safety". It is in the project estimated that the implementation can lead to a substantial reduction of more than 2,400 fatalities per year.
For a number of projects, it may be still possible to establish a baseline, by means of further analyses and e.g. the use of EC statistics on road accidents (the CARE database). Such analyses could be useful to achieve added value from these projects, enabling the Commission to assess the expected benefit of the projects (i.e. making them quantifiable and in doing so provide the basis for an effective performance monitoring) and so to enhance their utility.

Another important factor of the existing RSAP is the timeframe for reducing the number of fatalities by 2010. Most of the projects will have difficulty contributing to a reduction before 2010, given the type of project. Real impact will not happen until close to 2010 or later.

Sustainability[6]
The assessment was based on expert opinions on the "duration of effects" of road safety measures. A long duration of the effects after supporting stopped equals a high degree of sustainability.

The starting point was a systematic differentiation of the duration of road safety effects, found in the RTD project PROMISING (Promotion of mobility and safety of vulnerable road users, a RTD project supported by the Commission in 1998 - 2001). The findings from this project were used together with evidence gathered on the projects to indicate the level of sustainability of the individual projects in the evaluation.

Although the assessment is very generic and the exact duration of each of the types of measures is uncertain, it shows that the road safety projects tend to deal with types of measures having a long duration and a high degree of sustainability of impact.

1.3 Conclusions

In general, the projects in the evaluation are all relevant for the specific objectives and the Main Areas of Action in the RSAP, but the lack of clear and focused linkage between the Main Areas of Action and the overall problems and needs indicates that the overall focus of the RSAP is too broad, lacking a

[6] Sustainability is defined as the extent to which positive effects are likely to last after the intervention has terminated. Therefore, the assessment concerns the completed projects.

systematic development of the intervention logic and setting of indicators for later evaluations.

The evidence gathered shows weaknesses in the ability to predict the actual impact on improving road safety. This is partly due to the fact that the projects are of a preparatory nature, requiring several follow-up activities for impact to materialise on road safety conditions. Furthermore, most of the projects do not contain an assessment of how many lives can be saved. Hence, the actual contribution to the RSAP objective of halving the number of fatalities by 2010 cannot be assessed. It is evident that for many of the projects, their contribution will not show before 2010 or later.

The evaluation sample includes few projects dealing with road safety measures identified as being cost-effective in a previous Commission report on priorities in EU road safety. A number of projects do not show any evidence of being cost-effective, indicating that no systematic assessment of cost-effectiveness has taken place in launching the projects.

For 2 years, until 2003, calls for proposals were evaluated in a continuous process. In 2003 and 2004, DG TREN established a competition-based annual process of proposal evaluation, targeting of relevant objectives of the RSAP. The present evaluation includes only projects launched no later than 2003. Therefore, the evaluation does not provide a detailed analysis of the changes resulting from the annual competition-based evaluation of proposals. A more systematic approach is expected with this modified design of the calls for proposals.
The focus on dissemination by DG TREN, through their home page with substantial project information, should be highlighted. Dedicated web sites also exist for the majority of the projects. Furthermore, the participation of many relevant stakeholders in the projects makes it likely that the output will be absorbed and used by them and other relevant beneficiaries.

1.4 Recommendations

Based on the findings of the evaluation, the following main recommendations can be made:

- The future road safety actions launched by the Commission should, to a greater extent, be launched on the basis of knowledge on priority measures with high cost-effectiveness and impact. Preparatory work in the form of ex-ante assessments may be needed to ensure this improved focus. The Impact Assessment Study carried out as part of the mid-term review can be seen as a first step.

- In any future road safety action programme, the intervention logic, giving a clear description of the hierarchy of programme objectives, should be presented. It should include a description of the main problems and needs to be addressed, on the basis of statistics from the CARE database and the

various international studies analysing the feasibility of different road safety measures.

- Future call for proposals should take their point of departure in a clear description of the programme objectives, including a description of the baseline situation for the issues in focus, as well as an indication of the timeframe for the expected impact.

- The work started by DG TREN to establish performance indicators should be continued. This will support the prioritisation and monitoring of future evaluations on policy level. The CARE database will be an important element in this process.

- The setting up of objectives and targets should be adjusted:

  - Short-term targets, covering a timeframe of e.g. 5 years, should be established on the basis of the impact assessment carried out as part of the mid-term review of the RSAP. The targets have to be quantifiable, with clearly defined indicators. For example, objectives to implement daytime running lights in the EU should be accompanied by an indicator of the number of member states which have in fact implemented them, as well as milestones for when it is expected to happen.
  - Long-term objectives or a vision should be formulated to support long-term initiatives which cannot demonstrate impact in the short term.

The calls for proposals should request that tenders include an analysis of key partners from member states to be involved. This would ensure that all future projects exploit and build on road safety expertise available in all member states.

2 Introduction

2.1 Background

The Directorate General for Transport and Energy (DG TREN), and in particular the unit responsible for road safety (Unit E3), have outsourced the expertise to carry out a mid-term/ex-post evaluation, focusing on a sample of completed and on-going projects financed under the EU Road Safety Policy from 1999 to 2004.

The White Paper "European Transport Policy for 2010: Time to decide" [COM (2001) 370 final] sets the overall goal of road safety; to halve the number of fatalities by 2010.

The Commission adopted the European Road Safety Action Programme [COM (2003) 311 final] in 2003 to implement the road safety part of the transport policy.

The present mid-term/ex-post evaluation is part of a mid-term review[7] of the action programme and will be a starting point for the programme revision.

2.2 Objective of the evaluation

The overall objective of the evaluation is to provide the European Commission with information on the results of the projects that the EU has supported financially from 1999-2004 as part of the implementation of the EU Road Safety Policy. The funded projects are only one part of the Commission activities in implementing the policy. Other activities include e.g. proposing new legislation and collecting accident data.

The scope of this report is to evaluate the financial support by the EC for research projects, procurements and targeted calls for proposals. During the inception phase, the final evaluation sample was agreed to be 35 projects,

[7] The Commission has so far launched two other studies as part of the mid-term review. First, an ex-post evaluation was conducted in 2004, evaluating 10 funded projects, "Ex-post evaluation of specific projects funded under the Transport Safety Policy", carried out by The European Evaluation Consortium. Second, the Commission launched an Impact Assessment Study of the programme revision in January 2005.

covering EU funding of approx. EUR 37 million. The total amount of EU funding per year has in the period 1999 - 2004 been approx. EUR 10 million for grants and approx. EUR 12 millions for RTD projects.

According to the TOR of the study, the evaluation must provide conclusions and recommendations by assessing the following criteria:

- **Utility**: the extent to which effects correspond with the needs, problems and issues to be addressed
- **Effectiveness**: the extent to which effects contribute to the achievement of the general objective of reducing fatalities
- **Efficiency** of the ended and on-going projects
- **Sustainability** of the effects after the end of the intervention
- **Future** - final decision on the opportunity of continuing with the new projects and how to improve or reorient the action programme.

A review of the projects to be evaluated showed that a fairly large part were still on-going or recently completed. Hence, the evaluation should include elements of both interim and ex-post evaluation methodology. Therefore, it was decided together with DG TREN to include an assessment of *relevance* (the extent to which an intervention's objectives are pertinent to needs, problems and issues to be addressed). Although ex-post evaluations normally do not focus on relevance, EU guidelines for evaluation suggest inclusion of relevance in the context of interim evaluations.[8]

The present report has been prepared by COWI under the existing COWI Service Framework Contract with DG TREN covering Ex-post and Mid-term Evaluations (Ref. TREN/A1/17-2003 Lot 2) and in response to the Terms of Reference included under Work Order TREN/A1/17-2003/Lot 2/04/5.

Readers should note that the report presents the views of the consultant, which do not necessarily correspond with those of the Commission.

[8] "Evaluating EU activities. A practical guide for the commission services". European Commission, July 2004

3 Policy context

The present EU policy on road safety is presented in the White Paper "European Transport Policy for 2010: Time to Decide" [COM (2001) 370 final]. The document sets the target for road safety; to halve the number of fatalities by 2010. The White Paper recognises that the achievement of the goal is a shared responsibility with national and local authorities being the main actors. Nevertheless it is indicated that

"the European Union too needs to contribute to this objective, not just through the exchange of good practise, but also through action at two levels:

- *harmonisation of penalties, and*
- *promotion of new technologies to improve road safety".*[9]

The implementation of the road safety policy is carried out through the European Road Safety Action Programme (RSAP) [COM (2003) 311 final]. The RSAP describes several actions and proposals necessary in order to realise the target set in the White Paper. In the RSAP, an illustration of the shared responsibility is given based on the example of actions needed to increase use of seat belts. The EU needs e.g. to make rules on the mandatory fitting and use of equipment as well as setting up performance standards. At the national level, e.g. implementation of EU rules is needed together with securing compliance through resources for police enforcement. At the regional or local level, e.g. the police enforcement is needed as well as local campaigns in schools.

As mentioned previously, the objective of the evaluation is to assess EC financed projects from 1999-2004. As the White Paper was published in 2001, projects funded before cannot be directly associated with the present policy and target. Nevertheless, the overall international knowledge of needs and problems in the road safety area has not changed dramatically over the last 5-10 years. That is, the focus on road users, vehicle technology and road infrastructure have been well known ways of dealing with road safety for some years.

These have also been key points in previous EU policy documents on road safety. In 1997, the EU Commission presented the report "Promoting Road Safety in EU. The Programme for 1997-2001" [COM (97) 131 final)]. This report included a road safety strategy for the coming years and pointed out the

[9] page 66, "European Transport Policy for 2010: Time to decide" [COM (2001) 370 final]

need to look at the system as a whole, and not isolated at road infrastructure, vehicles technology or road users. This integrated approach was to focus on the human factor and the key elements were the following:

- *"A recommendation of the Commission to fully take into account the very high costs of road accidents in a more widespread application of cost-benefit assessments for road safety measures.*

- *An integrated EU information system including info on accident statistics, exposure data, implementation of road safety measures, research, best practises and enforcement.*

- *Measures to combat fatigue and the use of alcohol, medicines and drugs whilst driving.*

- *Application of technology and telematics to ensure safer driving.*

- *Coordination and support of safety rating systems in order to provide scientifically correct information to the consumer on the safety aspects of vehicles."*[10]

The call for proposals made within the GROWTH Research Programme[11] referred to the policy document "Promoting Road Safety in EU. The Programme for 1997-2001". A number of the projects in the present evaluation sample are funded as part of the GROWTH Research Programme.

Furthermore, other projects funded as road safety activities from 1999 up to 2002 - when the White Paper was presented - were also launched within the context of the policy paper from 1997. A number of these projects are also included in the evaluation sample.

Finally, it must be noted that the results of many of the activities funded before 2003 have provided input and knowledge to the actual formulation of the RSAP. Therefore, although a number of the projects were launched before the presentation of the RSAP, it is still appropriate to assess their relevance in relation to the RSAP.

[10] page 20, "Promoting Road Safety in EU. The Programme for 1997-2001" [COM (97) 131 final)]

[11] The GROWTH (Competitive and Sustainable Growth) Research Programme is one of four thematic research programmes under the fifth RTD Framework Programme of the EC.

4 Study methodology

4.1 The use of the Logical Framework Approach

The focus of the evaluation is on the connection between the objectives in the RSAP and the projects in the evaluation sample.

To deal with the complexity of the evaluation sample and to illustrate how we understand the overall framework of the evaluation and the intervention logic, we have developed a matrix based on the Logical Framework Approach (LFA), se Table 4.1.

First, the LFA matrix is used to illustrate the link between the overall objectives and the main areas of action described in the RSAP, thereby creating an overview of the programme. The intervention logic for the RSAP was not developed at the design phase in an ex-ante evaluation. The main areas of actions in the RSAP are used to assess the relation between the various levels of objectives.

Second, the LFA matrix illustrates the linkage from the individual project objectives to the RSAP objectives.

In order to assess the RSAP, it is crucial to note that even though the Programme includes an intermediate quantified objective, the Programme also highlights that this target can only be achieved through a shared effort at different levels of government. The RSAP mentions that

"The main aim is to provide the motivation for launching shared activities and to stimulate these activities at all levels of actions."[12]

[12] Page 9 in the RSAP

Table 4.1 LFA matrix covering the Road Safety Action Programme

	Intervention logic
Global objective	Increase road safety within the Community, thereby contributing to an efficient and sustainable transport system.
Intermediate objective	Halving the number of persons killed from 2000 to 2010
Specific objectives	1. Improve road users behaviour 2. Make vehicles safer 3. Improve road infrastructure
Main areas of actions	1.1 Complying with basic road safety rules 1.2 Driver licensing, examination and training 1.3 Use of crash helmets 1.4 Safe commercial goods and passenger transport through guidelines and legislation 2.1 Consumer information (EuroNCAP) 2.2 Accident protection or passive safety 2.3 Accident prevention or active safety 2.4 Periodic technical inspection 3.1 Technical guidelines concerning infrastructure safety 3.2 Trans-European road network 3.3 Safety of tunnels 3.4 The new intelligent road concept and Galileo 3.5 Emergency services and care for road accident victims
Activities giving an out-put	The projects funded under the RSAP
Input	Funding of projects

4.2 Data collection

The primary source of data for the assessment of the project sample is reports from the projects and project applications provided by the Road Safety Unit of DG TREN directly or through the DG TREN website. Supplementary documents and information were received by contractors following either e-mail contact or a telephone interviews.

The availability and quality of relevant information has differed widely between the projects. For 4 projects, only description of works in annexes of the original applications for grants was available. For the other projects, more relevant information like e.g. minutes of meetings, deliverables, interim reports, final reports or dedicated websites were available. A list of the relevant documents used for each of the projects is available at the end of the individual project data sheets. The datasheets are found in Annex I.

Draft datasheets and supplementing questions (see Annex II) were submitted to DG TREN and the contractor for validation by e-mail. Comments have been received from 23 contractors.

Telephone interviews (see Annex II) were conducted in the last stages of the evaluation with contractors from five completed projects[13] and one DG TREN official.[14] These interviews focused mainly on issues concerning utility and sustainability.

Interviews were also carried out with four national road safety experts from Austria, Denmark and Ireland. These interviews focused on the use of results in a national context (se Annex II).

Finally, as part of the assessment, a number of EU policy documents on road safety and other relevant documents were reviewed (see Annex III).

4.3 Assessment of projects

A systematic compilation of information concerning individual projects is documented in the datasheets. The datasheets furthermore include the assessments made of the individual projects as background for the overall assessment of the support given in 1999 - 2004. An example of the content of a datasheet is shown in Figure 4.1.

[13] The projects were CONSPICUITY, EURORAP, GLARE, ROSE25 and TRAINER.
[14] This interview concerned CONSPICUITY and DRL.

Project title	Improved frontal impact protection through a world frontal impact dummy - FID	
Contractor	TNO Automotive - Organisation for Applied Scientific Research	
Project period	From: 01.01.2002	To: 30.10.2003
Type of contract	RTD Contract	
Budget in EURO	Total: 2,834,251	EU contribution: 1,781,345
Call for proposal/Programme	5th RTD Framework Programme	
Brief description of project	The project objective is to contribute to the reduction of the amount of injured and killed car occupants involved in frontal collisions, by developing improved frontal crash test dummies for future crash testing. The project analyses the need for improvements of frontal crash test dummies based on accident data. Based on biomechanical studies, the project has developed improved parts for a test dummy. The results are widely disseminated to relevant international organisations dealing with harmonisation of standards.	
	Key questions	Assessment
Utility	How is the project objective linked to programme objective?	The project has a good connection to the intermediate objective of making vehicles safer, and can be seen as a relevant part of the programme output on stricter legislation and voluntary agreements on passive safety.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project has developed parts to improve frontal crash test dummies and thus lived up to its objective. The results achieved support road safety objectives. The project output have been presented to working groups of the International Standard Committee (ISO) and other relevant organisations for the implementation of harmonised rules for use of test dummies. Furthermore, the consortium actively promotes that the dummy will be evaluated by the car industry as well.
Utility (used for completed projects	Does the project include a baseline and a potential impact assessment?	The baseline for the project is the number of accidents with frontal car crashes. The project mentions that experience from France and USA show that approx. 45 % of car occupant casualties occur in such accidents. It is not described to what extent the project output will be able to assist in reducing such numbers.
Sustainability (used for completed projects)	Will project result last after the project has been completed?	Provided that project results will be implemented, the impact will be at least equivalent to the lifetime of vehicles.

Figure 4.1 Example showing the datasheets used in the assignment

To assist the overall assessment, a schematic assessment score was used for the individual projects.

Relevance
Relevance is here defined as the extent to which the project objectives correspond to the needs, problems and issues reflected in the RSAP.

The RSAP describes the challenges to be met in the road safety field, and the evaluation team consider these challenges to be synonymous with the needs, problems and issues to be addressed.

The schematic score used for the assessment:

- High degree of relevance
- Some degree of relevance
- Limited degree of relevance
- No relevance

The score "high degree of relevance" reflects that the project objectives directly refers to either the global, intermediate or specific objectives and thus for sure can be regarded as relevant. The score "some degree of relevance" reflects that the project objectives more indirectly refer to the RSAP objectives but are still assessed as being relevant. A "limited degree of relevance" reflects that the project objectives only very indirectly can be said to refer to the RSAP objectives.

Effectiveness

Effectiveness is defined here as the extent to which specific objectives set are attained and intended results are achieved.

The following schematic score has been used in the process of assessing effectiveness:

- Objectives are achieved
- Objectives are only partly achieved or are likely to be achieved
- Objectives are not achieved
- No information available due to on-going project

The assessment of effectiveness is based on comparing project objectives with project output. Second, the results have been assessed against the specific objectives in the RSAP.

The assessment of the actual result of achieving RSAP objectives was carried out for the 20 completed projects. For the majority (14) of these, the assessment was based on evidence from the project documents and comments received by e-mail from contractors when commenting draft project data sheets. For 6 projects, the assessment included evidence from telephone interviews with project contact persons and a DG TREN official.

Utility

Utility is the extent to which effects correspond with the needs, problems and issues to be addressed.

Utility has been assessed by describing the long-term impact that these projects are likely to achieve. To obtain indications of the utility, the following issues were included in the assessment of the completed projects:

- Existence of a specific baseline providing background for an assessment of impact
- Possibility of quantifying the impact
- Possibility of predicting the actual time for achieving the impact

Sustainability
Sustainability is the extent to which positive effects are likely to last after an intervention has terminated.

The road safety objective of 50% reduction as per 2010 has not yet materialised with the reduction of fatalities in 2004 for EUR15 of -18% and for EUR25 of -6%. Given that the impact has not yet materialised, it is uncertain to assess how long it will last. Nevertheless, we have assessed utility through using expert opinions on the "duration of effects" of road safety measures.

Efficiency
Efficiency is the extent to which the desired effects are achieved at a reasonable cost, seen as the best relationship between resources employed and results achieved.

The efficiency of the projects in contributing to the RSAP objectives have been assessed by using existing information on efficiency of different road safety measures. Within the last 5 - 10 years several studies have been made at national as well as international level attempting to identify the most efficient road safety measures by carrying out cost benefit studies or cost effectiveness studies. The results from such studies have been used as background for the assessment.

4.4 Limitations

Certain methodological problems encountered during the evaluation process gave some limitations for the ability of drawing conclusions. The following problems were identified:

Time available and availability of information
Given the limited number of calendar days set aside for the evaluation, it was decided that it should mainly be based on existing project information from DG TREN. During the evaluation process it became clear that due to the lack of consistent record keeping and the replacement of officials in DG TREN, available project information was very difficult to track in DG TREN for several of the projects.

The project documentation was briefly studied and a limited number of follow-up interviews were arranged. Also, the type of information available varied significantly among the projects. While some of the projects were briefly described in summary reports or leaflet documentation, others were described in more detail. The Commission has been unable to provide supplementary information on time to start the evaluation process, on those projects where documentation turned out to be rather limited.

Lack of programme ex-ante considerations
The programme was established without an ex-ante evaluation. So, in order to establish an overview of the programme, the evaluation team had to develop a

hierarchy of objectives which served as the programme framework for applying the different evaluation criteria.

Type of projects

All the projects included in the evaluation have a preparatory character and can be described as being only one among several steps towards achieving impact in the form of saved lives. Examples are RTD projects giving input to new technical specifications for testing vehicles or feasibility studies on introducing legislation on compulsory use of daytime running lights. The impact of the projects on the number of road fatalities will in many instances only materialise after some years and only after implementation of further follow-up actions, projects, studies, and legislation.

Since most of the projects lack a clear and well-defined baseline that documents the initial situation, expressed in e.g. number of accidents, road behaviour, etc., we have found it useful to assess the relevance of the projects.

5 The evaluation sample

5.1 Selection process

The evaluation includes a sample of 35 projects with a total EU funding of approx. EUR 37 million.

At the beginning of the assignment, DG TREN provided the consultant with a list of potential projects to be included in the evaluation sample. The list contained road safety projects funded by the EU Commission within the period from 1999 to the beginning of 2004. It was agreed to include projects with a total sum of EU funding of EUR 50 million.

During the inception phase, the final evaluation sample was selected from this list. The following criteria were used for the selection:

- Projects launched as part of road safety policy programmes
- Projects not evaluated earlier in the "Ex-post evaluation of specific projects funded under the Transport Safety Policy"[15]
- Representation of procurement, subvention and RTD contracts
- Representation of a wide range of project costs
- Representation of a wide range of output/results.

The first criterion was used by DG TREN prior to the start of the assignment, to exclude projects launched to support administrative programme tasks, e.g. translation and IT support and other funding without a specific road safety aspect.

The three last criteria were set up to ensure that no bias existed concerning the contracting method, the size of projects or the actual road safety output. No projects were excluded on the basis of these three criteria, as the total evaluation sample was already limited to a total EU contribution below EUR 50 million using the first two criteria.

The final evaluation sample was agreed by DG TREN.

---

[15] TEEC, 2004: ""Ex-post evaluation of specific projects funded under the Transport Safety Policy" including the road safety projects ROSITA 1 and 2, EuroNCAP, ETSC, CESARE, RESPECT, CARE, SARTRE. TISPOL, EuroBOB. http://europa.eu.int/comm/dgs/energy_transport/evaluation/activites/transports_en.htm.

DG TREN[16] has stated that the total number of contracts managed by the Road Safety Unit from 1999 until now amounts to 288. An elimination of contracts relating to translation, computer assistance, printing of leaflets etc. brings the figure down to 76 relevant contracts related to road safety. The previous evaluation[17] included 9 of these contracts; some of the contracts were actually related to energy savings, and some of the contracts had just been signed in 2004 and have not provided sufficient information for an evaluation yet. The projects from the remaining 35 contracts are all included in this evaluation sample. The total amount of EC funding per year has in the period 1999 - 2004 been approx. EUR 10 millions for grants and approx. EUR 12 millions for RTD projects.

5.2 Characteristics of the sample

The evaluation sample can be described according to the following characteristics:

- Funding programme
- Contract type
- Year of funding
- Level of completion
- Project size in Euro (total cost and EU contribution)
- Technical output

Projects on road safety funded partly or completely by the EU Commission in the period 1999-2004 can be divided into:

- Research projects as part of EU RTD framework programmes
- Other funded projects as part of the dedicated implementation of EU Road Safety Policy.

Thirteen of the projects in the evaluation sample were RTD projects. These were all funded by a thematic research programme, GROWTH 1998-2002, under the fifth RTD framework programme. [18] The GROWTH research programme included two key action areas relevant for road safety research; namely "sustainable mobility and intermodality" and "land transport and marine technologies". Projects relevant to road safety within these key action areas were managed by a project officer from DG TREN, Unit E3 (Road Safety Unit). The EC contribution to these projects is between 40% and 95%.

The remaining 22 projects are all part of the dedicated implementation of EU transport policy with focus on road safety. Until 2003, these projects were all funded on an annual basis under the budget line B2-7020. For 2004, the

[16] Information given by DG TREN official at a steering group meeting on 13 April 2005.
[17] See footnote 11.
[18] Competitive and sustainable growth is one of the four thematic programmes of the Fifth RTD Framework Programme 1998-2002. For further information see http://www.cordis.lu/growth/home.html.

Transport Safety Policy is funded according to the new activity-based budgeting. No projects funded on the 2004 budget are included in this evaluation, as these projects cannot yet provide sufficient information for the evaluation.

The projects funded under the Transport Safety Policy were launched either as subvention contracts, based on calls for proposals within a limited number of programme themes designed by DG TREN, or as procurement contracts based on a call for tender against a clearly defined specification set by DG TREN. EC contribution to subvention contracts can be up to 50%. In procurement contracts, the EC contribution is 100%.

Table 5.1 Number of projects included in the evaluation, divided into year and type of funding programme and contract type

	1999	2000	2001	2002	2003	Total
RTD grants	6	4	3	-	-	13 (37%)
Subvention contract	2	0	1	5	8	16 (46%)
Procurement contract	0	0	0	2	4	6 (17%)
Total	8	4	4	7	12	35 (100%)

Table 5.2 Projects included in the evaluation, divided into funding programme and contract type (title of projects)

	Completed project	On-going project
RTD grants	ADVISORS, ECBOS, FID, IMMORTAL, TRAINER, TRAVEL GUIDE, VIRTUAL	FORMAT, HASTE, PENDANT, PROSPER, RISER, VC-COMPAT
Subvention contract	CITA 1, CITA 2, EURORAP 1, EVI, GLARE, MAIDS 2001, YETD	ALCOLOCK, ETAC, IDELSY, MEDRIL, NPACS, SARAC II, SEC BELT, SPEED ALERT, YOUTH ON THE ROAD
Procurement contract	CONSPICUITY, DRL, ROSE 25, SCHOOL TRANSPORT, TIS STUDY, TRANSPORT COMPANIES	-

The duration of the individual projects varies from approx. one to approx. three years. Furthermore, the sample includes on-going as well as completed projects. A total of 15 projects equivalent to 43% were on-going at the time of the evaluation.

The evaluation sample includes projects with a total project value of approx. EUR 64 million and a total EC contribution of approx. EUR 37 million. GROWTH projects amount to 37% of the number of projects in the evaluation sample but amount for 76% of the EU funding (see Figure 5.1).

Table 5.3 Total costs of projects included in the evaluation, divided into year and type of funding programme and contract type (EUR million, rounded figures)

	1999	2000	2001	2002	2003	Total	
RTD grants	18	15	12	0	0	45	(70%)
Subvention contract	1	0	1	7	8	17	(27%)
Procurement contract	0	0	0	1	1	2	(3%)
Total	19	15	13	8	9	64	(100%)

Table 5.4 EC contribution to project cost for projects included in the evaluation, divided into year and type of funding programme and contract type (EUR million, rounded figures)

	1999	2000	2001	2002	2003	Total	
RTD grants	12	8	8	0	0	28	(76%)
Other grants							
Subvention contract	0,6	0	0,4	3	3	7	(19%)
Procurement contract	0	0	0	1	1	2	(5%)
Total	13	8	8	4	4	37	(100%)

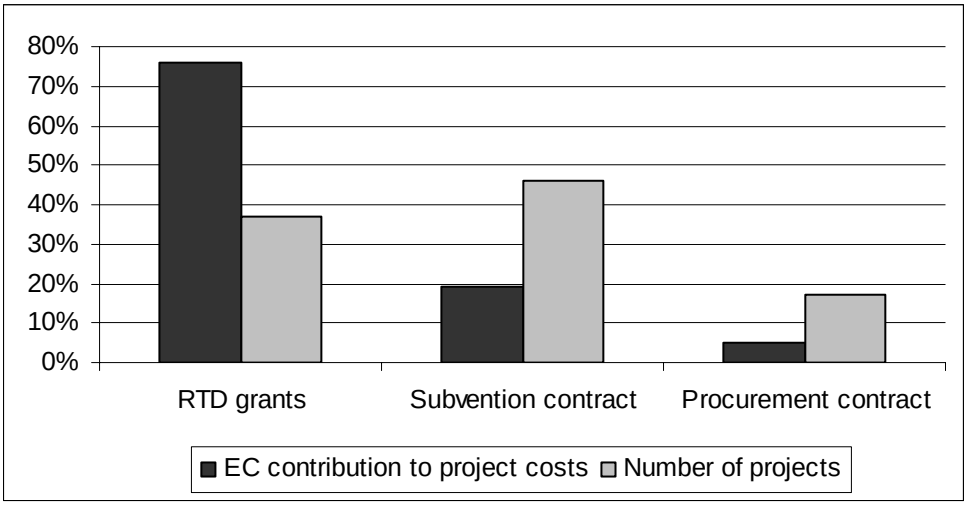


Figure 5.1 The evaluation sample divided into RTD grants, subvention contracts and procurement contracts from left to right. The dark columns illustrate division of EC contribution to project costs. The light columns illustrate division into number of projects.

The Logical Framework Approach (LFA) illustrated in Table 4.1 was used to connect the projects to the RSAP objectives. Based on this approach, the result shows that 12 projects have primarily focused on vehicles, 8 projects have focused on road users and 3 projects have focused on road infrastructure. In

addition, 11 projects have focused on more than one of the specific objectives. One project has not focused on any of these objectives.

Example of a project covering more than one objective

The ETAC (European Truck Accident Causation) project is an example of a project addressing more than one objective. The project aims at identifying causes for accidents involving trucks. The project has a good connection to the objective of making vehicles safer, but the results may turn out also to address the objectives of improving road infrastructure or improving road user behaviour. This will depend on the outcome of the accident analyses.

The RTD grants were all part of the GROWTH Research Programme (specific programme Transport). The programme had a broad aim with road safety being one out of many programme areas. Five of the 13 RTD grants were directed only on making vehicles safer and further four of them included making vehicles safer as well as other road safety objectives.

The subvention and procurement contracts are spread more evenly on the specific objectives. Furthermore, evidence provided by DG TREN officials confirm that projects launched in 2004 (and not included in this overview) are to a higher degree than the previous projects directed towards improving road users behaviour and road infrastructure. This tendency represents a movement away from vehicle technology projects towards a more broad composition of projects from 1999 to 2004. In 2003 and 2004, only 3 out of more than 30 launched projects deal with vehicle technology.

This finding corresponds with the fact that before the presentation of the White Paper on transport policy in 2001 and the subsequent presentation of RSAP in 2003, road safety projects were funded mainly as part of RTD programmes focusing more on technological development and growth perspectives than on dedicated road safety objectives.

Table 5.5 Projects included in the evaluation divided in accordance with RSAP specific objectives

Specific objective	Number of projects
Making vehicles safer	12
Improving road user behaviour	8
Improving road infrastructure	3
More than one objective	11
None of the objectives	1
Total	35

6 Results of the main evaluation criteria

This chapter presents the results of the assessment of the main evaluation criteria:

- Relevance
- Effectiveness
- Efficiency
- Utility
- Sustainability

Further, the chapter summarises the results and focuses on the link between the Road Safety Action Programme and the evaluation sample as a whole.

6.1 Relevance

In general, all the projects - except one - address one or more of the specific objectives of RSAP - i.e. improving road users' behaviour, making vehicles safer or improving road infrastructure - and can therefore be assessed as being relevant (see Table 6.1). The project which does not address these objectives is the CITA 2 project, which focuses strictly on environmental impact.

Table 6.1 Assessment of the relevance of project objectives to the problems, needs and issues to be addressed.

Assessment score	Number of projects
High degree of relevance	28
Some degree of relevance	6
Limited degree of relevance	0
No relevance	1
Total	35

Source: Annex I, Project Data Sheets.

The remaining 34 projects can be considered to fulfil the relevance criteria, although 6 of the projects were assessed as having "some relevance".[19] The

[19] The 6 projects assessed as having some connection are MEDRIL, PROSPER, ROSE25, TRAVEL-GUIDE, VIRTUAL and YOUTH ON THE ROAD

reason for giving this slightly lower score was that these projects had a more indirect way of addressing needs with no clearly defined baseline. Nevertheless, these projects are also seen as being relevant.

Example of a project with "some degree of relevance"

The project MEDRIL (a practical study of the medical examination of driving licence holders in 4 EU member states) links only indirectly to the objective of improving road user's behaviour. The project aims at giving recommendations to the Commission on a procedure for medical examinations of driving licence holders. Indirectly, this may be seen as a way of getting more persons to drive only when they are well, thus improving road users' behaviour in general. Nevertheless, no baseline information is given in the project description on the actual magnitude of the problem due to a lack of medical examination.

Example of a project with a "high degree of relevance"

The on going project IDELSY (Initiative for Diagnosis of Electronic Systems in Motor Vehicles) aims The aim of the project is to develop and test inspection procedures for complex, electronically regulated and safety relevant systems to be used in the main vehicle inspection. The aim has a high relevance on the specific objective of making vehicles safer by improving test procedures for new vehicles. The correspondence to the intermediate objective of reducing the number of road fatalities by 2010 is less clear due to a lack of evidence on the extent and nature of the problem - the number of road fatalities.

The overall positive result of the analysis of the projects' relevance should be seen against the background that the range of main areas of actions and specific objectives in RSAP is comprehensive and nearly all-embracing. In other words, the RSAP is not focused in terms of prioritizing SMART objectives, that is, objectives being specific, measurable, realistic and timely. It would be difficult to formulate any road safety project that could not fit within these main areas of action. The main areas of action do not give targeted guidance for the formulation of precise project objectives. It is therefore not surprising that (almost) all of the funded projects are linked to the objectives of the RSAP and can be assessed as being relevant at the programme level (see Figure 6.1).

Main areas of actions	Evaluation sample (activities)	
1 Improved road user behaviour	MAIDS PENDANT SCHOOL TRANSPORT	TIS STUDY SEC SAFETY BELT
1.1 Complying with basic road safety rules through information and harmonisation of rules	ROSE 25 SPEEDALERT YOUTH ON THE ROAD ALCOLOCK TRAVEL GUIDE HASTE	EVI IMMORTAL PROSPER YETD TRANSPORT COMPANIES
1.2 Driver licensing, examination and training through guidelines and harmonisation of rules	MEDRIL GLARE IMMORTAL TRAINER	VIRTUAL YETD ROSE 25 TRANSPORT COMPNIES
1.3 Use of crash helmets through information on best practice		
1.4 Safe commercial goods and passenger transport through guidelines and legislation	TRANSPORT COMPANIES ETAC	
2. Safer vehicles	MAIDS PENDANT SEC SAFETY BELT	TIS STUDY SCHOOL TRANSPORT
2.1 Consumer information (EuroNCAP)	NPACS SARAC II	TRANSPORT COMPANIES VC-COMPAT
2.2 Accident protection or passive safety through technological innovation support and harmonisation of rules	FID VC-COMPAT ECBOS	ETAC TRABSPORT COMPANIES VC-COMPAT
2.3 Accident prevention or active safety through support to technological innovation and harmonisation of rules	DRL SPEEDALERT PROSPER VIRTUAL ADVISORS TRANSPORT COMPANIES	CITA 1 CONSPICUITY HASTE IDELSY EVI
2.4 Periodical technical inspection	TRANSPORT COMPANIES	
3 Safer infrastructure	ETAC MAIDS 2001 PENDANT	SCHOOL TRANSPORT SEC SAFETY BELT TIS STUDY
3.1 Technical guidelines concerning infrastructure safety	EURORAP I FORMAT RISER	TRAVEL GUIDE YOUTH ON THE ROAD
3.2 Trans-European road network through harmonised rules		
3.3 Safety in tunnels		
3.4 The new intelligent road concepts and Galileo through support to innovation studies	PROSPER	
3.5 Emergency services through best practice and guidelines		
None of the objectives	CITA 2	

Source: Annex I, Project Data Sheets.

Figure 6.1 Evaluation sample divided by objectives and "main areas of actions" categories according to the Logical Framework Approach described in Table 4.1.

Summary

With one exception, the objectives of the 35 projects show a high degree of relevance vis-à-vis the problems and needs to be addressed in the area of road safety.

Nevertheless, the reason for showing a high degree of relevance in the majority of projects is primarily due to the very broad description of objectives to be pursued in the RSAP. The programme objective hierarchy is largely missing as the specific objectives and the main areas of actions are nearly all-embracing without a clear and systematic link to the global and intermediate objectives.

For many of the projects, a clear description of the actual baseline (the specific situation being addressed in the project) is also missing. Such a description would have been helpful in assessing the relevance of the project objectives.

6.2 Effectiveness

Evidence gathered during the review of project documentation indicates that in general the completed projects have been effective in carrying out the defined work tasks and producing the expected outputs.

The further assessment of effectiveness has been focusing on the actual achievement of results and impact in relation to the RSAP objectives. As mentioned earlier, the projects all have a preparatory character or can be seen as one of the steps towards achieving a direct impact on the actual number of fatalities. However, different types of follow-up actions are needed in almost all projects in order for the projects to achieve direct impact. The assessment of the long-term effects/impact of the projects has therefore not been included in the assessment of effectiveness.

Influence on decision-making processes
The examination of the project types in the sample makes it evident that the projects in general are aimed at providing background input on technical issues, informing decision-making at different levels (EC and Member States) or improving guidance in the implementation of road safety measures.

Based on evidence gathered during interviews with contractors, EC officials and road safety experts from Member States it is clear that project results have been or will be used to support the decision making process and subsequently participate in the improvement of road safety. This is supported by the fact that most of the projects involve well-known agencies from a number of Member States dealing with road safety which serve to ensure that project results are gradually absorbed among road safety experts and institutions and utilised for their intended purpose.

Example of a project with the contractors following up on the project

MAIDS2001 (subvention contract) project concerns accidents involving motorcycles. It is carried out by the European organisation for the motorcycle industry and has involved a number of motorcycle producers and user organisations. The project output is disseminated on a dedicated web site and follow up actions have been carried out in the form of meetings with a targeted audience of specialists and different stakeholders at EU and national level. Based on the results, the industry is currently preparing research projects, which aim at improving motorcycle safety in different domains like conspicuity, training and e-safety.

Example of a project with member states using the project to follow up actions

DRL (a procurement contract) concerns the effects of introducing compulsory use of daytime running lights. The issue is currently being discussed at EC level, but furthermore, the issue is being discussed in some of the member states. Austria has currently discussions concerning legislation on DRL and the project output is used as background material.

Example of a project with EC following up on the project

CONSPICUITY (a procurement contract) concerns the change of directives dealing with marking of heavy goods vehicles to make them more visible in the dark. The output shows a good cost-effectiveness of changing the directives and EC has started discussions with the UNECE to implement changes.

Furthermore, several of the projects include dissemination activities in the form of publishing of leaflets, production of web site or arrangements of seminars. Activities that support the process of informing the target group of results and improve the probability that project results eventually will materialise in an actual road safety impact.

DG TREN participates in these dissemination activities by using their own web site to disseminate results for all funded projects.

Achievement of objectives in RSAP

Evidence suggests that for half of the completed projects (equal to 9 projects), short term results have been achieved supporting specific objectives in the RSAP (see Table 6.2). For approximately the other half, results are likely to be achieved. For 2 projects, no results have been achieved supporting road safety objectives.

Table 6.2 Assessment of the projects according to the question: Has the project achieved results supporting road safety objectives?

	Project
Results supporting road safety objectives were achieved	CITA 1, CONSPICUITY, DRL, ECBOS, EURORAP, FID, GLARE, TRAINER, VIRTUAL
Results supporting road safety objectives are likely to be achieved	ADVISORS, EVI, IMMORTAL, MAIDS2001, ROSE25, SCHOOL TRANSPORT, TIS-STUDY, TRANSPORT COMPANIES, YETD
No results supporting road safety objectives have been achieved*	CITA 2, TRAVEL GUIDE
Not assessed due to on-going project	Alcolock, ETAC, Format, Haste, Idelsy, Medril, NPacs, Pendant, Prosper, Riser, Sarac II, Speedalert, Sec Safety Belt, VC-compat, Youth on the road

* CITA 2 has, as described earlier, not been designed as a road safety project. For TRAVEL GUIDE information was not delivered in time for being used in the assignment.
Source: Annex I, Project Data Sheets

At a programme level, the following main clusters of results can be deduced from the evidence gathered:

- Input to further studies either financed by EC (e.g. in 6th RTD Programme) or other parties
- Input to legislation in EU, other international organisations (e.g. UNECE, responsible for vehicle standards) or in member states
- Development of a commercial product (e.g. crash dummies and tools to measure glare sensitivity)
- Dissemination through web sites, seminars, conferences etc giving that results are likely to come
- Feasibility studies giving input for decisions.

One of the main recipients of the results is the Commission itself in order to prepare legislation or initiate further studies.

Furthermore, the involved institutions among the project partners are themselves recipients and important beneficiaries for the use of the results. The participants include major research institutes in the member states, national authorities (e.g. road directorates), branch organisations (e.g. ACEM, the European Motorcycle Manufacturers Organisation), the vehicle industry and other international organisations.

Finally, other recipients are institutions similar to the project partners, national authorities, and branch organisations that have not been directly involved in the

projects but receive information due to dissemination activities or participation in international activities (e.g. EU working groups).

Table 6.3 Assessment of the projects according to the question: Has the project achieved results supporting road safety objectives? (number of projects)

	RTD grants	Subvention	Procurement	Total
Results supporting road safety objectives were achieved	4	3	2	9
Results supporting road safety objectives are likely to be achieved	2	3	4	9
No results supporting road safety objectives have been achieved	1	1	0	2
Not assessed due to on-going project	6	9		15
Total	13	16	6	35

Source: Annex I, Project Data Sheets.

Due to the limited number of projects in the sample, no statistical evidence can be given on performance of the different types of contracts. Nevertheless, the overall tendency is that the contract type is not crucial for achieving a result supporting the RSAP objectives.

Example of a project that achieved the expected results

ECBOS[20] (Enhanced coach and bus occupant safety) is an example of a project which has produced the expected output and achieved results to support road safety objectives. The objectives are described as *"...to investigate the field of current bus and coach accidents as well as to propose new cost-effective test methods and suggestions for improved regulations to decrease the injury risk for the bus occupants."* The project output can be divided into three parts. First, a database was produced complying with the objective of investigating the field of accidents. Second, models for vehicle crash assessments were developed, tested and assessed, leading to proposals for new cost-effective test methods. Third, a set of precise recommendations addressed at specific existing regulations, directives etc. were prepared. The results were achieved by having relevant stakeholders carry recommendations into further legislative preparation, included in the project consortium.

[20] The quotations are taken from ECBOS Final Publishable Report, August 2003. ECBOS is a FP5 research project.

Example of a project that is likely to not fully achieve its specific objectives

An example of a project assessed which is only likely to have achieved the objectives is the Young European Truck Driver Competition project (YETD). The project is *"…targeted at improving the driving skills and safety awareness of young truck drivers. The objective is to designate the best Young European Truck Driver, based on competence in safe driving skills and awareness."*[21]. The project output has been a competition to find the best European truck driver. Nevertheless, the objective was also to improve the driving skills and safety awareness of young truck drivers. A corresponding result cannot be found in the reporting and it is doubtful whether such a result has been or will be achieved. Furthermore, the project can also be seen as an example of a project presenting a very general objective which it is impossible to achieve solely by realising the project.

The link in YETD between "improving the driving skills and safety awareness among young truck drivers" and "the designation of the best young European truck driver" is not clear. Naturally, knowledge on e.g. the number of truck drivers having joined the competition will give an indication of the likely result, but it cannot be assessed whether safety awareness has actually been improved due to participation in the competition.

The YETD project is an example highlighting an issue relevant for a number of the projects. The direct causality between the road safety objectives (safer vehicles, improved road user behaviour or safer infrastructure) and the actual project output and results (e.g. a competition and designation of the best driver) is difficult to prove. ECBOS can be seen as one of the better examples, and YETD as one of the more problematic examples among the projects in the sample.

Summary

The evaluation shows that in general the completed projects have produced the outputs corresponding to their original project description. This indicates that the contractors are able to deliver the expected output.

The majority of the completed projects (18 of 20 projects) has achieved or is likely to achieve results in the main areas of action, supporting the specific objectives. Among the results, which are most likely to reach an impact are the projects already having resulted in new legislation or in commercial products. For a number of the projects, the results are feasibility studies, dissemination of guidelines or input to further studies. The likelihood for such results to eventually lead to an impact is unpredictable.

An important issue is the earlier described unclear linkage between the hierarchies of objectives in RSAP. Even though results are likely to support the main areas of action, the impact on the overall objectives, corresponding to the problems and needs to be addressed, may be more diffuse.

Due to a vague definition of objectives, aimed at problems, needs and issues to be addressed, and without systematic and documented linkages between the different levels of objectives, the actual effectiveness of the projects in pursuing the global objectives might be low.

[21] The quotation is taken from Young European Truck Drivers - Annex 1 Detailed description of the operation.

The evidence gathered shows that project results have been or will be used to support the decision making process and subsequently will be able to lead to actions for improvement of road safety. The evidence shows that dissemination activities are well integrated in the projects and supplemented by DG TREN, thus giving a necessary precondition for the further use of the results by relevant stakeholders. Furthermore, numerous relevant stakeholders in the field of road safety have been involved in the projects and their involvement ensures a gradual absorption and use of the results.

6.3 Efficiency

This assessment includes consideration on how economically the resources (project funding) were used in delivering the results. Given the focus of the evaluation, no in-depth studies of each project were undertaken. However, such an in-depth evaluation of efficiency in the use of resources at project level was carried out in 2004 covering 9 road safety projects funded by DG TREN[22].

This assessment includes considerations on resources versus results and follow-up actions to achieve the objectives of the RSAP.

Resources versus results
The efficiency was assessed by looking at whether effects are achieved at reasonable costs. Common for the evaluated projects is that they are at the first stage in the process of creating impact. Therefore, even the extent to which the desired impact on road safety deriving directly from the projects was deemed too difficult to be measured - or at least being measured within the next few years. The assessment of resources versus effects is therefore based on the assumption that follow-up actions are carried out to ensure impact.

A presentation of the expected results compared with the resources to achieve the results was given only in a few of the projects under review. The background for the assessment is instead taken in other studies dealing with assessments of the efficiency of various road safety measures.

Such an assessment can be found in the EU Commission report: "Priorities in EU road safety. Progress report and ranking of actions" [COM (2000) 125 final]. The report discusses cost-effectiveness of road safety measures and attempts to make a cost-effectiveness analysis of different actions. The report was used as one of the background documents for the White Paper and has thus influenced the focus of the RSAP.

The report presents, among other issues, a ranking of proposed measures based on a cost-effectiveness analysis and a recommendation for action.

[22] "Ex-post evaluation of specific projects funded under the Transport Safety Policy", see also
http://europa.eu.int/comm/dgs/energy_transport/evaluation/activites/doc/reports/transports/transport_safety_final_report_en.pdf

The report further describes that cost-effectiveness and estimations of the potential number of saved casualties are important, but not always easy to include for the assessment of all road safety activities. A number of activities are concerned with e.g. gathering and dissemination of information, or research activities providing information for monitoring purposes or guidance to policy actions. Such actions will have to be assessed more subjectively on the basis of the perceived benefit for policy makers.

For various actions, the report presents a cost-effectiveness assessment which is used to propose priority actions. Furthermore, the report ranks the following 6 measures as the most relevant for short/medium term EU priorities on the basis of a cost-effectiveness analysis:

- EuroNCAP, continuation with the publication of ratings
- Seat belts and child restraints, campaigns and legislation
- Alcohol recommendation, campaigns and information on enforcement
- Speed limiters for light vehicles, legislation
- Black spot management and forgiving roadside design developing guidelines
- Safer car fronts for pedestrians and cyclists, type approval and (possible) in use legislation

The following 5 measures were also mentioned as priorities, but were described as needing more research to assess their cost-effectiveness (the prioritisation is based only on a multi-criteria analysis):

- Medical standards for driving licences
- Testing for driving licences
- Daytime running lights
- Effect of medicines on driver behaviour
- Post-accident care

For the present evaluation sample, the 4 projects; ALCOLOCK (Implementation in the European Union, an in-depth qualitative field trial), EURORAP (European road assessment programme), NPACS (New programme for the assessment of child seats) and RISER (Roadside infrastructure for safer European roads), can be seen as measures belonging to the mentioned 6 top-ranking measures and therefore representing a cost-efficient use of resources.
Another 4 projects belong to the group of measures mentioned as priorities, but as needing more research to assess their cost-effectiveness:

- DRL (Daytime running lights). The project has provided research results on the potential cost-effectiveness of introducing DRL policies. The project conclusion is that the introduction of DRL is potentially cost-effective.
- GLARE (Relevance of glare sensitivity and impairment of visual function among European drivers). Although the issue may be part of the measure mentioned above, "testing for driving licence", the project has no description of baseline or potential impact relating to road safety. The

project therefore has complied with the need for further research to assess the potential cost-effectiveness.

- IMMORTAL (Impaired motorists, methods of roadside testing and assessment for licensing). The final project results were not available for the evaluation, but the reviewed project documents included a description of a baseline and an indication that the project results will have the potential of leading to measures being cost-effective.

- MEDRIL (A practical study of the medical examination of driving licence holders in 4 EU member states). The project is on-going with an expected end date at the beginning of 2006, and a conclusion on cost-effectiveness therefore cannot be given. Nevertheless, the existing project documents do not demonstrate the intention to provide a baseline or to make any cost-effectiveness analysis of the project results. The project can therefore not be said to comply with the need to use research to assess the potential cost-effectiveness of medical standards for driving licences.

The cost-effectiveness assessment of the remaining 27 projects will have to rely on the actual results described in the project information itself. Only 5 of these projects (CONSPICUITY, ECBOS, EVI, PROSPER, VC-COMPAT) include descriptions of baseline and potential cost-effectiveness.

Monitoring
An important issue when assessing efficiency is the ability to monitor project implementation (i.e. the process of converting input to output).

At programme level, it is interesting to examine whether the programme has the right type of instruments available to ensure efficiency. The assumption is that, in order to ensure efficiency, projects must be monitored both economically and technically. At programme level, monitoring and evaluation instruments ensure that the programme as a whole produces results that lead towards the objective of reducing fatalities. The availability of clearly defined indicators that enable monitoring of progress towards objectives is essential. The RSAP does not present clearly defined indicators, making precise monitoring difficult. If there are no indicators for success, it is very difficult to track progress and monitor if the programme is on the right track.

We are aware that the RSAP includes the wish to develop such performance indicators and a working group has been created on Safety Performance Indicators. The work was agreed in the Council Conclusion of EC Transport Council of 5th June 2003 and the RTD project Safetynet has a working package (WP3) dedicated to Road safety performance indicators.[23]

As mentioned earlier, the RSAP includes a broad scope of output. The development of indicators may also support a more focused approach and assist in launching actions having the greatest impact.

[23] The RTD project Safetynet has a dedicated web site: http://safetynet.swov.nl/

Summary
The efficiency of the actual financial performance of the individual projects has not been examined during this assessment. The 2004 evaluation carried out for 9 selected road safety projects included such an assessment, and the results from this study may be useful for the mid-term review of the RSAP.

The findings resulting from this evaluation's efficiency assessment can be summarised as follows in relation to the Commission report "Priorities in EU Road Safety. Progress report and ranking of actions":

- Only a minority of the projects (4) deal with measures assessedas being cost-effective.

- Another minority of the projects (4) deal with measures assessed as maybe being cost-effective, but needing further research. Only one of these projects actually includes an analysis of cost-effectiveness.

- The rest of the projects do not deal with measures assessed as being cost-effective.

Altogether, the picture is that cost-effectiveness is difficult to assess, given the lack of project information on costs versus results. With this in mind, it is uncertain how cost-effective the majority of the projects are in terms of results and impact. The assessment suggests that the efficiency on achieving the desired effects at a reasonable cost should be questioned. This difficulty is a general problem for many road safety initiatives.

6.4 Utility

First of all, one main result of the assessment is that the output of all the projects (except CITA 2) is likely to result in impact that contribute to the reduction of the number of fatalities.

Common for the majority of the projects is that they only provide a background for actions for others to take in order to achieve an actual impact on the number of fatalities. Furthermore, e.g. research projects may not be very well known by the beneficiaries in the member states. Officials and politicians in the member states concentrate on the resulting directives and do not necessarily know any research projects initially giving background for the directives[24]

Given this type of projects, utility can be described by assessing the likely long-term impact. In analysing utility more in-depth, the following issues have been examined for each of the 20 completed projects:

- The existence of a specific baseline useful as background for an assessment of the impact

[24] This was expressed during a telephone interview with a Danish Government official working with road safety and vehicle legislation.

- Quantifications of the impact
- Materialisation of impact in relation to the timeframe for the RSAP.

Existence of a specific baseline
In order to assess the likely long term impact, it is essential to consider the evidence on the actual baseline; i.e. the situation addressed by the project.

Due to the variety of projects, the 20 completed projects have been divided into 5 groups with different characteristics concerning their description of a baseline.

The evidence shows that 3 projects have a specific baseline, 6 projects have partly described a baseline, 5 projects have indirectly described a baseline, 1 project can be described as a "background" project and 5 projects have no description at all of a baseline, see Table 6.4.

Table 6.4 The 20 completed projects divided according to their baseline description

	RTD grants	Subvention	Procurement	Total
Yes	1	0	2	3
Background	0	0	1	1
Partly	4	2	0	6
Indirectly	0	2	3	5
No	2	3	0	5
Total	7	7	6	20

Yes: The project deals with road safety measures and has a description of a baseline expressed in figures (e.g. the number of fatalities/accidents involving heavy goods vehicles at night time)

Background: The project aims at giving background information useful for monitoring or guidance to policy makers without dealing with specific road safety measures.

Partly: The project deals with road safety measures and refers to figures or information from other studies, national reports etc., thus giving some indication of the potential baseline.

Indirectly: The project deals with road safety measures and refers only indirectly to a baseline without giving figures (e.g. research dealing with improvement of crash dummies for testing frontal car collision accidents)

No: The project deals with road safety measures but does not include any description of a baseline.

Source: Annex I, Project Data Sheets

Therefore, one of the necessary conditions (a baseline) for assessing the utility only exists for 9% of the completed projects. Nevertheless, it could be argued that follow-up analysis - including the use of figures from e.g. the CARE database - may be able to increase this figure to 70% of the projects, thus including the projects that partly or indirectly have described a baseline.

It appears that 5 of the 6 procurement contract projects include a baseline description (or an indirect description of their baseline). For the subvention contract projects and GROWTH projects, no clear picture can be seen.

One of the projects, the TIS-STUDY deals with collection of background information across the member states. The TIS-STUDY (Comparative study of road traffic rules and corresponding enforcement action in the member states of the European Union) provides background information on the actual legislation and enforcement actions in the member countries. The baseline in such a study is less relevant as the results aim at giving background for decisions or discussions on future measures. However, the TIS-STUDY also illustrates that background studies can lead to an impact by assisting policy making in the member states. This is the case in Austria, where the study results have been used in the political discussions on changing of fines for road traffic offences.[25]

Quantifications of the impact
The existence of a baseline is a necessary condition for attempting to quantify the impact and thus indicating how well the funded projects correspond with the overall problems and needs.

As described in the previous subchapter, only three of the projects have described a baseline. The evidence from the project documents for these projects suggests that implementation of the measures investigated in the three projects are likely to result in substantial savings of lives. An estimate of a yearly saving of approx. 2.400 lives is given alone for the project dealing with the introduction of daytime running lights (DRL). The estimates for the other two projects are savings on less than 300 lives per year.

The estimates support the previous findings from the EU Commission report "Priorities in EU Road Safety. Progress report and ranking of actions" [(2000) 125 final]. This report pointed out the introduction of DRL as a priority action. Furthermore, more recent studies also point out DRL as a priority action at the EU level and describe the DRL study as an important step towards decisions on the implementation.[26]

For the remaining 17 projects, it is not possible, with the information available, to quantify the likely impact in the sense of saved lives. Nevertheless, the overall assessment is that all projects point in the right direction and will contribute to the reduction of the number of fatalities.

Materialisation of impact in relation to timeframe of the RSAP
The RSAP includes a timeframe for the reduction of the number of fatalities to 20,000 persons by year 2010.

---

[25] Telephone interview with official from Austrian Road Safety Board.

[26] The Impact Assessment carried out for DG TREN as part of the mid term review of the RSAP points out introduction of DRL as a priority action based on a number of existing studies.

Therefore, an important element is to assess how well the projects will be able to contribute to the achievement within this timeframe. Referring back to the type of projects, these are mainly just one of the steps towards achieving an impact on the number of fatalities. Therefore, it is evident that impact will not materialise for several of the projects before 2010.

Example of a project where some impact most likely will materialise before 2010

The ECBOS project aims at improving vehicle safety standards for buses. The project has resulted in proposals for adjustments of existing and proposals for new European regulations and directives, as well as written standards for tests and approvals of buses and coaches. In this case, many steps are needed before an impact on the number of fatalities can be achieved. First, the recommendations need to be implemented in the relevant legislation. Second, the test procedures must be set up and used. Third, buses need to go through the tests and be approved - and this will probably only be the case for new buses and coaches. Fourth, these new buses must be purchased and used on the roads as substitutes for older buses. Therefore, an impact will only gradually come into effect. Only when the whole vehicle fleet has been changed to contain only buses fulfilling the new demands will the impact be total. This rather long chain of events makes is difficult to assess how much impact can be expected before 2010.

Example of a project where impact will depend on national follow up actions

The possibility of introducing obligatory DRL is being discussed in Austria based on the results of the DRL study. Depending on the outcome of political discussions, DRL may even be introduced by law already in 2005. If this is going to happen, the DRL study may be seen as a project with a fairly quick impact and certainly with an impact before 2010. In Ireland, DRL has also been discussed but it is not high on the agenda of the national road safety strategy, and it is not likely that DRL will be a measure with an impact before 2010 in Ireland.[27]

Summary

The overall assessment is that the funded projects most likely will contribute to a positive impact on road safety and can therefore be helpful for beneficiaries in member states, EC and other important stakeholders. Nevertheless, the magnitude and character of this positive impact is unpredictable. A majority of the projects have no description of the actual baseline (number of accidents realistic to influence). Furthermore, they deal with measures that are not considered priority measures with high efficiency according to e.g. a previous EC document describing priority road safety measures in EU.

For a few projects (3 out of 20 completed projects) evidence exist on the actual magnitude of the likely impact. Only one of these projects (DRL) deal with a measure that previously has been given priority in an EC document. Estimates are that the implementation can lead to a substantial reduction of more than 2.400 fatalities per year.

For a number of projects, it may be possible, with further analysis and e.g. including the use of EC statistics on road accidents (the CARE database), to

[27] Telephone interviews with official from Austrian Road Safety Board and from the Irish Department of Transport.

establish a baseline. Such analyses will be useful to undertake in order to get added value out of these projects. This will enable the Commission to assess the expected benefit of such studies (quantifiable).

Another important factor to consider in relation to the existing RSAP is the timeframe of reducing the number of fatalities by year 2010. Most of the projects will have difficulties in contributing to a reduction before 2010 given the type of projects. Real impact will come close to 2010 or later.

A recommendation for the future call for proposals will be to demand a clear description of a baseline and an ex-ante assessment of the potential impact on the baseline by implementing the project output.

6.5 Sustainability

The following assessment is based on an expert opinion concerning "duration of effects" of road safety measures. A long duration of the effects equals a high degree of sustainability.

While the projects include a variety of road safety outputs related to the three objectives of safer vehicles, improved road user behaviour and safer infrastructure, they vary significantly in terms of the expected duration of effects.
The variation can be illustrated with two very different project types (hypothetical examples). For a project which aims at improving road infrastructure, the effects may last nearly as long as the infrastructure exists; i.e. perhaps 25-40 years without much follow up actions needed. For a project dealing with road user behaviour as for example a police enforcement campaign on excessive speeding, the effect of the campaign is likely to last no longer than the actual operation period of the campaign.

More background information for a systematic differentiation of the duration of road safety effect can be found in the RTD project PROMISING[28]. The project presents an overview of the duration of road safety effects, depending on the category of the measure. We have used the findings from the project to indicate the level of sustainability of the projects, see Table 6.5. Even though such an overview is very generic and the exact duration can be argued, it indicates clearly the differences among various types of measures.

The overview in the table illustrates clearly, that the projects deal mostly with measures of long duration and not with measures which only have an effect when they are on-going.

[28] PROMISING (Promotion of mobility and safety of vulnerable road users) a RTD project supported by EU Commission 1998 - 2001,
http://europa.eu.int/comm/transport/road/publications/projectfiles/promising_en.htm

Table 6.5 Likely duration of road safety effects illustrated with on the basis of the results from a RTD project, PROMISING

From PROMISING study		Indicative listing of the 20 completed projects in the evaluation
Category of safety measure	Typical duration of safety effects	
Land use planning; new residential areas	25 - 40 years	
Road pricing; fuel or vehicle taxation systems	1 -3 years or 10 - 15 years (explanation not included here as no projects are in this category)	
Changing the modal split of travel	Contemporaneous effect only	
Major road investment projects (new road)	25 - 40 years	EURORAP 1,
Minor road investment projects	15 - 25 years	
Traffic control by means of road markings	10 - 15 years	
Traffic control by means of highway signs	1 - 10 years	
Upgrading road maintenance	1 year	
Vehicle safety regulations (for new vehicles)	10 - 15 years	ADVISOR, CITA 1, CONSPICUITY, DRL, ECBOS, EVI, FID,
Driver education and training (new drivers)	1 - 3 years	TRAINER, VIRTUAL, YETD
Training of children	1 - 3 years	ROSE 25 (but longer time if guidelines still are beneficial in 5 - 10 years)
Public information campaigns	Effect only during campaigns, or a short time after	
Conventional police enforcement	Effect only when operated, or a short time after	
Automatic police enforcement	Effect only when operated, or a short time after	
Supplement to the categorisation prepared within this evaluation study		
Legislation on driver licensing	*Probably 10 - 15 years*	*GLARE, IMMORTAL*
Background information	*As long as the information collected is relevant, probably 2 - 5 years*	*SCHOOL TRANSPORT, TIS-STUDY*
Guidelines or action programmes for other issues	*Depending on the content, but probably 5 - 10 years*	*MAIDS 2001, TRANSPORT COMPANIES, TRAVEL GUIDE*

Summary

On the basis of generally accepted knowledge about the sustainability of road safety effects, the assessment shows that the road safety projects tend to deal with types of measures having a long duration and a high degree of sustainability of impact.

7 Conclusion and recommendations

The conclusion of the evaluation is first presented followed by recommendations for future decisions on funding of projects within the RSAP.

7.1 Conclusion

In general, the projects in the evaluation are all relevant for the specific objectives and the main areas of actions in the RSAP, but the lack of clear and focused linkages between the main areas of actions and the overall problems and needs indicates that the overall focus of the RSAP is too broad, lacking a systematic development of the intervention logic and setting of indicators for later evaluations.

The evidence gathered shows weaknesses in the ability to predict the actual impact on improving road safety. This is partly due to the fact that the projects are of a preparatory nature requiring several follow-up activities for impact to materialise on road safety conditions. Furthermore, most of the projects do not contain an assessment of how many lives can be saved. Hence, the actual contribution to the RSAP objective of halving the number of fatalities by 2010 cannot be assessed. It is evident that for many of the projects their contribution will not show before 2010 or later.

The evaluation sample includes few projects dealing with road safety measures identified as cost effective in the previously mentioned Commission report on priorities in EU road safety[29]. A number of projects do not show any evidence of being cost effective indicating that no systematic assessment of cost-effectiveness has taken place in launching the projects.

For two years until 2003, calls for proposals were evaluated in a continuous process. In 2003 and 2004, DG TREN established an annual process, introducing competition-based evaluation of the proposals and targeting of relevant objectives of the RSAP. The present evaluation only includes projects launched no later than 2003. Therefore, the evaluation does not provide a detailed analysis of the changes resulting from the annual competition-based evaluation of proposals. A more systematic approach is expected with the modified design of the calls for proposals.

[29] "Priorities in EU road safety. Progress report and ranking of actions" [COM (2000) 125 final]

The focus on dissemination by DG TREN through their home page with substantial project information should be highlighted. Dedicated web sites also exist for the majority of the projects. Furthermore, the participation of many relevant stakeholders in the projects makes it likely that the output will be absorbed and used by these and other relevant beneficiaries.

Relevance
In general, the objectives of the 35 projects show a high degree of relevance in relation to the problems and needs to be addressed.

However, the high degree of relevance is primarily due to the very broad description of specific objectives and main areas of action in the RSAP. The evidence collected shows that the project objectives refer to the specific objectives and the main areas of action, but this does not necessarily mean that evidence can be found of the correspondence to the overall road safety problems.
This is caused by the fact that the comprehensive main areas of action do not entirely fulfil the SMART criteria (i.e. being specific, measurable, realistic, accepted and timely) and lack a clear and systematic link to the global and intermediate objectives.

For many of the projects, this result is emphasised by the fact that there is no clear description of the actual baseline (the specific situation being addressed in the project). Such a description would have been helpful in assessing the relevance of the project objectives.

Effectiveness
The evaluation shows that in general the completed projects have produced the output outlined in their original project description. This indicates that the contractors have been able to deliver the expected output

The majority of the completed projects (18 of 20 projects) has achieved or is likely to achieve results in the main areas of action, supporting the specific objectives. Those which are most likely to have an impact are the projects which have already resulted in new legislation or in commercial products. For a number of the projects, the results are feasibility studies, dissemination of guidelines or input to further studies. The likelihood of such results eventually having an impact is unpredictable.

An important issue is the unclear linkage between the hierarchies of objectives in RSAP described earlier. Although results are likely to support the main areas of action, the impact on the overall objectives, corresponding to the problems and needs to be addressed, are often more diffuse.

The results achieved or about to be achieved vary among the projects. However, recommendations on EC directives being brought forward to the right institution or working group are one example of a main result. Another example is the dissemination of project output to relevant stakeholders. The project EURORAP 1 represents such an example, showing that dissemination

can bring about a reaction from stakeholders, in this case discussions on the safety performance of roads in Austria.

Efficiency
The efficiency of the financial performance of the individual projects has not been examined during this evaluation. The 2004 in-depth evaluation carried out for 9 road safety projects included such an examination, and the results from this study may be useful for the mid-term review of the RSAP.

In the present evaluation, the relationship between the resources employed and the results achieved was assessed by using the results from an existing EC report on the costs and benefits of road safety measures.[30] This report attempts to make a cost-effectiveness analysis of different road safety measures. The report was used as one of the background documents for the White Paper and has thus influenced the focus of the RSAP.

The main reason for using this as a starting point was that the project documentation examined gave very limited information on the expected results in terms of the resources used to achieve the results.

The findings on efficiency can be summarised as follows in relation to the Commission report "Priorities in EU Road Safety":

- Only a minority of the projects (4) deals with measures assessed as being cost-effective

- Another minority of the projects (4) deals with measures assessed as maybe being cost-effective, but needing further research. Only one of these projects actually includes an analysis of cost-effectiveness

- The rest of the projects do not deal with measures assessed as being cost-effective.

Altogether, the picture is that cost-effectiveness is difficult to assess, given the lack of project information on costs versus results. With this in mind, it is uncertain how cost-effective the majority of the projects are in terms of results and impact. The assessment suggests that the efficiency in terms of achieving the desired effects at a reasonable cost should be questioned. This difficulty is however a general problem for many road safety initiatives.

Finally, it must be noted that the evaluated projects are only first steps (feasibility studies, research activities etc.) in the process of creating impact. Therefore, the assessment of resources versus effects is based on the assumption that follow-up actions are actually carried out to ensure impact.

[30] See "Priorities in EU Road Safety. Progress report and ranking of actions" [COM (2000) 125 final]

Utility

The overall assessment is that the funded projects are likely to contribute to a positive impact on road safety and can therefore be helpful for beneficiaries in member states, EC and other important stakeholders. Nevertheless, the extent and nature of this positive impact cannot be predicted. A majority of the projects has no description of the actual baseline (the number of accidents which can realistically be influenced). Furthermore, they deal with measures that are not considered priority measures with high efficiency according to the EC report "Priorities in EU Road Safety"[31].

For a few projects (3 out of 20 completed projects) evidence exists of the actual extent of the likely impact. Only one of these projects (DRL) deals with a measure which has that is considered as a priority action in the EC report "Priorities in EU Road Safety. Estimates are that the implementation can lead to a substantial reduction of more than 2.400 fatalities per year.

For a number of projects, it may be possible to establish a baseline, by means of further analyses and e.g. the use of EC statistics on road accidents (the CARE database). Such analyses could be useful to obtain added value from these projects, enabling the Commission to assess the expected benefit from the implementation of the projects.

Another important factor of the existing RSAP is the timeframe for reducing the number of fatalities by 2010. Most of the projects will have difficulty contributing to a reduction before 2010, given the type of projct. Real impact will not happen until close to 2010 or later.

Sustainability

The assessment was based on expert opinions on the "duration of effects" of road safety measures. A long duration of the effects equals a high degree of sustainability.

The starting point was a systematic differentiation of the duration of road safety effects, found in the RTD project PROMISING (Promotion of mobility and safety of vulnerable road users, a RTD project supported by the Commission in 1998 - 2001). The findings from this project were used together with evidence gathered on the projects to indicate the level of sustainability of the individual projects in the evaluation.

Although the assessment is very generic and the exact duration of each of the types of measures is uncertain, it shows that the road safety projects tend to deal with types of measures having a long duration and a high degree of sustainability of impact.

[31] "Priorities in EU Road Safety. Progress report and ranking of actions" [COM (2000) 125 final]

7.2 Recommendations for the future

Based on findings of the evaluation, the following main recommendations can be made:

- The future road safety actions launched by the Commission should to a greater extent be launched based on the basis of knowledge on priority measures with high cost effectiveness and impact. Preparatory work in the form of ex-ante evaluations may be needed to ensure this improved focus. The Impact Assessment Study carried out as part of the mid term review can be seen as a first step.

- In any future road safety action programme, the intervention logic, giving a clear description of the hierarchy of programme objectives should be presented. It should include a description of main problems and needs to be addressed on the basis of statistics from the CARE database and the various international studies analysing the feasibility of different road safety measures.

- Future call for proposals should take their point of departure in a clear description of the programme objectives, including a description of the baseline situation for the issues in focus as well as an indication of the timeframe for the likely impact.

- The work started by DG TREN to establish performance indicators should be continued. This will support the prioritisation and monitoring of future actions to feed in any future evaluation on programme and policy level. The CARE database will be an important element in this process.

- The setting up of objectives and targets should be adjusted:

    - Short-term targets - covering a timeframe of e.g. 5 years - should be established on the basis of the impact assessment carried out as part of the mid-term review of the RSAP. The targets have to be quantifiable, with clearly defined indicators. For example, targets to implement daytime running lights in the EU should be accompanied by an indicator of the number of Member States which have in fact implemented them as well as milestones for when this is expected to happen
    - Long-term objectives or a vision should be formulated to support long-term initiatives which cannot demonstrate impact in the short term.

- The calls for proposals should request that tenders include an analysis of key partners from Member States to be involved. This would ensure that any future projects exploit and build on road safety expertise available in all Member States.

Annex I: Project Data Sheets

The projects are listed alphabetically by acronym. The basic information on budgets, type of contract etc. is delivered by DG TREN.

Project title	Action for advanced driver assistance and vehicle control system implementation, standardisation, optimum use of the road network and safety ADVISORS	
Contractor	SWOV - Institute for Road Safety Research	
Project period	From: 01.04.2000	To: 30.11.2002
Type of contract	RTD contract	
Budget in EURO	Total: 3,055,768	EU contribution: 1,795,733
Call for proposal/programme	5th RTD Framework Programme	
Brief description of project	The background for the project is that use of Advanced Driver Assistance Systems (ADAS) is expected to increase road safety and reduce environmental impacts of traffic, and it is used in more and more road vehicles. Nevertheless, the impact of ADAS on the safety performance of the road transport system has not been assessed very clearly. The overall objectives of the project are to develop a comprehensive framework to analyse, assess and predict the implications of a range of ADAS, and to develop implementation strategies for ADAS which will have a highly positive impact. The project has collected information on ADAS activities in Europe, carried out stakeholder analyses; analysed risk factors of using ADAS; developed and tested a framework for assessment, collected evidence for important safety effects and network effects of a few ADAS which are relatively close to market introduction, prioritised ADAS in terms of appropriateness for introduction on the European roads, developed implementation strategies and reported the results in a final report. Furthermore, the project has undertaken several dissemination activities - such as development of a website (www.advisors.iao.frauenhover.de), production of a CD-ROM, workshops with e.g. insurance companies, legal authorities, customers, car manufacturers and suppliers and scientific experts, conference presentations and scientific publications, and some newspaper articles. Moreover, the project has developed a user-friendly ADAS terminology.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme's immediate objective of making vehicles safer - indirectly by assisting to the programme output of improving active safety through technical innovations.
Effectiveness	Has the project reached its objective?	The project appears to have reached its objectives, as it claims to have developed a detailed, comprehensive framework for analysis and assessment of ADAS. Moreover, it has developed implementation strategies for selected ADAS.
	Do the results support the programme objectives? (used for completed projects)	Results supporting road safety are likely to be achieved. The project has undertaken several dissemination activities which support the likelihood of the results being used by informing key stakeholders of the possibilities of ADAS. However, the project points to the fact that more research is needed to assess and develop ADAS, and thus more funding is probably necessary before the comprehensive framework is ready for use. The project is followed up partly by the FP6 project In Safety (506716), and other activities, e.g. continuation of the work on user friendly terminology
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets in principle all accidents caused by unsafe ADAS, but no references are made to an assessment of the actual potential impact in figures

Sustainability (used for completed projects)	Will project results last after the project has been completed?	.Provided that project results will be implemented; the impact will be approx equivalent to the lifetime of vehicles.

References:

- ADVISORS final, publishable report, 31 January 2003
- A number of other ADVISORS reports delivered during the project period

- Comments received by e-mail from Marion Wiethoff, SWOV

Project title	Implementation in the European Union, an in-depth qualitative field trial - ALCOLOCK	
Contractor	Belgian Institute for Road Safety	
Project period	From: 31.12.2003	To: 30.12.2005
Type of contract	Subvention contract	
Budget in EURO	Total: 1,194,178	EU contribution: 597,089
Call for proposal/programme	DG TREN/SUB/01-2003	
Brief description of project	The project is a follow-up on a feasibility study regarding implementation of BAIIDs (Breath Alcohol Ignition Interlock Device) in the European Union policies. BAIID is a breath testing devise connected to the ignition system of a motor vehicle. If the driver's breath has an alcohol concentration which is too high, the vehicle cannot start. The objectives of the feasibility study were to investigate the effects of the use of BAIIDs, to identify target groups and technical and legal requirements necessary for implementation, to design a field trial, and identify EU countries willing to implement Alcolock programmes and participate in the field trial. The field trial study is aimed at identifying factors that influence Alcolock programme participation and compliance.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the feasibility study objectives and the programme's objective of encouraging road users to improve their behaviour. The results will have the potential to assist in ensuring improved compliance with basic road safety rules. It is expected that the same goes for the field trial study. This can however not be assessed yet.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	No project results were available for the evaluation -
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	-
Sustainability (used for completed projects)	Will project results last after the project has been completed?	-

References

- Alcolocks; an effective solution for present DUI-problems? Presentation at meeting of EU Expert Group on Alcohol, Drugs and Medicinal Products, 7 February 2003, Brussels by René Mathijssen, senior researcher, SWOV Institute for Road Safety Research
- ALCOLOCK_AlcolocksBrussel pres swov.ppt
- Alcohol Interlock Implementation in the European Union: Feasibility study, November 2001
- Comments received by e-mail from René Mathijssen, SWOV

Project title	Electronically controlled systems on vehicles - CITA 1	
Contractor	CITA but work undertaken mainly by IKA (Germany), TRL (Great Britain) and TÜV Rheinland (Germany)	
Project period	From: 07.05.1999	To: 07.04.2002
Type of contract	Subvention contract	
Budget in EURO	Total: 600,000	EU contribution: 300,000
Call for proposal/programme	???	
Brief description of project	Currently, inspection of electronically controlled systems is not part of mandatory periodical technical inspection of vehicles. That can be a problem, as a growing number of cars have complex electronic systems, and the knowledge of the reliability of these systems and how they can be checked is limited. Malfunction of the systems may affect the safety of the vehicle. The objectives of the research project are therefore to advance the state of knowledge of the reliability of electronic systems and how to test these systems. The project has carried out a study on the reliability of electronically controlled systems on vehicles, analysed test procedures and made a cost benefit analysis of introducing test systems. The results are documented in a report and the overall conclusion is that periodical vehicle inspection should be developed to include inspection of electronically controlled systems, in order to ensure optimum traffic safety. The project suggests test procedures for airbags, ABS brakes and Vehicle Dynamic Controllers.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme objective of making vehicles safer. Indirectly, the project can support the programme on improved active safety through technical innovations.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project has analysed the reliability of electronically controlled systems and demonstrated feasible test procedures for airbags, ABS brakes and Vehicle Dynamic Controllers - which is in accordance with the project objective. The results of the project support the programme objective, as the project suggests test procedures to improve the safety of vehicles. The results were one factor in initiating further work in one member state on the case for adding tests on electronic systems during periodic inspection. They will also form part of the input to the current study recently initiated by DG TREN on future options for roadworthiness enforcement in Europe, although further work to refine the test procedures and to estimate the costs of applying them may eventually be needed.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets accidents/fatalities caused by defect airbags, ABS brakes and vehicle dynamic controllers. The project estimates that about 24 % of all vehicles will experience some sort of electronic system fault. Due to a lack of accident causation data, the project does not make an estimate of how many accidents might be caused by those faults.

Sustainability (used for completed projects)	Will project results last after the project has been completed?	Provided that project results will be implemented, the impact will be approx equivalent to the lifetime of vehicles.

References

- Periodical Inspection of Electronically Controlled Systems on Vehicles. Programme Summary Report, 31 March 2002

- Comments received by e-mail from WIM Labro, CITA

Project title	Second programme of studies on emission testing at periodic and other inspections - CITA 2	
Contractor		
Project period	From: 01.01.2000	To: 09.01.2003
Type of contract	Subvention contract	
Budget in EURO	Total: 625,000	EU contribution: 309,000
Call for proposal/programme	??	
Brief description of project	An EU Directive specifies that tests must be carried out during periodic inspections, in order to measure the exhaust emission performance of road vehicles. The objective of this project is to improve the current procedures for testing and to specify new procedures that will adequately control the emissions from low emission vehicles. The project has conducted five studies: Consideration of best practice procedures for measuring exhaust emissions from petrol vehicles; a study on motorcycle exhausts emissions and noise; a study on the influence of catalyst temperature on the effectiveness of periodic inspection; and a study to examine the feasibility of a large-scale data collection exercise	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is no connection between the project objectives and the programme objectives of improving road safety The project addressed the environmental, rather than road safety aspects of roadworthiness, and was a follow-up on the impact Auto-Oil programme
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project has reached its objectives The results do not support the programme objectives, as their aim was to assist environmental improvement not to target accident reduction.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project does not include a baseline and a potential impact assessment related to road safety, as the project is targeting environmental objectives.
Sustainability (used for completed projects)	Will project results last after the project has been completed?	Not relevant

References

- Second CITA programme on Emission Testing at Periodic and Other Inspections. Programme Summary Report, November 2002
- Comments received by e-mail from WIM Labro, CITA

Project title	Conspicuity of heavy goods vehicles - CONSPICUITY	
Contractor	TÜV Rheinland Group – TÜV Kraftfahrt GmbH	
Project period	From: 28.12.2003	To: 27.12.2004
Type of contract	Procurement contract	
Budget in EURO	Total: 176,410	EU contribution: 176,410
Call for proposal/programme	Call for tender	
Brief description of project	Heavy Goods Vehicles (HGVs) are involved in a disproportional number of fatal accidents relative to their share of the vehicle fleet. Furthermore, only 25 % of traffic is at night time but 40 % of the accidents happen at night time. The project describes that the lack of HGV visibility (the phrase conspicuity is used to describe visibility) may be a contributing factor to some of these accidents. The objectives of the study are to investigate the legislative situation, the effect of increased conspicuity on accident reduction, cost benefit analysis of four scenarios for implementation of conspicuity measures and finally, the project will make recommendations for further action from the Commission.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There seems to be a good connection between the project objectives and the programme objective of making vehicles safer and supporting the programme on improved active safety through stricter legislation
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project seems to have reached it objectives as it analyses the conspicuity of HGVs and makes recommendations. The project results support the programme objectives, as the conclusions and recommendations from the project forms the basis for the discussion in UNECE on introducing new legislation regarding the visibility of trucks
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets accidents at night time caused by reduced visibility involving HGV The project assesses, that equipping HGV with retro-reflective material has the potential of reducing the number of fatalities by 165 persons.
Sustainability (used for completed projects)	Will project results last after the project has been completed?	Provided that the project recommendations will be implemented the impact will be approx 10-15 years

References:

- Conspicuity of heavy vehicles, Final report, 22 December 2004
- Comments by e-mail from Mathias Bancken, TÜV Rheinland Group
- Telephone interview with Martin Spearber, TÜV Rheinland Group
- Telephone interview with Peter Schmitz, DG TREN

Project title	Daytime running lights - DRL	
Contractor	TNO - Organisation for Applied Scientific Research	
Project period	From: 30.12.2002	To: 29.12.2003
Type of contract	Procurement contract	
Budget in EURO	Total: 340,893	EU contribution: 340,893
Call for proposal/programme	Call for tender	
Brief description of project (Objectives, methods, results)	This research project looks into the use of DRL. The objectives of the project are to investigate the current use of DRL, and how DRL affects accidents and pollution. On this basis, the project investigates five policy options and looks into the cost benefit ratio, the accident avoidance and the pollution for each policy option. The project concludes that the preferred option is the use of DRL by all motor vehicles, and that all new cars are required to have dedicated DRL switched on automatically. To implement DRL, the project suggests a gradual approach, but with the implementation of the behavioural parts as soon as possible. Moreover, the project suggests accompanying the introduction of DRL by a large-scale publicity campaign.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There seems to be a good connection between the project objectives and the programme objective of making vehicles safer - through supporting improved active safety through legislation.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project has reached it objectives. It has identified the preferable policy option for implementing DRL based on the current use of DRL, it has demonstrated how accidents are affected by DRL and a cost benefit analysis has been carried out. The results of the project support the programme objectives as the results from the project are discussed in the relevant European working groups. Moreover, a national expert from Austria pointed out that the project recommendations are used as background for national discussions on the implementation of legislation on DRL, which maybe will be implemented in 2005..
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project describes that the use of DRL will affect multi-party daytime accidents and that these accidents make up 40 % of all fatal or injury accidents in the EU. The project estimates that the use of mandatory DRL will potentially prevent 2,359 fatal injuries a year.
Sustainability (used for completed projects)	Will project results last after the project has been completed?	Provided that the project recommendations will be implemented the impact will be approx 10-15 years

References:

- Daytime Running Lights: Deliverable 3: Final report, October 2003
- Rune Elvik et al: Daytime Running Lights: IR2: A systematic review of effects on road safety-. TØI 2003
- Telephone interview with Peter Schmitz, DG TREN

Project title	Enhanced coach and bus occupant safety - ECBOS	
Contractor	Technische Universität Graz	
Project period	From: 01.01.2002	To: 30.06.2003
Type of contract	RTD contract	
Budget in EURO	Total: 2,312,999	EU contribution: 1,489,565
Call for proposal/programme	5th RTD Framework Programme	
Brief description of project	The project objective is to generate new knowledge to minimise the incidence and cost of injuries caused by bus and coach accidents, by assisting to improve vehicle safety standards for buses. Analyses of actual accident data from 8 countries and in-depth analyses of 40 accidents were carried out in order to appoint relevant elements to include in a numeric simulation model. Such simulation models for vehicle crash assessments have been developed and tested. The project has resulted in a number of recommendations for adjustment of existing and proposals for new European regulations and directives, as well as written standards concerning tests and approvals of buses and coaches. The project includes a cost benefit analysis of the recommended tests compared to the existing tests. The included costs consisted of required costs for tests and simulations, and the benefits consisted of the reduction of socio-economic costs due to less fatalities and seriously injured persons. The analysis showed a positive cost befit ratio in most cases.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project has a good connection to the objective of making vehicles safer, and can be seen as a relevant part of the programme on stricter legislation on passive safety.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project has resulted in specific recommendations for improving directives and standards and has thus reached its objective. The results achieved support the road safety objectives. The project has resulted in specific recommendations, some of which are in a phase of being implemented through stakeholders within the project consortium.
Utility (used for completed projects	Does the project include a baseline and a potential impact assessment?	The project describes that annually, over 150 occupants of buses and coaches suffer fatal injuries and over 30, 000 are injured. Implementation of the achieved results will lead to safer vehicles and potentially a reduction in the number of casualties. No figures for this potential reduction are mentioned.
Sustainability (used for completed projects)	Will project result last after the project has been completed?	Provided that project results will be implemented, the impact will be approx equivalent to the lifetime of vehicles.

References

- ECBOS Final Publishable Report, August 2003
- Comments received by e-mail from Dr. Erich Mayrhofer, Technische Universität GRAZ

Project title	European truck accident causation - ETAC	
Contractor	IRU / CEESAR	
Project period	From: 01.04.2004	To: 31.03.2006
Type of contract	Subvention contract	
Budget in EURO	Total: 609,200	EU contribution: 304,600
Call for proposal/programme	DG TREN/SUB/01-2003	
Brief description of project	The main objective is to identify the causes for truck accidents in order to identify actions to improve road safety. The project will develop a common methodology for accident causation research, and expert teams will make in-depth investigations of 600 truck accidents in 7 EU countries. The results will be recorded in a developed database compatible with other EU projects wishing to harmonise accident registration. The database will give information on accident causes, and the project will give a methodological way of dealing with truck accident registration. Furthermore, the project will come forward with recommendations to reduce the number of accidents involving trucks and ensure that the results are disseminated to relevant parties.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project has a good connection to the objective of making vehicles safer, and can be seen as a relevant part of the programme on stricter legislation and voluntary agreements on passive safety. The project objective is to identify actions which could also be targeted at improving road infrastructure or improving road user behaviour.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	No project results were available at the time of the evaluation.
Utility (used for completed projects	Does the project include a baseline and a potential impact assessment?	
Sustainability (used for completed projects)	Will project result last after the project has been completed?	

References

- Project application for ETAC delivered by DG TREN without a heading. Therefore uncertainty of source?
- Technical annex to project application for ETAC, 30 October 2002
- Comments received by e-mail from Wim Smolders, IRU

Project title	European road assessment programme - EURORAP 1	
Contractor	AA Foundation for Road Safety Research, with TRL - Transport Research Laboratory	
Project period	From: 19.12.2002	To: 18.12.2003
Type of contract	Subvention contract	
Budget in EURO	Total: 948,498	EU contribution: 474,249
Call for proposal/Programme	??	
Brief description of project	EURORAP focuses on safe roads. The rationale behind the project is that the road and the car must work together to protect life. The objectives of EURORAP are to reduce deaths and life-threatening injuries on Europe's roads. This should be done by systematically assessing risks and identifying safety shortcomings which can be addressed with practical road-improvement measures, and to put assessment of risk at the heart of strategic decisions on route improvements, crash protection and standards of route management EURORAP has developed two new European Standard Protocols - Risk Rate Mapping and Star Rating of roads through a Road Protection Score. The risk rate mapping is based on real accident and traffic flow data, and it shows the rate at which people are being killed and seriously injured. The star rating is calculated by assessing how well the road protects road-users from death and disabling injuries. Moreover, the project has held several conferences in Europe since 2002 to disseminate the concept and the results and the project has designed a website with project material. The project is now active in 15 countries.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme objective of improving road infrastructure. The project is not directly linked to programme main areas of action - but it can indirectly be seen as a contribution to good practice guidelines for infrastructure safety.
Effectiveness	Has the project reached its objective?	The project has developed the two new protocols, which directly addresses the first objective. The second objective - to put risk assessment at the heart of strategic decisions in the field - cannot be evaluated precisely, but the dissemination activities may assist in the process of the fulfilment.
	Do the results support the programme objectives? (Used for completed projects)	The project results have supported the programme objectives in several ways as the results have been disseminated and discussed by stakeholders such as national authorities but to have real impact the project need to be followed by investments in infrastructure and follow up mapping.

Project title	European road assessment programme - EURORAP 1	
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets in principle all fatalities, where different design of the road may have prevented it. EURORAP shows that the fatal and serious accident rate of an average single carriageway rural road is four times that of a motorway, and the results suggest that it is possible to target very accurately the high-risk, low-safety roads. EURORAP has found that even in a country with a good road safety record, fatalities could be reduced by more than a quarter just by implementing a programme for achieving today's average risk for all roads. The results from Britain indicate that the annual number of fatal and serious injury collisions could be reduced by 20 % - i.e. UK alone has the potential to save about 200 lives and 1500 serious injuries each year.
Sustainability (Used for completed projects)	Will project result last after the project have been completed?	Provided that project results will be implemented, the duration of the impact will be approx 25-40 years.

References:

- EURORAP: Star rating Europe's roads for safety, leaflet, September 2003
- Comments received by email and telephone interview with Steve Lawson, TRL

Project title	Feasibility study on electronic vehicle identification - EVI	
Contractor	Intelligent Transport Systems and Services - Europe	
Project period	From: 30.12.2002	To: 29.06.2004
Type of contract	Subvention contract	
Budget in EURO	Total: 804,318	EU contribution: 402,158
Call for proposal/programme	?	
Brief description of project	Electronic Vehicle Identification system (EVI) is a device that uniquely identifies a vehicle electronically. Until now, there has been no comprehensive study of the requirements for and feasibility of an EU-wide implementation of EVI. Such a system is described as being beneficial in many EU policy areas, e.g. security and road safety. The overall objective of the project is therefore to investigate the feasibility of an EU-wide EVI system, including assessment of the benefits on EU policy areas. The project has conducted an analysis of requirements for EVI, legal aspects, technological aspects, system architecture etc. In the field of road safety, the project has carried out a socio-economic assessment of the introduction of EVI. The road safety benefits are assumed to be an improved enforcement of speeding violations, and thus lower speed leading to fewer injuries and fatalities. The conclusion on costs and benefits implies that the pay-back time may be up to 25 years. The project concludes that an EU-wide EVI system is feasible. The project has involved European stakeholders during the process such as public authorities, the telecom industry, car industry and others.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project objectives have a good connection with the programme objective of improving road users' behaviour (lower speed) and may be said to be a part of the programme on improved compliance with basic road safety rules. EVI can also be seen as being connected with the objective of improving vehicle safety and the improved active safety through technical innovation. Nevertheless, it must be stressed that the project also aims at a number of effects other than road safety
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project has made the proposed feasibility study and has reached its objectives. The results achieved are likely to support road safety objectives. The project concludes that an EU-wide EVI system is feasible and improvements of road safety assist in coming to this conclusion. If an EVI system is implemented, it will have the potential of supporting the programme objective.
Utility (used for completed projects	Does the project include a baseline and a potential impact assessment?	No description has been found.
Sustainability (used for completed projects)	Will project result last after the project has been completed?	Provided that project results will be implemented, the impact will be approx equivalent to the lifetime of vehicles.

References:

- Conclusions on feasibility assessment EVI and recommendations for taking the topic forward, November 2004
- Comments received by e-mail from Oene Kerstjens, ERTICO SC

Project title	Improved frontal impact protection through a world frontal impact dummy - FID	
Contractor	TNO Automotive - Organisation for Applied Scientific Research	
Project period	From: 01.01.2002	To: 30.10.2003
Type of contract	RTD Contract	
Budget in EURO	Total: 2,834,251	EU contribution: 1,781,345
Call for proposal/Programme	5th RTD Framework Programme	
Brief description of project	The project objective is to contribute to the reduction of the amount of injured and death car occupants involved in frontal collisions, by developing improved frontal crash test dummies for future crash testing. The project analyses the need for improvements of frontal crash test dummies based on accident data. Based on biomechanical studies, the project has developed improved parts for a test dummy. The results are widely disseminated to relevant international organisations dealing with harmonisation of standards.	
	Key questions	Assessment
Utility	How is the project objective linked to programme objective?	The project has a good connection to the objective of making vehicles safer, and can be seen as a relevant part of the programme on stricter legislation and voluntary agreements on passive safety.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (used for completed projects)	The project has developed parts to improve frontal crash test dummies and thus lived up to its objective. The results achieved support road safety objectives. The project output have been presented to working groups of the International Standard Committee (ISO) and other relevant organisations for the implementation of harmonised rules for use of test dummies. Furthermore, the consortium actively promotes that the dummy will be evaluated by the car industry as well.
Utility (used for completed projects	Does the project include a baseline and a potential impact assessment?	The potential target group for the project is the number of accidents with frontal car crashes. The project mentions that experience from France and USA show that approx. 45 % of car occupant casualties occur in such accidents. It is not described to what extent the project results will be able to assist in reducing such numbers.
Sustainability (used for completed projects)	Will project result last after the project has been completed?	Provided that project results will be implemented, the impact will be at least equivalent to the lifetime of vehicles.

References:

- FID project Final Publishable Report 22/12/2003

Project title	Fully optimised road maintenance - FORMAT	
Contractor	Ministerie van Verkeer en Waterstaat - Dienst Weg - en Waterbouwkunde	
Project period	From: 01.02.2002	To: 31.01.2005
Type of contract	RTD Contract	
Budget in EURO	Total: 4,524,690	EU contribution: 2,000,272
Call for proposal/Programme	5th RTD Framework Programme	
Brief description of project	FORMAT reflects a desire to offer a fully integrated approach to the optimisation of all aspects of the planning and execution of road infrastructure maintenance. The project objectives are to develop technical innovations in maintenance techniques, condition monitoring, cost benefit analysis and safety at work sites. The main output of the project will be an integrated guide 'Fully Optimised Road Maintenance'. This guide is not available, and therefore the results cannot be evaluated. The expected content of the guide are optimised procedures for the application of maintenance measures, an integrated cost benefit analysis model, effective and safe traffic management procedures for road works, applicable to the new strategies and techniques; optimised procedures for road infrastructure condition monitoring and technologies and applications for monitoring road infrastructure condition at traffic speeds. The project has undertaken several dissemination activities and involved stakeholders. Moreover, the project anticipates that industry will save money using the guideline. The project mentions that more than 100 road workers are killed annually in Europe and many more workers are injured. The expected guide may have the potential to contribute to improving the working conditions for the many European road workers, leading to fewer casualties.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project objectives have a good connection to the programme objective of improving road infrastructure, and can be seen as a part of the programme on good practice guidelines.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The main output of the project is an integrated guide 'Fully Optimised Road Maintenance'. This guide is not available, and therefore the results cannot be evaluated in this brief overview. -
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	-
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- Competitive and sustainable growth programme: Contract for shared-cost RTD Project: Annex1 "Description of Work, 5 September 2002
- www.rws.nl/rws/dww/home/format (project web site)

Project title	Relevance of glare sensitivity and impairment of visual function among European drivers - GLARE	
Contractor	Netherlands Ophthalmic Research Institute	
Project period	From: 19.12.2002	To: 18.12.2004
Type of contract	Subvention contract	
Budget in EURO	Total: 1,536,038	EU contribution: 766,690
Call for proposal/Programme	??	
Brief description of project	The objective of the project is to determine the occurrence of the most important types of visual impairment of European drivers. Moreover, the project will develop an instrument to measure glare sensitivity for driving license application. To estimate the prevalence of visual impairment, the project has investigated 2455 drivers in 5 countries in 4 age categories from 45 and up. The project points out that the prevalence of visual impairment is low in younger age groups and higher in older age groups. In all age groups, acuity can be improved in a significant number by optimization of correction of refractive errors. Moreover, the contrast sensitivity could have a more important role in the assessment of drivers than in the current regulations. The project has also developed the proposed method to measure glare sensitivity for driving license application. This method is now used in a commercial product.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objective and the programme objective of encouraging road users to improve their behaviour - through improved driver licensing and training.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project has reached its objectives as the prevalence of visual impairment is determined, and the instrument to measure glare sensitivity is developed. The results of the project supports the road safety objectives as the instrument to measure glare sensitivity is used in a commercial product, Then the assessment of the driver's ability to drive will probably improve.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets all accidents caused by visual impairment - primarily among elderly drivers. No references are made to the actual figures of this group.
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	Provided that project results will be implemented, the impact will probably at least be 10-15 years - depending on when new methods are developed

References:

- Relevance of glare sensitivity and impairment of visual function among European drivers, final report, January 2005
- http://www.glare.be (project web site)

- Telephone interview with and written comments from Tom van den Berg

Project title	Human machine interface and traffic safety in Europe - HASTE	
Contractor	Institute for Transport Studies (ITS) - University of Leeds	
Project period	From: 01.01.2002	To: 31.03.05
Type of contract	RTD Contract	
Budget in EURO	Total: 3,495,559	EU contribution: 1,754,111
Call for proposal/Programme	5th RTD Framework Programme	
Brief description of project	The car has become a potential home to many different types of systems. Such systems range from those which convey simple information to the driver (for example incident warnings) to those that require the driver to interact with a system in order to extract the required function (for example a route guidance system). The driving task may become of secondary importance to tasks relating to interaction with the system. If such distraction occurs, there is evidence that traffic safety will be compromised. The aim of HASTE is to develop methodologies and guidelines for the assessment of In-Vehicle Information Systems (IVIS) to ensure that the driving task will not become of secondary importance to tasks relating to interaction with the system. The project includes identification of traffic scenarios in which safety problems with an IVIS are more likely to occur, analysis of the mechanisms through which elevated risk may occur in terms of distraction, and identification of the best indicators of risk. Furthermore, the project sets up methods devised to evaluating real systems and recommendations for a cost effective test regime. Finally, the project will recommend an approach for the preliminary hazard analysis of the human machine interface of an IVIS concept or design, including issues related to reliability, security and tamper proofing. The project is ongoing and no central results are available for evaluation.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objective and the programme objective of improving vehicles will be a part of the programme on improved active vehicle safety
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project is ongoing and only the first deliverable was available for the evaluation and no full assessment can be made. -
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	-
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	-

References:

- HASTE Midterm report, 30 June 2003
- www.its.leeds.ac.uk/projects/haste/index.htm (project web site)
- Comments received by e-mail from Dr Samantha Jamson, Institute for Transport Studies, University of Leeds

Project title	Diagnosis of electronic systems in motor vehicles for pti - IDELSY	
Contractor	RWTÜV - Fahrzeug GmbH	
Project period	From: 30.12.2003	To: 29.12.2005
Type of contract	Subvention contract	
Budget in EURO	Total: 896,700	EU contribution: 400,000
Call for proposal/Programme	DG TREN/SUB/01-2003	
Brief description of project	The aim of the project is to develop and test inspection procedures for complex, electronically regulated and safety relevant systems to be used during Periodic Technical vehicle inspection. The procedures should be capable of use in practice and should make use of modern diagnosis tools. The project is still ongoing, and no final results are available.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective	There is a good connection between the project objectives and the programme objective of making vehicles safer - and the project can indirectly be seen as part of the programme on improved active safety through technical innovations
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	As the project is ongoing, no final results have been reached, but the project is on time according to the available documents and only needs to test the procedures in field trials.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	-
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	-

References:

- Interim report of the IDELSY Project, 31 December 2004
- Comments received by e-mail from Axel Richter, RWTÜV Fahrzeug GmbH

Project title	Impaired motorists, methods of roadside testing and assessment for licensing - IMMORTAL	
Contractor	University of Leeds	
Project period	From: 01.01.2002	To: 31.12.2004
Type of contract	RTD Contract	
Budget in EURO	Total: 3,343,697	EU contribution: 2,512,473
Call for proposal/Programme	5th RTD Framework Programme	
Brief description of project	The aim of IMMORTAL is to provide evidence to propose intervention methods for driver impairment, and support the future development of European policy governing driver impairment legislation. The project investigates driver impairments by literature reviews and proposes policy actions. The types of intervention methods considered will be licensing assessment for chronic impairment of driver fitness (ageing, mental illness and disease), and roadside impairment assessment for acute impairment of driver state (alcohol, drugs and medicines).	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme objective of encouraging road users to improve their behaviour - through improved compliance with basic road safety rules and improved driver licensing and training.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project has not finished yet. Nevertheless, the brief review of the project found that recommendations regarding fatigue or sleep, the evaluation of drivers with light mental retardation and driver health have been prepared. The project is likely to achieve results that can support the overall objective of reducing fatalities. The project has held several workshops/seminars and more are planned. The workshop participants included researchers and policy makers from the European countries and representatives from related projects
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project states that the majority of the traffic fatalities in the EU are caused by human error, and driver impairment is a significant source of error. For example, it is described that between 7 and 30 % of all personal injury crashes are caused by fatigue or sleep. And the evidence is clear that sleep- and fatigue-related crashes are on the average more severe than other crashes. There does not seem to be a quantification of the potential impact of the project
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	Provided that project results will be implemented, the impact will probably last at least be 10-15 years - depending on when new methods are developed

References:

- Presentation of the research project IMMORTAL (note delivered by DG TREN, file name IMMORTAL T2002)

Project title	Motorcycle accident in depth study phase 2001 - MAIDS 2001	
Contractor	Association des Constructeurs Européens de Motocycle (ACEM)	
Project period	From: 16.11.2001	To: 15.11.2002
Type of contract	Subvention contract	
Budget in EURO	Total: 781,770	EU contribution: 390,000
Call for proposal	??	
Brief description of project	The project is the fourth phase of the MAIDS project. In the previous phases a common methodology on accident studies for PTW (Powered Two Wheelers) was developed and validated The project objectives are to identify and indicate the causes and consequences of PTW accidents and propose counter measures to reduce the frequency and severity of such accidents to compare the accident data to a control population in order to determine the risk associated with certain factors (e.g. alcohol)to apply this comprehensive and reliable data source in the development of proper counter-measures that will reduce the frequency and severity of PTW accidents. No reference is made to the actual amount of accidents involving PTW. The project has made in-depth studies of 921 PTW accidents in selected regions in 5 countries. Data has been compared with a control group of bikes and drivers not involved in accidents. The results consist of a large number of tables based on statistical analyses of the collected data. The results are summarised in 26 main findings on accident causes. Furthermore, a document with an action has been prepared.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project objective is linked to one road user category and can be seen as having good connection to all 3 objectives concerning road users, vehicles and road infrastructure.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project has reached its objective by establishing comprehensive data on the accident causes and preparing an action plan with a set of counter measures. The project has proposed actions aiming at reducing the number of fatalities in accidents involving PTW, and the project therefore supports the programme objective. Furthermore, the project has established a web site providing the possibility of finding project results, and downloads are reported to have been made approx. 7.500 times since July 2004. Finally, a number of presentations have been made and more are planned to targeted audience of specialists and stakeholders at EU and national level. Based on the project output, ACEM members are currently preparing research projects aiming to improve PTW safety concerning e.g. conspicuity and training.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	No baseline is described, but given that the project deals with PTW, it is likely that a baseline can be found. No actual figures for the potential reduction of fatalities are mentioned
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	The project has produced an action plan and is preparing further work. Potential actions can be both legislation on vehicles, road infrastructure improvements etc. The impact and the sustainability of the potential impact therefore cannot be assessed..

References:

- MAIDS Final report 1.2 (no date on the document)
- ACEM, a Plan for Action (leaflet prepared by the end of 2004)
- Comments received by e-mail from Jacques Compagne, ACEM

Project title	A practical study of the medical examination for driving licence holders in four EU member states - MEDRIL	
Contractor	International Commission for Driver Testing (CIECA)	
Project period	From: 01.03.2004	To: 28.02.2006
Type of contract	Subvention contract	
Budget in EURO	Total: 552,000	EU contribution: 276,000
Call for proposal	DG TREN/SUB/01-2003	
Brief description of project	The project objective is to give recommendations to the European Commission on a procedure and a periodicity of medical examinations for driving license holders of a group 1 license, based on an evaluation of such examination in 4 countries. The project will include inventory of practices in Finland, Luxembourg, Spain and the Netherlands; development and testing of a uniform protocol for medical examination and training of in total 275 medical doctors to work with the form; execution of a medical examination with the developed form with 10.000 driving licence holders, geographically spread over the countries, and over different age groups (where applicable); statistical analysis of the data from the protocol forms, and finally a workshop to discuss the results of the project and to reach recommendations on the contents and the periodicity of the medical examinations. A further workshop will be held to discuss on-road testing for "borderline" medical cases. The results are expected to be an inventory of current practices in the 4 involved countries: a standardised protocol form for medical examinations; statistical analysis of which functional diseases are found with driving license holders of a group 1 driving license, and recommendations to the European Commission on the contents and the periodicity of the medical examination. The actual size of the target group (drivers with functional diseases involved in accidents) is not mentioned. The findings are expected to be discussed at workshops with relevant parties.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project has some connection with the programme objective of improving road users' behaviour by considering the frequency of medical problems in the driving population, recommending methods and periodicity for medically testing drivers, and in this way improving driver licensing, examination and training.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	No project results are available yet for the evaluation.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- MEDRIL Technical annex v2, delivered by DG TREN
- Comments received by e-mail from Nick Sanders, CIECA

Project title	New programme for the assessment of child seats - NPACS	
Contractor	ÖAMTC - Ôsterreichische Automobil-, Motorrad- und Touring Club	
Project period	From: 22.12.2003	To: 21.12.2005
Type of contract	Subvention contract	
Budget in EURO	Total: 2,243,527	EU contribution: 600,000
Call for proposal	DG TREN/SUB/01-2003	
Brief description of project	The project objectives are to provide guidance to consumers on the relative protection afforded by universal child restraint systems, through reliable methods of dynamic testing; assessment of their ease of use, and regular European evaluation of the performance of theses products. NPACS is initiated by a number of partners and started in 2003. The part of NPACS supported by EU started in 2004. The expected activities are : an accident analysis of accidents with children involved, based on reviews of existing statistics; assessment and further development of test methods for child restraint systems through actual tests, desk studies etc; development of a rating system for child restraint systems and creation of a NPACS information web site aiming at giving the public access to information on tests of child restraint systems. At the time of evaluation, no specific results had been achieved yet. The anticipated results are mainly agreement on a harmonised test procedure for child restraint systems, available test results for such systems and dissemination to the public of the results through a web site. A quantification of the potential target group (serious injuries with children occupants in cars) is not mentioned, but references are made to international research and experience showing that "The effect of child restraints over and above the use of adult safety belts in reducing serious injuries is around 90% for rearward facing systems and around 60% for forward facing systems".	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project has a good connection to the objective of making vehicles safer by delivering results to the programme on increasing consumer demand for safe vehicles.
Effectiveness The findings are expected to be discussed at workshops with relevant parties.	Has the project reached its objective? The findings are expected to be discussed at workshops with relevant parties.	The project is halfway through the research phase and has not yet delivered results.
The findings are expected to be discussed at workshops with relevant parties.	The findings are expected to be discussed at workshops with relevant parties.	
The findings are expected to be discussed at workshops with relevant parties.	The findings are expected to be discussed at workshops with relevant parties.	

References:

- WD FC 5d-030505 Final working agreement, 5 May 2003

- A word document with the title "NPACS Subvention Proposal", 3 June 2003, (the description of activities is not very clear and can only be seen as indicative)
- NPACS Subvention Proposal (no date)
- Comments received from Eva Maria Kerschl, ÖAMTC

Project title	Pan-European co-ordinated accident and injury databases - PENDANT	
Contractor	Loughborough University Vehicle Safety Research Centre	
Project period	From: 01.01.2003	To: 31.12.2005
Type of contract	RTD Contract	
Budget in EURO	Total: 3,264,242	EU contribution: 3,106,861
Call for proposal	5th RTD Framework Programme	
Brief description of project	The purpose of the project is to provide new levels of crash and injury data to support EU vehicle and road safety policy making. Two data systems will be developed. The first will be based on data collected in 8 countries, and will contain in-depth crash and injury data relating to over 1100 injured car occupants and pedestrians. The second information system will utilise hospital injury data relating to all road user types that already exist in 3 EU countries. There will be a qualitative and quantitative level of co-ordination between CARE and the two new data systems; CARE will provide a low level of detail (approx. 40 fields) of the accident circumstances for every EU injury accident. The hospital data will give a medium level of detail on injuries for selected samples involving large numbers of all types of road users. The in-depth data will be able to explain the causation mechanisms of injuries of car occupants and pedestrians with a high level of detail (over 400 fields), relating directly to vehicle regulation. The project is ongoing.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the 3 programme objectives. The project is indirectly linked to much of the programme by giving the potential for necessary supporting background information.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project has not finished yet. According to the mid-term review the project (almost) follows the plan. -
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	-
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	-

References

- Contract for Accompanying Measures: Annex 1 Description of work
- Comments received from Pete Thomas, Loughborough University Vehicle Safety Research Centre

Project title	Project for research on speed adaptation policies on European roads - PROSPER	
Contractor	Vägverket - Swedish National Road Administration	
Project period	From: 16.12.2002	To: 15.12.2005
Type of contract	RTD Contract	
Budget in EURO	Total: 3,234,655	EU contribution: 1,841,767
Call for proposal	5th RTD Framework Programme	
Brief description of project	The project objectives are to evaluate the efficiency of road speed management methods based on information technology (ISA) in comparison with traditional physical means: to investigate road users' reactions to such developments and to recommend suitable strategies for implementation of such methods. The background for the project is described as being that inappropriate speed is a major cause of accidents. The main project result is described as being the assessment of the potential effect of ISA road speed management methods in relation to traditional methods, and a thorough analysis of possible and suitable implementation strategies for different road speed management methods. The results will be designed as proposed actions for each group of identified stakeholders in road speed management and will concentrate on a short term perspective of 2 to 5 years. The project does not describe in figures the potential target group causing accidents due to in-appropriate speed, but it is described that young people, aged 15 to 24, are most at risk, with a fatality rate 50-90% higher than that of the population as a whole. The project will include an analysis of the potential effect of ISA on European roads by using CARE data. The costs are described as being difficult to estimate, due to the innovative character. The costs will be substantial in the short term in comparison with the benefits, due to necessary investments and trial studies	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project objective can be described as having some connection to the programme objectives on road user behaviour, vehicles and road infrastructure. The use of ISA can be seen as a contribution to the programme on improved compliance with basic road safety rules, improvement of active safety through legislation and technical innovations, and on the output of gaining improved knowledge on safety impact of intelligent road concepts.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project has not yet produced results. .
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- Mid term review 23 November 2004

- Contract for Accompanying Measures: Annex 1 Description of work, 2 September 2002

- http://www.rws-avv.nl/servlet/page?_pageid=121&_dad=portal30&_schema=PORTAL30&p_folder_id=7737 (project web site)

- Comments received by Jonas Sundberg, Swedish National Road Administration

Project title	Roadside infrastructure for safer European roads - RISER	
Contractor	Chalmers University of Technology	
Project period	From: 21.12.2002	To: 20.12.2005
Type of contract	RTD Contract	
Budget in EURO	Total: 2,828,476	EU contribution: 1,955,437
Call for proposal	5th RTD Framework Programme	
Brief description of project	RISER is a research project aiming at delivering practical guidelines for roadside design and maintenance, in order to improve the safety performance of future roadside design. The project includes an accident analysis, a mapping of the performance of infrastructure including reconstruction of accidents, identification of counter-measures and analyses of crash tests, development of design, redesign and maintenance guidelines, as well as dissemination including workshops and the establishment of a web site.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project has a good connection to the programme objective of improving road infrastructure, and can be seen as an integrated part of the output to establish good practice guidelines for infrastructure safety.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	It is still too early to assess the effectiveness of the project.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- Annex 1 for contract for RISER, dated 14 May 2002

Project title	Inventory and compiling of a European "good practices" guide on road safety education targeted at young people (children & teenagers) - ROSE 25	
Contractor	KfV - Kuratorium für Verkehrssicherheit	
Project period	From: 29.12.2003	To: 29.03.2005
Type of contract	Procurement contract	
Budget in EURO	Total: 398,871	EU contribution: 398,871
Call for proposal/Programme	Call for tender	
Brief description of project	The main objectives are to collect measures of good practice in road safety education (RSE) for children and teenagers in the member states of EU-25 and to compile European guidelines for best practice. The project has identified and contacted major players on RSE activities in all EU-25 countries and collected systematic information by means of questionnaires. Based on the collection, recommendations and guidelines are prepared which aim to provide practitioners with useful information on planning and carrying out such activities.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is some connection between the project objectives and the programme objective of encouraging road users to improve their behaviour, provided that project results are used to contribute to the programme of improving compliance with basic safety rules. Furthermore, improved driver licensing, examination and training is an issue dealt with indirectly, as interventions for pre-drivers which should prepare adolescents in terms of attitudes for following licensing courses in driving schools are collected as well Similarly, actions for moped drivers which also often include preparatory steps for licensing are collected.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project seems to have reached its objectives by preparing guidelines and recommendations The project results are likely to support road safety objectives as it puts road safety education of children and teenagers on the agenda.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project does not include a baseline, but the target group are accidents with children and teenagers, so a baseline probably can be found. There is no assessment of the potential impact in the project
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	If the results are implemented the guidelines will probably be beneficial for 5-10 years - even though the individual campaigns will only have impacts for 1-3 years

References:

- ROSE 25 Draft Final Report, 31. January 2005
- Comments received by Karin Weber, KfV - Kuratorium für Verkehrssicherheit
- Telephone interview with Karin Weber

Project title	Quality criteria for the safety assessment of cars based on real-world crashes - SARAC II	
Contractor	Comité Européen des Assurances	
Project period	From: 19.12.2002	To: 16.06.2005
Type of contract	Subvention contract	
Budget in EURO	Total: 1,483,789	EU contribution: 667,703
Call for proposal	??	
Brief description of project	A report describing the project application was the only available information for the evaluation. The SARAC II project's objectives are to : - "assess the suitability of existing real-world car crash data systems, worldwide, for their ability to provide high-quality safety ratings for passenger cars and to continue to improve these systems by the identification and inclusion of new and revised key variables - use retrospective analysis of real-world crash data to complement and supplement prospective crash test results - include issues of crash compatibility, vehicle aggressiveness and primary safety, using retrospective real-world crash data analysis." The activities are intended to be the evaluation of leading vehicle crash data banks worldwide, with the overall aim of harmonising the methods of collecting and evaluating data. A forum for information exchange of crash data and its analysis will be set up, bringing together academics, insurance institutes and car manufacturers. A final report will be prepared, clearly outlining the effect of new car assessment programmes (NCAP) worldwide (all based on the EU's EuroNCAP programme) , particularly their effect on improving the behaviour of the occupant and other road users, road safety protection. The report will make recommendations for enhancing NCAP testing and facilitating greater objective assessment. The project will motivate NCAP programme committees to orchestrate their assessment protocols to better reflect real-world crashes and to include assessment of the ability for the car to avoid or at least mitigate the consequences of crashes.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	The project objective has a good link to the programme objective of making vehicles safer by contributing to increasing consumer demand for safe vehicles (this is done by giving input to the EuroNCAP programme)
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	No results are reported yet -
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- Report on the grant application by SARAC, 25 July 2002 Report on the grant application by SARAC, 25 July 2002

Project title	Road safety in school transport - SCHOOL TRANSPORT	
Contractor	TIS.pt - Consultores em Transportes, Inovação e Sistemas, S.A	
Project period	From: 30.12.2003	To: 29.10.2004
Type of contract	Procurement contract	
Budget in EURO	Total: 118,607	EU contribution: 118,607
Call for proposal	Call for tender	
Brief description of project	The objective of the SCHOOL TRANSPORT project is to analyse the legal and operational situation in the member states of the European Union concerning safety in school transport, to evaluate the need for further legislation or other action at the Community or member state level and, based on this assessment, to develop a work programme for the suggested actions. The project uses two previous studies on school transport as a starting point. Project results include the updating of the analysis in the previous studies, country reports showing national approaches to school transport, topic overviews on legislation and practice in school transport, conclusions and recommendations for e.g. promoting school transport, safety measures, EC actions, etc.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme objectives of improving road users' behaviour, making vehicles safer and improving road infrastructure.
Effectiveness	Has the project reached its objective?	The final report contains conclusions and recommendations are given for e.g. promoting school transport, safety measures, EC actions, etc. The drafted EC work programme includes actions on the harmonisation of concepts and terminologies, database integration for information feedback on policy implementation, improvements in coach visibility/ efficiency of symbols, promoting the exchange of practices among EU-25, survey on practices and barriers to school transport, implementation of a zero-level of tolerance to alcohol and other narcotics, school transport exchange days and training activities for school transport drivers.
	Do the results support the programme objectives? (Used for completed projects)	The project results are likely to be able to support the programme objectives. A prerequisite is that output will be utilised for making improvements with regard to road users, vehicles or infrastructure.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets school children. It aims to improve road safety for children by promoting the use and safety conditions in school transport.
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	Provided that an impact will come, the impact is likely to last as long as the collected material still is relevant and fairly updated.

References:

- SCHOOL TRANSPORT - "Road safety in school transport, Final Report", 15 October 2004.

- SCHOOL TRANSPORT - "Road safety in school transport, Proposal", 2003.

- Comments received by e-mail from Daniela Carvalho, TIS pt

Project title	Improve road safety in south, East & Central Europe - SEC BELT	
Contractor	European Transport Safety Council	
Project period	From: 01.01.2004	To: 31.12.2006
Type of contract	Subvention contract	
Budget in EURO	Total: 1,143,536	EU contribution: 571,768
Call for proposal	DG TREN/SUB/01-2003	
Brief description of project	The aim of the SEC Belt project is to improve road safety in 16 Southern, Eastern and Central European countries by identifying and promoting measures for the accident risk reduction of road users. Objectives in the project include identification of specific safety risks and opportunities, evaluation of safety data and policies, as well as promotion of best practice and safer behaviour in the SEC Belt countries. The project is ongoing. Present results include 3 capacity and awareness raising seminars documented in a policy paper, setting up two workings parties for a review of improving accident data and evaluation of national road safety policies, publication of newsletters on road safety development, preparation of concept for a mobile exhibition on road safety, fact sheets, presentations at conferences, etc. The project targets all road users in the SEC Belt countries in general and vulnerable road users in particular.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the objectives of improving road users' behaviour, making vehicles safer and improving road infrastructure
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project is ongoing. Progress in 2004 has been reported in a paper. There seems to be a direct link between the project's objectives, activities and realised/expected results.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- SEC BELT - "ETSC Activity Overview & SEC Belt Project Evaluation" December 2004.
- SEC BELT - "Annex 1 - Description of the action", 2003.
- Comments received by e-mail from Antonio Avenoso, European Transport Safety Council

Project title	Harmonisation of in-vehicle speed alert system - SPEEDALERT	
Contractor	ERTICO	
Project period	From: 01.05.2004	To: 30.04.2005
Type of contract	Subvention contract	
Budget in EURO	Total: 756,669	EU contribution: 378,334
Call for proposal	DG TREN/SUB/01-2003	
Brief description of project	The SPEEDALERT project's overall objective is to consolidate the outcome of the different European in-vehicle speed information and warning system activities, and to harmonise the in-vehicle speed alert concept definition to the largest extent possible. This is seen as a precondition for future European-wide implementation. In-vehicle speed alert systems are seen as significant contributors to road safety. SPEEDALERT builds on the previous work by the SpeedAlert Committee. The project is ongoing and reporting is only available for the first activities. The intention of in-vehicle speed alert systems is to inform the motorist of the current speed limit and thereby raise their awareness to comply with the rules, preventing speed enforcement and enhancing road safety. Speed alert systems will not limit speed but will solely provide driver assistance. The project targets motorists directly and all road users indirectly.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the objectives of improving road users' behaviour and making vehicles safer.
Effectiveness	Has the project reached its objective?	The project is ongoing. It is emphasised that no final reporting or evaluation has been completed; only two reports on activities are available. Given the available information at this project level, no conclusions are possible regarding the connection between project objectives and output.
	Do the results support the programme objectives? (Used for completed projects)	The project results support the programme objectives. A prerequisite for a safety effect is that results are used for making improvements in vehicle technology.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- SPEEDALERT - Website "www.speedalert.org/".
- SPEEDALERT - "Newsletter, no. 1", December 2004.
- SPEEDALERT - "Workshop 1, Brussels", 4 October 2004.
- SPEEDALERT - "D2.1 Common definition of speed limits and classifications", November 2004.
- SPEEDALERT - "System and service requirements", 7 February 2005.

Project title	Comparative study of road traffic rules and corresponding enforcement actions in the member states of the European Union - TIS-STUDY	
Contractor	TIS.pt - Consultores em Transportes, Inovação e Sistemas, S.A	
Project period	From: 13.12.2002	To: 12.12.2003
Type of contract	Procurement contract	
Budget in EURO	Total: 784,899	EU contribution: 784,899
Call for proposal	Call for tender	
Brief description of project	The main objective of the TIS-STUDY is to provide information on and to make a comparative analysis of road traffic rules and corresponding enforcement in the member states of the European Union (EU 15). Focus is on providing detailed information on road traffic rules and respective sanction regimes to contribute to EC harmonisation, providing information on best results achieved in the field of legislation issuing and enforcement strategies to decision makers, on informing the general public and supplying useful information to the European road user. Project results include analyses of national, legal, organisational and regulatory frameworks, as well as on rules and enforcement for 46 topics. A final report sums up the activities, conclusions and recommendations. Reporting includes a non-public database with topical information on road traffic rules and enforcement.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between project objectives and the programme objectives of improving road users' behaviour, making vehicles safer and improving road infrastructure.
Effectiveness	Has the project reached its objective?	Results of analyses of national, legal, organisational and regulatory frameworks, as well as of rules and enforcement for each selected topic, are reported in a publicly available final report. The report includes annexes with country reports, topic tables, lists of useful websites, national key informants, assessment of data quality and the RTR database and guidelines. The final report sums up the planned activities, conclusions and recommendations. The project reporting includes a detailed database with topical information on road traffic rules and enforcement. 46 topics are covered in six categories: Driving requirements, professional transport, road characteristics, safety equipment, traffic rules and vehicle characteristics.
	Do the results support the programme objectives? (Used for completed projects)	The project results are likely to support the programme objectives. A prerequisite is that the results lead to improvements in road user behaviour, vehicle or road infrastructure safety. The interview with an Austiran national expert revealed that the project output has been used as inspiration for new legislation on fines.
Utility (Used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets all road users.
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	The output will probably need to be updated regularly to be sure that the latest legislation is included.

References:

- TIS-STUDY - "Comparative study of road traffic rules and corresponding enforcement actions in the member states of the European Union, Final Report", 2004.

- TIS-STUDY - "Comparative study of road traffic rules and corresponding enforcement actions in the member states of the European Union, Proposal", 2002.

Project title	System for driver training and assessment using interactive evaluation tools and reliable methodologies - TRAINER	
Contractor	Belgisch Instituut voor de Verkeersveiligheid vzw	
Project period	From: 01.04.2000	To: 31.03.2003
Type of contract	RTD Contract	
Budget in EURO	Total: 3,576,981	EU contribution: 2,274,258
Call for proposa/Programmel	5th RTD Framework Programme	
Brief description of project	The TRAINER project focuses on developing assessment and training methodologies and tools to improve novice driver training, with special emphasis on hazard perception and risk avoidance. Although only tools for the training and assessment of passenger car drivers are developed within TRAINER, the related needs of truck, bus and taxi drivers are also surveyed. New technologies, such as interactive multimedia training tools, on-line multimedia databases and stationary and semi-dynamic simulators are all employed in a cost-effective and quantifiable way, to enhance driver training quality (especially in terms of hazard perception), reduce overall training time and cost and to enhance road safety. Project results are reported in a final publishable report. Furthermore, reporting on a number of activities is separately available.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme's objective of improving road users' behaviour - provided that project results are used to contribute to improving driver licensing and training.
Effectiveness	Has the project reached its objective?	The project is finished. The final report presents the results of the different project activities including guidelines and recommendations for novice driver training and vehicle design. The available reporting indicates that the expected project activities and results have been fulfilled. The project website has not been continuously up-dated.
	Do the results support the programme objectives? (Used for completed projects)	The project results supports road safety objectives as a follow up project partly based on TRAINER is proposed in the EU. It is stated that 5 project products (training curricula database, interactive multimedia software, low and mean cost driving simulators and driver normative behaviour data-base) will be industrialised and marketed from 6 months to 5 years after the end of the project - depending on the product - by the relevant project partners. Moreover the project results have been used in other (EU) projects such as AGILE, CONSENSUS and IDEA
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project does not include a baseline, but the target group are accidents with novice drives, so a baseline probably can be found. There is no assessment of the potential impact in the project
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	If the results are implemented the guidelines will probably be beneficial for 5-10 years - even though the effect for the individual drivers being trained probably will be shorter.

References:

- TRAINER - "Annex 1 Description of work", 10 November 1999.
- TRAINER - Website "www.trainer.iao.fraunhofer.de/achievements.htm", 2005.
- TRAINER - "Survey of existing training methodologies and driving instructors' needs", January 2001.
- TRAINER - "Deliverable No. 2.1, Inventory of driver training needs and major gaps in the relevant training procedures", January 2001.
- TRAINER - "D.4.1, Driving simulator scenarios and requirements", June 2001.
- TRAINER - "Del. 4.4, Truck simulator feasibility study", January 2002.
- TRAINER - "Deliverable 5.1, TRAINER assessment criteria and methodology", February 2002.
- TRAINER - "D6.1, Pilot plans".
- TRAINER - "D9.2, Project www site with interactive demo", December 2001.
- TRAINER - "Final publishable report", June 2003.
- Comments received by e-mail from Ria de Geyter, Belgisch Instituut voor de Verkeersveiligheid vzw
- Interview with Patricia Anbo, Belgisch Instituut voor de Verkeersveiligheid vzw

Project title	Application of road safety related community legislation in transport companies - TRANSPORT COMPANIES	
Contractor	NEA Transport and Training	
Project period	From: 30.12.2003	To: 28.02.2005
Type of contract	Procurement contract	
Budget in EURO	Total: 295,150	EU contribution: 295,150
Call for proposal	Call for tender	
Brief description of project	The overall objective of the project is to assess how road transport companies can become more involved in the task of halving the number of road accident fatalities in Europe. The main activities are an analysis of the existing road safety situation within freight transport companies, an analysis of the literature and relevant experiences outside Europe on development of road safety at company level, and an inventory of options for actions leading to an "Action Plan" with specific strategies at both community and individual company level. The study includes literature research, analyses of accidents, and interviews with transport companies, associations, inspections, etc. The project is finishing. Results are presented in a final report and various other papers, e.g. recommendations for high priority actions related to vehicle technology and its usage, the driver, implementing a safety culture and improving compliance.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the objectives of improving road users' behaviour and making vehicles safer
Effectiveness	Has the project reached its objective?	The project output is presented in a final report and different other papers. Conclusions, recommendations and an action plan for the EU and companies are included. The project's objectives, activities and output seem to be logically linked.
	Do the results support the programme objectives? (Used for completed projects)	The project results are likely to support the programme objectives. The results of the study have been presented and discussed at a workshop in Brussels.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets trucks and truck drivers
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- TRANSPORT COMPANIES - "Towards an agenda for safer professional transport, Final Report", October 2004.
- TRANSPORT COMPANIES - "Letter of introduction from Dimitrios Theologitis, Head of Unit".

Project title	Traveller and traffic information systems: guidelines for the enhancement of integrated information provision services - TRAVEL-GUIDE	
Contractor	Transport Engineering Laboratory of the Aristotle University of Thessaloniki	
Project period	From: 01.04.2000	To: 31.03.2002
Type of contract	RTD Contract	
Budget in EURO	Total: 2,281,017	EU contribution: 1,549,939
Call for proposal	5th RTD Framework Programme	
Brief description of project	The TRAVEL-GUIDE project's main objective is to develop guidelines concerning information provision by traffic information and traffic management systems. Traffic information systems can, in conjunction with traffic management systems, assist in reducing several negative aspects of road transport, such as accidents, congestion and pollution, by providing information and guidance for safer, more efficient and more environmentally friendly use of the road transport infrastructure. Project activities include assessment of state-of-the-art driver information systems and services and architectural issues, development of scenarios for the evaluation of methods of information provision and of new methods of driver information provision, demonstration and testing, development of design guidelines for driver information systems and applications and cost-benefit analysis and exploitation. The planned activities are presented in detail and seem to link directly to the project objectives. The only available reporting however is a report on guidelines for the enhancement of integrated information provision services. Guidelines are presented on the basis of a pilot environment (on-site, in-vehicle and public transport) and guideline target groups (authority, system developer/information provider and end user).	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is some connection between the project objectives and the objectives of improving vehicles and improving road infrastructure
Effectiveness	Has the project reached its objective?	The project is finished. Only limited reporting is available. The report focuses on presenting guidelines and best practise for driver information systems and services, divided into guidelines for in-vehicle, on-site, environment independent and public transport systems and services. Furthermore, there is a brief reference to earlier project activities. There seems to be a logical link between objectives, planned activities and output, but given the limited information, no further assessment is possible.
	Do the results support the programme objectives? (Used for completed projects)	The limited results may support the objectives but limited information is available for the assessment.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project primarily targets motorists, including foreign, elderly and disabled and professional drivers.
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	Due to the actual lack of evident project results, the sustainability cannot be assessed.

References:

- TRAVEL-GUIDE - "Annex 1 Description of work", 8 October 1999.
- TRAVEL-GUIDE - "Deliverable D6, Design guidelines and best practise issues for driver information systems and services", June 2002.
- Comments received by e-mail from Dr. A. Naniopoulos, Transport Engineering Laboratory of the Aristotle University of Thessaloniki

Project title	Improvement of vehicle crash compatibility through the development of crash test procedures - VC-COMPAT	
Contractor	TRL Limited - Transport Research Laboratory	
Project period	From: 01.01.2003	To: 31.12.2005
Type of contract	RTD Contract	
Budget in EURO	Total: 5,836,008	EU contribution: 3,000,000
Call for proposal	5th RTD Framework Programme	
Brief description of project	The overall objective of the project is to develop a set of crash test procedures which, when implemented in legislation and/or consumer testing, will lead to an improvement of vehicle crash compatibility. It is expected that the project will contribute to reducing the number of killed and seriously injured by up to 30 % in accidents where the car collides with another vehicle (the project focuses on car-to-car and car-to-truck collisions). The project is ongoing and reporting is only available on certain activities. Using the outlines from the 4th framework compatibility project as a basis, VC-COMPAT will complete the initial development of test procedures, including associated performance criteria, demonstrate that the procedures can correctly assess a car's compatibility and determine the best approach to access compatibility using a minimum of additional tests. The main expected technical achievements are the development of a suite of draft test procedures for car-to-car impact and associated performance criteria outlines to assess and control car frontal structures for frontal impact compatibility, development of a framework for a crash compatibility rating system, and indication of the benefits and costs of improved frontal impact compatibility. For car-to-truck impact, development of test procedures and performance standards for front under-run protection systems for trucks and indication of the benefits and costs of front and rear under-run protection systems for trucks are correspondingly expected. It is stated in the project that 50-65 % of all road accident fatalities in Europe are car occupants. 50-60 % of car occupant casualties occur in accidents where the car collides with another vehicle, mostly another car or alternatively a truck. The project targets car-to-car and car-to-truck collisions. It is expected that the project's results can contribute to a safety improvement of new cars and trucks, leading to a reduction in seriously injured and killed car users of up to 30 % in accidents where a car impacts another vehicle.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme's objective of making vehicles safer - provided that project results are used to contribute to programme on increasing consumer demand for safe vehicles, stricter legislation on passive safety, etc.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project is ongoing. No final report or evaluation is available, only a number of reports on activities. There seems to be a direct connection between the project's objectives, planned activities and expected output.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for	Will project result last after	

completed projects)	the project has been completed?	

References:

- VC-COMPAT - "18 Months Progress Report", 22 November 2004.
- Comments received by e-mail from Mervyn Edwards, TRL Limited - Transport Research Laboratory

Project title	Virtual reality systems for perceived ergonomic quality testing of driving task and design - VIRTUAL	
Contractor	Scuola Superiore Sant'Anna (Pisa)	
Project period	From: 01.01.2002	To: 31.12.2002
Type of contract	RTD Contract	
Budget in EURO	Total: 3,975,695	EU contribution: 2,555,954
Call for proposal	5th RTD Framework Programme	
Brief description of project	The VIRTUAL project's objective is to develop, test and validate three different virtual reality (VR) driving simulators in order to apply them to vehicle ergonomics studies and training of novice drivers. Project results are presented in a final report. Three different virtual reality driving simulators have been developed. They are characterised by an increasing level of immersion in the Virtual Environment and by differences in the kind of devices and the degree of feedback (visual, acoustic and haptic) to the driver. The three different VR simulators developed allow the driver to interact with a simulated car and the surrounding environment during the accomplishment of realistic driving tasks. The systems have been validated by comparing the performance of drivers in real cars and in a simulated environment. Moreover, evaluations regarding acceptance and quality of systems have been carried out.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is some connection between the project objectives and the objectives of improving road users' behaviour and making vehicles safe.
Effectiveness	Has the project reached its objective?	The project has, as intended, resulted in the development of three different virtual reality driving simulators, which have been tested and evaluated. The systems have furthermore been tested in studies for the training of novices. A VR system has been installed at Centro Ricerche Fiat in Torino for ergonomic studies (external visibility) and training of novice drivers. It is further stated that the developed methods based on VR can significantly improve the quality and validity of ergonomic evaluations of vehicles, and can reduce the risks and costs of problem solving after prototyping.
	Do the results support the programme objectives? (Used for completed projects)	The project results will, if utilised for improving driver training and vehicle safety, support the programme objectives.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets primarily novice passenger car drivers.
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	Provided an impact will come, it is likely that an impact will last for 1 - 3 years for each of drivers been trained.

References:

- VIRTUAL - "Final Publishable Report", 26 February 2003.

Project title	Young European truck driver competition - YETD	
Contractor	SCANIA CV AB (PUBL)	
Project period	From: 01.01.2003	To: 30.11.2003
Type of contract	Subvention contract	
Budget in EURO	Total: 2,763,233	EU contribution: 348,666
Call for proposal	??	
Brief description of project	The project's objective is to improve driving skills and safety awareness among young truck drivers in general, and specifically to designate the best European truck driver aged up to 30 years - based on competence in safe driving skills and awareness. In this connection, local, regional and national competitions are arranged in each of the 19 participating countries (15 EU countries, Norway, Switzerland, Poland and Czech Republic). The winners of a first theoretical (written) round go to a regional competition which includes both theoretical and practical tests. Regional winners meet up in a national final. The competition culminates in a European Final to designate an overall winner. The competition was carried out in 2003 (approx 32,000 participants at qualifying level) and will be repeated in 2005, this time with 28 participating countries. No reporting on project results is available.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is a good connection between the project objectives and the programme's objective of improving road users' behaviour.
Effectiveness	Has the project reached its objective?	No reporting on project results is available. There is a direct link between the objective and activities leading to designation of the best young European truck driver. The link between the objective to improve driving skills and safety awareness among young truck drivers in general and the project activities (the competition) is more difficult to assess, as the road safety benefits of the various promotion of, participation in and possible feedback of the competition are not known.
	Do the results support the programme objectives? (Used for completed projects)	Project results are likely to support the objectives.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	The project targets young truck drivers.
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	Provided an impact has been obtained, it is likely that it will last for 1 - 3 years for the drivers been involved.

References:

- Young European Truck Drivers - "Annex 1 Detailed Description of the operation".

- "Young European Truck Drivers 2005 - the largest driver competition ever", Scania.com/News Centre.

Project title	Youth on the road: A unique platform of co-operation and gateway of information for youth & road safety in Europe - YOUTH ON THE ROAD	
Contractor	PAU	
Project period	From: 22.12.2003	To: 21.12.2005
Type of contract	Subvention contract	
Budget in EURO	Total: 523,154	EU contribution: 250,000
Call for proposal	DG TREN/SUB/01-2003	
Brief description of project	The Youth on the Road project aims at providing a platform for seeking relevant and up-to-date information, presenting and promoting initiatives and best practices on e.g. raising road awareness, creating a network for interaction between national, regional and local actors, etc. related to road safety and youth. Focus in the project is on direct youth participation in the formulation and implementation of road safety related initiatives. The main tool to facilitate this work is the construction, development and updating of an Internet portal www.youthontheroad.net. The project is ongoing. The portal has been launched, a first call of projects has been activated (6 subject areas; young people's journeys in the city, which public spaces for young people?, the place of young people with disabilities in the city, speed and young drivers, drugs and alcohol behind the wheel and young people in difficult situations), etc.	
	Key questions	Assessment
Relevance	How is the project objective linked to programme objective?	There is some connection between the project objectives and the programme's objectives of improving road users' behaviour and improving road infrastructure - by contributing to programme of improving compliance with basic road safety rules, providing good practice guidelines for infrastructure safety, etc.
Effectiveness	Has the project reached its objective? Do the results support the programme objectives? (Used for completed projects)	The project is ongoing and no final report with results, etc. is available, but it is stated that the portal aims to offer quality, up-to-date information on young people and road safety, as well a database that makes it possible to publicise various initiatives being run at European, national, regional or local level, thereby facilitating actors' interaction. Moreover, a youth and road safety network involving cultural, social and educational communities directly related to children and young adults has been built. The network is expected to reach 1,500(-2,500) local partners in 75(-100) European cities with a cumulative audience of 1.5(-2.5) million active and involved individuals.
Utility (used for completed projects)	Does the project include a baseline and a potential impact assessment?	
Sustainability (Used for completed projects)	Will project result last after the project has been completed?	

References:

- Youth on the Road - "Proposal".
- Youth on the Road - "Interim Report", 17 December 2004.
- Youth on the Road - "Grant Application Form", 7 November 2003.
- Comments received by e-mail from Sabine Schuman, PAU.

Annex II: Question guides

The following question guides were used during the assignment to get supplementing information.

Questions submitted by e-mail to contact persons
To project contact persons for all 35 projects, the evaluation team submitted an e-mail including a draft project data sheet. The content of the e-mail was agreed with DG TREN.

---000---

Dear Mr/Ms [contact person]

We submit this e-mail to you on behalf of Mr Theologitis, Head of Road Safety Unit in DG TREN.

Background

Our company has by DG TREN been assigned to evaluate how the EU funded road safety projects from 1999 to 2004 correspond to the objectives in "European Road Safety Action Programme", [COM(2003) 311 final].

Approx. 40 funded projects have been selected to include in the evaluation sample. The purpose of the evaluation is to get a good overview of the sum of funded projects. It is NOT the purpose to make a specific evaluation of each of the projects.

The evaluation assignment started in January and has to be finished in March so that DG TREN can use the results to discuss any adjustments of the action programme.

What would we like You to do?

DG TREN has informed us that you are the person from the contracting team to contact to validate the attached draft Project Data Sheet.

We would like you to have a look at the attached project data sheet and give us any comments on the text. You are welcome to write the comments directly into the sheet or submit comments electronically in other documents.

We would especially like you to consider the following:

- Have we misunderstood something about the project that we need to revise? (we have had very little time to make the review and the review is not intended either to give a full description - just sufficient to be part of the overall evaluation)

- Do you have more information on the continuation of the project? (this refers especially to the assessment of sustainability.

- Do you have general comments to assist the evaluation? (this could e.g. be advantages/disadvantages with different types of call for proposal or comments to actual road safety issues dealt with by EU)

Time schedule

Due to the tight time schedule, we would very much appreciate to receive your comments no later than Friday this week. We sincerely hope that you will be able to live up to this.

If You have any comments or questions concerning this e-mail, do not hesitate to contact Henrik Grell, who is the project leader for the evaluation.

If you have any comments or questions that You would prefer to give directly to DG TREN, please contact the responsible project Officer Ms Maria-Teresa Sanz-Villegas, Road Safety Unit.

Question guide to telephone interviews with project contact persons
The following questions guide was used to carry out telephone interviews with 6 project contact persons and a DG TREN officer involved in two of the projects. The main purpose was to get further information on follow up activities and any knowledge on assessment of impact.

Introduction

Our company has by DG TREN been assigned to evaluate how the EU funded road safety projects from 1999 to 2004 correspond to the objectives in "European Road Safety Action Programme".

DG TREN will use the results of the evaluation to discuss any adjustments of the action programme. The purpose of the evaluation is not to make a specific evaluation of each of the projects.

Nevertheless, we would like to go more in depth with the follow up actions of selected projects.

The following schematic questions were used. They were adapted to the single project based on the information gathered in project documents.

1. Knowledge of any follow up actions after the project finished

- Who has received the final report or other project output?

- What is your knowledge of the dissemination activities during and after the finalisation of the project?

  - Have you had any responses from relevant persons/institutions through the dissemination activities?

- Do you know if DG TREN or other stakeholders have arranged/planned any follow up actions on the report/project output? - if yes what kind of actions?

- Have you been involved in any follow up actions (meetings, preparation of new studies, etc)?

- Have you knowledge of any other researchers/national road safety authorities/EU/other who directly have used the project output to take action? - if yes, what kind of action?

2. Knowledge on road safety impact caused by the project

- Have you during the study or afterwards made any assessment on how the project output can contribute to the reduction of the number of fatalities?

  - if yes, have you any idea of the magnitude (number of fatalities likely to be reduced) of this reduction?

- Have you knowledge of any other impacts that the project may lead to? (other effects than on fatalities/accidents - both positive and negative impacts)

3. Likelihood for a materialisation of road safety impact due to the project?

- What should in your opinion be the next steps to achieve an impact on the number of fatalities based on the project? (Legislation, more research, funding of campaigns or …)

- How do you assess the probability that these next steps will be taken?

Question guide to telephone interviews with national road safety experts
The following questions guide was used to carry out telephone interviews with 4 national road safety experts from the member states. The main purpose was to get further information on knowledge of EC funded projects on road safety and use of such projects in the national work.

Introduction

The following questions are prepared as part of the study "Ex-post evaluation of actions funded under the road safety policy 1999 - 2004". The study is carried out by COWI for the European Commission, Directorate-General for Transport and Energy (DG TREN). The study will finish in the beginning of April 2005.

The questions are prepared and asked to a number of experts working with national road safety policy in the member states. The purpose is to get indications on the general knowledge of EU actions regarding road safety.

Questions

- Have you heard about the EU Road Safety Action Programme from 2003?
- Do you know the road safety target in the White Paper (European Transport Policy for 2010: Time to decide") from 2001?
- Do you know any road safety research projects, studies or other road safety actions funded or supported by the EU since 1999?

If Yes to the last mentioned question:

- Could you please tell us the project(s) name(s)
- Where have you heard about the project(s)? (e.g. contacted by contractors wishing information, directly being a participant, listened to presentations on conferences, read reports, searched on the Internet or other)
- Have the project output been used directly in the national road safety work?

Do you have any other comments regarding EU road transport policy or actions?

Annex III: Documents reviewed

- Evaluating EU activities. A practical guide for the Commission services, European Commission, July 2004
- An action programme on road safety [COM (93) 246 final], June 1993.
- Promoting road safety in the EU. The programme for 1997 - 2001 [COM (97) 131 final], April 1997.
- Priorities in EU road safety. Progress report and ranking of actions [COM (2000) 125 final], March 2000.
- European Transport Policy for 2010: Time to decide. White paper [COM (2001) 370 final]
- Saving 20,000 lives on our roads. A shared responsibility. European Road Safety Action Programme, [COM (2003) 311 final]
- Ex-post evaluation of specific projects funded under the Transport Safety Policy, TEEC The European Evaluation Consortium, August 2004
- PROMISING. Promotion of Measures for Vulnerable Road Users, Cost-benefit analysis of measures for vulnerable road users, Deliverable D 5, TRL, July 2001
- Documents concerning the GROWTH RTD programme on the CORDIS web site: http://www.cordis.lu/growth/src/overview.htm
- Various other documents from the DG TREN web site.

Project documents for the funded projects. These documents are listed for each of the projects in Annex I, Project Data Sheets.