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**Ex-post evaluation of specific projects funded
under the Transport Safety Policy**

FINAL REPORT

**The European Commission
The Directorate-General for Energy and Transport
(DG TREN)**

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Ex-post evaluation of specific projects funded under the
Transport Safety Policy

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	5
1.1	INTRODUCTION	5
1.1.1	Overview	5
1.1.2	Policy framework.....	5
1.1.3	The aim of the evaluation services.....	5
1.2	THE SCOPE OF THE EVALUATION	6
1.2.1	Projects in the sample.....	6
1.2.2	The evaluation questions	7
1.2.3	Representativeness of the sample selected.....	7
1.3	MAIN EVALUATION CONCLUSIONS AND RECOMMENDATIONS.....	8
1.3.1	Overall assessment	8
1.3.2	Conclusions and recommendations relating to Relevance	9
1.3.3	Conclusions and recommendations relating to Effectiveness.....	10
1.3.4	Conclusions and recommendations relating to Impact	11
1.3.5	Conclusions and recommendations relating to Efficiency.....	13
1.3.6	Conclusions and recommendations relating to indicators for the monitoring of interventions ...	14
1.3.7	Conclusions and recommendations relating to Sustainability.....	15
1.3.8	Conclusions and recommendations relating to the suitability of extensions and future similar activities	16
1.3.9	Conclusions and recommendations relating to the consistency among different objectives	17
1.3.10	Conclusions and recommendations relating to possible improvements in the added value of the funding 18	
1.4	GENERAL RECOMMENDATIONS	20
1.4.1	Overall recommendations arising from the sample.....	20
2	INTRODUCTION.....	22
3	METHODOLOGY	23
3.1	PROJECT IDENTIFICATION AND DATA GATHERING	23
3.2	THE EVALUATION GRID	23
3.3	THE EVALUATIVE STAGE.....	26
3.3.1	Analysis of the policy context.....	27
3.3.2	The desk research	27
3.3.3	Selection and scrutiny of the first two projects.....	28
3.3.4	Project clusters and identification of appropriate stakeholders.....	28
3.3.5	The evaluative interviews.....	29
4	EVALUATION FINDINGS - GENERAL.....	31
4.1	THE POLICY BACKGROUND	31
4.1.1	The European Union Policy on Transport	31
4.1.2	Transport Safety	32
4.1.3	Road Safety	32
4.1.4	The Way Forward.....	33

4.2	REPRESENTATIVENESS OF THE PROJECTS SELECTED	33
4.2.1	Introduction	33
4.2.2	Analysis of overall budget and project support	33
4.2.3	Commitment analysis of the sample	35
4.2.4	Functional analysis of the sample	36
4.2.5	Particular attributes of projects in the sample	37
4.2.6	Ability to draw general conclusions	37
5	CONCLUSIONS	38
5.1	CONCLUSIONS FOR THE MAIN EVALUATION QUESTIONS	38
5.1.1	Overview	38
5.1.2	Conclusions relating to RELEVANCE	39
5.1.3	Conclusions relating to EFFECTIVENESS	42
5.1.4	Conclusions relating to IMPACT	47
5.1.5	Conclusions relating to EFFICIENCY	53
5.2	CONCLUSIONS FOR THE DERIVATIVE EVALUATION QUESTIONS	59
5.2.1	Overview	59
5.2.2	Conclusions on Sustainability	59
5.2.3	General conclusions on sustainability drawn from this sample of projects	61
5.2.4	Conclusions on monitoring and indicators	62
5.2.5	The consistency among different objectives	62
5.2.6	The added value of the funding	63
6	RECOMMENDATIONS	64
6.1	GENERAL RECOMMENDATIONS	64
6.1.1	The basis for the judgements	64
6.1.2	General recommendations drawn from the sample	64
6.1.3	Evaluative Term: Monitoring of interventions	67
6.2	SPECIFIC RECOMMENDATIONS	70
6.2.1	Specific monitoring recommendations	70
6.2.2	Specific recommendations on the value added of the funding and on the effectiveness of the project financed	73
6.2.3	Specific recommendations in relation to future funding	75
7	EVALUATION GRIDS-CASE STUDIES	78
7.1	ROSITA	78
7.2	EURONCAP	91
7.3	ETSC	104
7.4	CESARE	113
7.5	RESPECT	123
7.6	CARE	139
7.7	SARTRE	152
7.8	TISPOL	162
7.9	EQUASIS	172
7.10	EUROBOB	184
1	ANNEX 1: TASK SPECIFICATIONS FOR THE ASSIGNMENT:	197
1.1	BACKGROUND FOR THE EVALUATION	197
1.1.1	Description of the activities to be evaluated	197
1.1.2	Rationale and aims of the evaluation	198
1.1.3	Scope of the evaluation	198
1.2	OBJECTIVES AND TASKS OF THE ASSIGNMENT	199
1.3	REPORTING AND DELIVERABLES	200
1.4	ORGANISATION AND TIMING	200

2	ANNEX 2: INITIAL METHODOLOGY	202
2.1.1	<i>Project identification</i>	202
2.1.2	<i>The method of analysis</i>	202
3	ANNEX 3: POLICY CONTEXT.....	204
3.1	AIR TRANSPORT SAFETY.....	204
3.1.1	<i>The Creation of a European Agency for Aviation Safety.....</i>	204
3.2	MARITIME SAFETY.....	205
3.2.1	<i>1993 - 2000: The start of the Common Maritime Safety Policy</i>	205
3.2.2	<i>The Erika's Packages I & II.....</i>	205
3.3	RAIL SAFETY	206
3.4	ROAD SAFETY	206

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1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

1.1.1 Overview

This ex-post, external evaluation was commissioned by the Unit A1 of the Directorate General for Energy and Transport of the European Commission (DG TREN) to The European Evaluation Consortium (TEEC), under the Framework Contract BUDG-02-01 L2 for evaluation and evaluation-related services.

This executive summary presents an overview of the evaluation services, looking briefly at the aim and scope, the methodology applied and a synopsis of the conclusions and recommendations.

1.1.2 Policy framework

The overall objective of the EU Policy with regard to transport safety is to improve the safety of land, air and sea transport, without unduly affecting the economic efficiency of these transport modes. The White Paper sets out the overarching goal, in road safety, of halving fatalities by 2010, and in maritime safety of eliminating the use in European waters of single hulled tankers.

The European Union's Action Plan for transport safety to implement the policy focuses on a number of activities:

- On setting of rules or legislation.
- On establishing standards for common use.
- On ensuring uniformity in enforcement methods and of penalties.
- On support for communications campaigns and provision of information.
- On evaluation studies to consider impacts and necessary adjustments.
- On monitoring of the incorporation of EU legislation by Member States in national law.

1.1.3 The aim of the evaluation services

According to the Financial Regulation, actions funded on an annual basis have to be subject to an evaluation every six years. DG TREN commissioned this evaluation to provide the European Commission with the results of its interventions in this policy area and to help orient future interventions.

Specifically, the evaluation is aimed at providing a judgement of value on the ten selected projects co-financed by the Safety Transport budget line (B2-7020) by:

- Identifying their achievements and impacts with respect to the operational, specific and general objectives.
- Drawing conclusions on their effectiveness and efficiency of these projects and by suggesting, wherever possible, to integrate indicators into the monitoring of current and future interventions.

- Allowing the Commission to judge the suitability of an extension and a future recurrence of similar activities.
- To take action, whenever necessary, to improve the added value of the funding.

1.2 THE SCOPE OF THE EVALUATION

1.2.1 *Projects in the sample*

Considering the large number and variety of projects funded under the EC Transport Safety Policy over the past years and in view of staggered implementation phases and funding on a multi-annual basis, a limited number of projects were selected by the EC for evaluation. They were chosen to illustrate the various components of the EC Transport Safety Policy.¹ The following projects, including both studies and subventions, were included in the evaluation:

- **“ROSITA (I, II)”**, with the operational objective of evaluating and making recommendations on roadside (drug) testing equipment.
- **“EuroNCAP”**: a multi-annual action with the operational objective of setting up a New Car Assessment Programme in order to create a safer market offering adequate consumer information.
- **“European Transport Safety Council (ETSC) – studies, conferences, lectures and co-ordination of experts action”**: a multi-annual action with the operational objective of increasing information exchange and dialogue among transport safety stakeholders, such as authorities, industrialists, operators, scientific institutes and consumers.
- **“CESARE (I, II)”**: a multi-annual action with the operational objective of designing and introducing an interoperable service for electronic fee collection on tolled networks in the ASECAP Member States. CESARE III is planned.
- **“Periodic training and testing through simulators (RESPECT I, II)”**: a multi-annual action with the operational objective of completing data on the effectiveness of continuous education of truck drivers.
- **“CARE”**: a multi-annual action with the operational objective of setting up and developing an accident database.
- **“SARTRE (I, II)”**, with the operational objective of informing about user behaviour related to transport safety measures.
- **“TISPOL”**, a database on trucks and buses and enforcement (Phase I). Phase II is planned.
- **“Operational Grant for EQUASIS information system”**: a multi-annual action with the operational objective of setting up a database to increase the safety of maritime traffic in European waters.

¹ The projects are co-financed under the Transport Safety Policy in accordance with Articles 71, 80, 154, 155 and 156 of the Treaty establishing the European Community giving to the Commission the prerogative of specific competence in these fields.

- **“Designated driver campaign - EuroBOB”**: an information campaign on user behaviour.

1.2.2 The evaluation questions

The ex-post evaluation aims to put forward a judgement of value of the selected projects in order to respond to nine evaluation questions².

The **main evaluation questions** are the following:

1. Relevance to the policy.
2. Effectiveness of the projects.
3. Impact of the projects.
4. Efficiency (or cost-effectiveness) of the projects.

Five further elements for analysis are included in the mandate; they can be considered as **derivative evaluation questions**, in the sense that their answer is largely based on the responses given to the previous evaluative questions:

5. Define indicators for the monitoring of current and future interventions.
6. Facilitate the Commission’s judgement on the suitability of an extension and a future recurrence of similar activities.
7. Facilitate the Commission’s judgement on the sustainability of the activities particularly in the event of the withdrawal of EC funding.
8. Verify consistency among different objectives.
9. Facilitate the Commission’s decision to take action, if necessary, to improve the added value of the funding.

1.2.3 Representativeness of the sample selected

Representativeness of the projects selected is analysed with regard to the overall budget and the range of activities undertaken for transport safety under the budget heading. Overall, from the point of view of the project and programme management, the sample can be seen as sufficiently representative across project size, duration and type to be able to draw some valid conclusions relating to the management of projects within the budget line as a whole.

The total of the commitments made under the budget heading between 1998 and 2003 was Euro 51.8 million under 207 different types of expenses (grants, services and studies). In total the budget for the sample of projects selected was Euro 16.7 million over 33 contracts. Allowing for the fact that some projects appear to have been co-funded by other stakeholders some contracts were prior to 1998, the sample represents about 21% of the total committed funds and 13% of the contracts over the period 1998-2003.

Nine of the ten programmes evaluated were in the road sector and one in the maritime sector. This reflects the change of responsibility for the air and maritime

² Rephrasing from the Terms of Reference.

safety aspects to alternative budget lines (Air and Maritime Agencies). It also reflects the principal concern of the EC in transport safety.³

The commitments in the sample range in size from less than Euro 50,000 to in excess of Euro 1 million, reflecting the full range of budget allocations which were included in the period from 1998.

The majority of the total safety budget, 76%, was directed through “subventions”; studies carried out to full terms of reference from the EC, represented 13% of the budget; 11% was “services” procured directly, and a mixture of “other” small scale purchases. In the sample 70% were subventions (including CARE initially), 20% were studies (CESARE and SARTRE though both had partner funding), and 10% related to a service contract.

The sample demonstrates a good cross section of the activities which might be expected to be addressed at EC level such as the setting of rules or **legislation** (6 projects), establishing **standards** for common use (3 projects), ensuring uniformity in **enforcement methods** and of penalties (2 projects), support for communications campaigns and provision of **information** (5 projects), evaluation studies to consider impacts and necessary adjustments, and monitoring of the incorporation of EU **legislation** by Member States in national law (2 projects)⁴.

1.3 MAIN EVALUATION CONCLUSIONS AND RECOMMENDATIONS

1.3.1 Overall assessment

Our overall assessment of the ten projects is as follows:

- All the projects selected were **relevant to the policy** on transport safety with one exception, CESARE, which was more related to interoperability and therefore to the Sustainable Mobility Policy.
- On average, the projects proved to be **effective in relation to their scope**, and of an **acceptable level of efficiency**.
- The **impact** of the projects on the areas analysed was **tangible and important**, and **confirms the overall positive assessments made**.

1.3.1.1 Ratings - General assessment guidelines

- **LOW** Design/ performance require significant modifications for improvement
- **MEDIUM** Design/ performance are generally solid, though some adjustments are required for improvement

³ Euro 160 billion/ annum, is the estimated cost of road accidents in the EU.

⁴ Please note – several projects include activities in more than one area.

- **HIGH** Design/ performance are strong, there is scope for marginal improvement
- **VERY HIGH** Design/ performance are outstanding and are considered to be benchmarks

Figure 1 summarises the overall rankings against the four main evaluation questions (Relevance, Effectiveness, Impact, and Efficiency):

Project	Relevance	Effectiveness	Impact	Efficiency
ROSITA	HIGH	HIGH	HIGH	HIGH
EuroNCAP	HIGH	VERY HIGH	HIGH	HIGH
ETSC	HIGH	HIGH	HIGH	HIGH
CESARE	LOW*	MEDIUM	MEDIUM	MEDIUM
RESPECT	HIGH	HIGH	HIGH	HIGH
CARE	HIGH	MEDIUM	MEDIUM	MEDIUM
SARTRE III	HIGH	HIGH	MEDIUM	HIGH
TISPOL	HIGH	MEDIUM	MEDIUM	MEDIUM
EQUASIS	VERY HIGH	HIGH	MEDIUM	HIGH
EuroBOB	VERY HIGH	MEDIUM	HIGH	MEDIUM

Note (* CESARE relates more to mobility and interoperability rather than directly to safety)

Figure 1- Rankings attributed under each of the main evaluation questions

The following paragraphs provide more detail of these conclusions, against each of the evaluation questions. In each case where there is general conclusion, a recommendation is also given for improved project performance.

1.3.2 Conclusions and recommendations relating to Relevance

In regard to relevance to the policy on transport safety, nine out of ten of the projects scrutinised are directly relevant, while the relevance of one project (CESARE) appeared to be more related to mobility and interoperability.

There are some common themes related to relevance that can be drawn from the sample. In summary these are:

Conclusion	Recommendation
<p>The individual projects or programmes all stem from a clear understanding of the policy needs and directions, and are focused on supporting policy goals.</p> <p>Two of the projects were very highly relevant and a further seven highly relevant. This underscores the clear focus on accident reduction, although there is scope for marginal improvement for these seven projects.</p>	<p>Existing mechanisms to ensure the clear supporting relationship between projects and the Transport Safety Policy should be maintained; extensions that would increase relevance should be considered.</p> <p>Contractors should be required to detail how project objectives will support the policy goals, as part of their proposal. In addition, in several of the projects examined (and particularly EuroNCAP), there is large scope for feasible project extension activities that would serve the policy objectives well.</p>

<p>Occasionally, the relevance to policy is reduced by a lack of clear and feasible objectives.</p> <p>For example the objectives of ETSC are not tightly focused enough on road safety; the relevance of EuroBOB is undermined by its wide definition of target groups; and TISPOL relevance would be improved with more defined objectives.</p>	<p>During the drafting of terms of reference, procedures for peer scrutiny of the feasibility and link to policy goals of project objectives should be established.</p> <p>This would ensure that within the resources available, focused and feasible objectives are set.</p>
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1.3.3 Conclusions and recommendations relating to Effectiveness

In general, all the projects were effective in addressing their specific contractual obligations; some differences in the degree of effectiveness were remarked upon and are reported in the main text.

The terms of reference of the projects under assessment were clear and understandable, in setting the objectives of the contract. Project outputs were of a good quality even within reports of a highly technical nature (most were written in clear and understandable terms). Naturally, the detailed technical concepts in the supporting material for projects such as CESARE and EuroBOB were directed at their technical group.

The projects were judged to be effective in addressing the policy goals to which they refer. Some scope for improvement was noted, but this tended to be further investment in activities already undertaken to some extent, and in particular to further dissemination of results.

There are some common themes related to effectiveness that can be drawn from the sample. In summary these are:

Conclusion	Recommendation
<p>The preparation and definition of projects ensured that all projects were targeted at clear policy goals and all specific objectives were met.</p> <p>Within the projects, one was rated very high and a further five highly effective. The remaining ones were all ranked as medium. Projects with clear aims which were able to deliver their results clearly and widely achieved higher effectiveness ratings.</p>	<p>Mechanisms to ensure that projects must be well defined with clear goals and specific objectives should be maintained.</p> <p>The terms of reference must set out clear objectives and indicate how these are to be monitored throughout the project.</p>
<p>Improving access to the results, improving communication of results/ activities is a clear need across many projects.</p> <p>In the case of some projects, results are well communicated to the research community (e.g. SARTRE), although this was not consistent across the sample. There are some projects where</p>	<p>Wider access to the results of projects through improved communication strategies should be provided.</p> <p>Within each project, special provision should be made for dissemination along with monitoring of its means, reach and quality. Each project budget should have a separate</p>

communications are already very high (EuroNCAP; EuroBOB) and future funding on increasing communication would yield diminishing returns.	budget line for these activities.
<p>Projects belonging to a long-term programme, need continuity in aims, project leadership and procurement (e.g. CARE, CESARE).</p> <p>A balance must also be struck between keeping the overall aim clearly in mind whilst having a project structure which permits opportunity for reconsideration of the means and adjustments to the methods.</p>	<p>Longer-term funding or strategies to ensure continuity should be considered for projects which are part of a long-term programme.</p> <p>Multi-year budgets (where appropriate) with clear reporting and monitoring indicators included should be considered.</p>
<p>Output target range is sometimes too wide. Improved focus on a limited number of key outputs would be more effective than targeting a wider range.</p> <p>For example, a focus on making sure that information is up to date and complete (applicable to CARE and EQUASIS projects) rather than providing a broad response with less depth (e.g. ETSC).</p>	<p>Project objectives should be limited to a number of key outputs.</p> <p>Peer scrutiny during the definition of terms of reference should centre on ensuring the focus and feasibility of outputs.</p>

1.3.4 Conclusions and recommendations relating to Impact

Our overall conclusions relating to impact analysed under four common areas⁵ was as follows:

1. **Impact on policymaking:** All of the projects are intended to continue to keep safety at the forefront of legislators agendas (e.g. the work of the ETSC in researching and communicating safety issues), to inform decision makers about the progress of their actions (e.g. CARE providing a single source of accident data to monitor the EC overall safety objective), to assist in understanding how policy should be best formed (e.g. SARTRE revealing, in a standard way, attitudes to driving and enforcement across Europe), to lay the basis for certain technical aspects of a policy (e.g. ROSITA (on drug testing devices) or RESPECT (on the use of driver training simulators) preparing the ground on the prescription of certain types of transport safety-related technical tools) or to improve enforcement methods (e.g. TISPOL where Member States police forces can share best practice).
2. **Secondary impact on other policies:** Overall there was little or no direct impact on policies in other areas. Nevertheless, all projects will have a dimension which impacts health and environment and as such might be influential in informing the development of policies in that area. Training projects such as RESPECT or TISPOL might encourage policy makers in other areas to explore ways of effective training in support of policy goals.
3. **Communication and media:** All projects were well known within their community of users or researchers. Some were expert-focused projects (e.g.

⁵ They are: Policymaking; Secondary impact on policymaking; Communication and media; Industry.

ROSITA; CARE); some projects focused on small groups of stakeholders other than experts (truck drivers and their employers, in the case of RESPECT; the shipping community in the case of EQUASIS); while other projects had a significant media impact (EuroBOB and, maybe most importantly, EuroNCAP which frequently receives television coverage).

4. **Impact on industry:** Most projects in the sample were not directly related to an industrial output and could be expected to have an impact only in the longer term following, for example, standardisation of electronic road charging equipment or the development of standard enforcement equipment.

There are some common themes related to impact that can be drawn from the sample. In summary these are:

Conclusion	Recommendation
<p>There is room for improvement in access to the results and, communication of results/ activities, across all projects.</p> <p>Five of the projects were ranked highly and a further five as medium impact. However, several non-performances related factors reduced the rating of impact for some projects. These included the non-completion of the project (SARTRE, TISPOL, CESARE), or projects that were incomplete due to data difficulties beyond the control of the present contractor (CARE, EQUASIS).</p>	<p>Special attention to providing access to results through improving and targeting communication must be incorporated across all projects.</p> <p>Within each project, special budget provision should be made for dissemination together with measures of monitoring its means, reach and quality. In addition, information should be tailored to the user. This requires in-depth understanding of the categories of user. For instance, to know the impact of EQUASIS, knowledge of how many database users were shipping companies and how many were insurers would contribute to a clearer understanding of the impact.</p>
<p>As might be expected, little impact was recorded beyond individual projects' direct relevance in their particular field.</p> <p>Only a few projects are likely to have yet further secondary / indirect impacts. One example is the positive environmental impact that is likely to come from RESPECT. However, most projects funded under the Transport Safety Policy can be expected to have at least some secondary/ indirect impact on health policy (through reduced accidents, injuries and fatalities) and thus on public spending.</p>	<p>Opportunities should be taken to deliver a consistent high-level message calling on a cross-section of projects and results.</p> <p>Possibilities to take secondary impacts explicitly into account should be encouraged. Doing so could be highly beneficial to some of the projects, especially if this may leverage additional funding.</p>

Overall, no negative impacts⁶ of the projects under scrutiny were observed.

⁶ Negative impact (or perverse effect) is considered as an unexpected consequence of the project that negatively affects the beneficiary of the project, other addressees, or the broader project objectives.

1.3.5 Conclusions and recommendations relating to Efficiency

Regarding the use of resources, no evidence of over-allocation of resources was identified. In fact, it is important to note that many organisations leading projects within this sample were often national organisations which did not have any suitable structures (or adequate resources) to lead a European project or perhaps even to cooperate in a European partnership. EC involvement as an added value increases efficiency both from the perspective of the organisations leading the project, as well as in the achievement of European-wide impact.

Additionally, professional fees are in line with the fees that have been observed in other DGs of the European Commission. Where higher fees have been noted, this appears to be justified by the highly technical skills required to consultants working on those projects.

In terms of outputs and outcomes, as the projects have been successful in terms of effectiveness and impact, they have been judged as using their resources efficiently so cost effectiveness is likely to have been satisfactory. In some circumstances it has been possible to benchmark against other work in different fields. For example, in the work of SARTRE the average cost of an interview compares well with similar commercial interview programmes.

There are some common themes relating to efficiency that can be drawn from the sample. In summary these are:

Conclusion	Recommendation
<p>The individual projects or programmes arising from proposals all have appeared to demonstrate a good use of resources in delivering results.</p> <p>For efficiency, six of the projects were ranked high, and the other four, medium. Factors used in this assessment include benchmarking (where possible), analysis of professional fees, as well as project deliverables.</p>	<p>In order to maximise efficiency, specific cost-benefit analysis, using a case study approach, would allow DG TREN to make more informed choices when allocating further funding.</p> <p>A record of average fee rates can be used as one basis (a benchmark for input costs) for this type of exercise. In the case of a project having to be applied separately in various countries (e.g. EuroBOB), every effort should be made to exploit synergies and avoid duplication of costs where it can be avoided.</p>
<p>In the case of co-funding there is no overall record (except through the outputs) of the value and effort actually input by third parties.</p> <p>All projects reported acceptable fee rates but there was some scope for improved cost effectiveness in those classified as medium.</p> <p>Some projects (such as ROSITA) have been able to exploit economies of scale through collaboration agreements (in the case of ROSITA with the US).</p>	<p>In the case of co-funding an overall record, in a standard format, of the value and effort actually input by third parties should be required.</p> <p>A record of actual inputs by the contractors and third parties should be required from the project monitoring reports.</p> <p>Collaboration agreements such as the current collaboration with US institutes in the case of ROSITA should be sought to exploit economies of scale.</p>
<p>Objective monitoring indicators are not embedded in the reporting.</p>	<p>Standard objective monitoring indicators should be embedded in the reporting</p>

<p>While there are some general indicators provided in the form of days and fees and the cost of delivery there are no clear records of actual days input, fee rates, or cost per user.</p>	<p>framework for projects.</p> <p>When the terms of reference are established the monitoring measures must be determined and included together with the means of objective verification. These should relate to standard items such as costs, manpower inputs, and costs per output.</p>
<p>Most contracts appear to have been well targeted, possibly in a number of discrete phases to ensure manageability of outcomes.</p> <p>The major exception is CARE where several changes of ownership and a multitude of contracts must have led to less than efficient delivery.</p>	<p>For multiple contract projects special consideration must be given to ensuring stability of management and direction.</p> <p>Multi-year budgets (where appropriate) with clear reporting and monitoring indicators included should be considered.</p>

1.3.6 Conclusions and recommendations relating to indicators for the monitoring of interventions

Regarding the monitoring of interventions, there is room for improvement in the setting of specific objective and cost effectiveness indicators, in addition to qualitative monitoring. Standardised formats would allow DG TREN to more effectively make comparisons between divergent projects.

Good practice in monitoring depends on the quality of the preparation of the terms of reference or the application for funding. There are well understood guide lines (Project Cycle Management Handbook, EC) for the preparation of these documents, common themes relative to the procurement routes used are:

- To define clearly the objectives of any project or intervention.
- To state clearly the means by which that can measure their achievement.
- To include a clear description of the methodology proposed, the work plan and the resources to be used.
- To require regular reports from the contractors/beneficiary for monitoring of the progress of the project funded.

Note: As the sample projects were initiated under the earlier mechanisms of “open” calls for proposals (2001-2002), current requirements relating to objectives and indicators (elaborated in 2003-4) have only been considered in the recommendations of this section⁷.

There are some common themes relating to monitoring that can be drawn from the sample. In summary these are:

Conclusion	Recommendation
<p>There is a general lack of specific objective indicators for projects except through the</p>	<p>In addition to the deliverables, requirements for specific objective</p>

⁷ http://europa.eu.in/comm.dgs/energy_transport/home/calls/2004

<p>means of the deliverables.</p> <p>This is surprising in those cases where these would be easy to provide (e.g. the number of times a certain type of user accessed a transport safety database), even though some aspects of monitoring would require the establishment of more sophisticated indicators with substantial need for data collection and treatment (e.g. monitoring the degree of safety innovation in the car industry that demonstrably results from EuroNCAP testing).</p>	<p>indicators should continue to be included for each project terms of reference.</p> <p>Objective indicators can be at all levels from policy (target to reduce accidents), through to specific activity indications, such as number of conference attendees, number of citations in international conferences.</p>
<p>It is challenging to measure cost effectiveness and impact as the final objective is a general improvement in transport safety/ reduction in accidents.</p> <p>Linking each project/ intervention with the overall outcome in terms of changes in accidents is complex. Nevertheless, intermediate and proxy indicators could be used. One intermediate indicator would be the use of the information provided by an appropriate group of stakeholders - for example in the project EQUASIS the use of information by insurers and vessel charters.</p>	<p>Requirements for specific indicators to verify cost effectiveness should be included in the project terms of reference.</p> <p>These should relate to programme performance relating to such aspects as:</p> <ul style="list-style-type: none"> • Cost and volume of inputs. • Inputs and access by users. • Use/ citation of project in EC, research literature, media. • Website hits by category of user.
<p>Qualitative monitoring though feasible is also complex; none of the sample projects currently monitor the quality of their outputs.</p> <p>Qualitative indicators could be monitored through user surveys and feedback conducted either through the project itself or through independent means.</p>	<p>A budget allowance for qualitative monitoring should be a standard element of projects.</p> <p>Additionally, user surveys, reporting user feedback on the quality and use of information/ results, could be undertaken as an independent evaluative exercise.</p>

1.3.7 Conclusions and recommendations relating to Sustainability

The evaluation has reviewed those aspects of the project which might continue after the withdrawal of EC funds, the key factors which support sustainability both from within the project and from the perspective of the users of the information generated, and a view of financing alternatives.

Overall, as it is unlikely that these projects would have been initiated without EC instigation, it is expected that they will require at least some form of EC funding to be sustained.

There are some common themes relating to sustainability which can be drawn from the sample. In summary these are:

Conclusion	Recommendation
<p>Projects directly supportive of policymaking or entirely instigated by the EC are unlikely to continue should EC funding end.</p> <p>There is likely to be little pan-EU Member State interest in continuing these projects, especially if</p>	<p>Projects directly supportive of EC policymaking or instigated by the EC should be prioritised for continued funding.</p> <p>The implications for future spending on new topics and continuation of current topics will</p>

<p>the costs of supporting the project by one country alone are high, whilst the benefits accrue to many countries.</p>	<p>need to be considered when deciding on any new long term project.</p>
<p>Improving access to the results, improving communication of results/ activities is a clear need across all projects.</p> <p>In particular, the source material needs to be regularly cited and seen to be used as an authoritative source. For some types of projects, one of the best measures of success is if its results become authoritative enough for them to be taken as benchmarks even by a industry and consumers at large (as is the case e.g. for the star rating of EuroNCAP). Since this secures interest and possible funding by alternative sources, it may be one of the best ways to achieve long-term sustainability even with reduced EC involvement.</p>	<p>There is a need for centralised access to the results, and regular citing of source material from projects, at the EC level, so that they are regarded as authoritative sources.</p> <p>One option for raising the profile of activities on transport safety would be the development of a single and discrete EC website related to all aspects of safety. This site, accessed through the current Europe transport site, could be linked to all the project sites which are or have been sponsored through the transport safety budget.</p>
<p>Without securing ongoing programmes it is likely that the impacts achieved would dissipate over time.</p> <p>Future sustainability must be considered as an integral part of any intervention. This includes not only technical issues and personnel resources but also the impact on the organisation undertaking the work and the means to fund the activity after EC funding is withdrawn.</p>	<p>An analysis of future sustainability must be included as an integral part of the terms of reference of any intervention.</p> <p>In particular this should focus on the impact of the project on the organisation undertaking the work and the means to fund the activity, if it is to continue, after EC funding is withdrawn.</p> <p>Monitoring of this aspect should be undertaken at least once during any project and at the end, so that suitable continuity or effective termination can be considered.</p>
<p>In certain projects, where there is one tangible product (databases and information), sustainability is often limited by a lack of continued attention to maintenance.</p> <p>The key to sustainability is to ensure that once set up (the formative stage) databases and information are up to date, comprehensive and continue to deliver (the maintenance stage).</p>	<p>Attention should be paid to ensuring that existing projects are up to date and well maintained before embarking on wider activities.</p> <p>The opportunity should be taken at the end of a project, or at planned phases in a long term programme, to assess how useable results can be delivered with what is available.</p>

1.3.8 Conclusions and recommendations relating to the suitability of extensions and future similar activities

Specific, detailed conclusions are formulated in the main text for each of the projects evaluated. They provide indications regarding the suitability of an extension of the financing, and regarding the suitability of the recurrence of future similar activities. Overall proposals which can be drawn from the sample are as follows:

1. The **suitability for future funding**: While some of the projects are one-off they might also be part of a longer term programme (for example CESARE), most are in support of ongoing programmes either required by the EC for analytical purposes (e.g. CARE, SARTRE), are targeted at wider dissemination of information or techniques (e.g. ETSC, TISPOL, ROSITA), provide tests to increase safety standards (EuroNCAP), raise awareness on safety-related issues (EuroBOB) or provide safety-related training (RESPECT). As a result, unless severe disruption is to be avoided, in all cases continued funding is likely to be required in the short term.
2. The **potential for extension and/ or alteration**: All the contracts under assessment can be considered for some form of extension or alteration. In particular the enlargement of the EU poses significant challenges in the arena of safety. The expansion to a further ten States with different policing, enforcement and driving conditions will pose particular challenges.
3. The **potential for improving value for money**: This is particularly highlighted where long term information sources (e.g. CARE, SARTRE, EQUASIS) are proposed for funding under a more certain funding regime.

All of the projects can be considered as continuing projects except CESARE and possibly RESPECT which have definite termination goals.

1.3.9 Conclusions and recommendations relating to the consistency among different objectives

The focus of the policy objective on transport safety and the specific objectives of halving fatal accidents on the roads by 2010 and eliminating single hulled tankers from European waters, means that there is a clear consistency in direction for the projects.

The sample demonstrates **coherent support** across all of the areas which might be expected to be generated at EC level – relating to the formation of legislation, providing standards for safe operation, ensuring that legislation is enforced and best practice is enacted and that decision makers can be informed about the progress of their policies.

There are some **projects which address similar needs**, for example TISPOL and EuroBOB both relate to improving driving safety. There is potential in such projects to consider linkages which reinforce the need for both information on the penalties and the assurance that enforcement will be delivered.

An overall measure of the **consistency between objectives across the sample** is the recent Communication from the Commission, “European Road Safety Action Programme”, issued in June 2003. Each of the road related projects (except CESARE and indirectly, SARTRE) is mentioned by name and referenced as a building block in the overall strategy.

1.3.10 Conclusions and recommendations relating to possible improvements in the added value of the funding

Based on the evaluation findings, no major project measures are deemed necessary to improve the added value from funding. However, extension of project coverage to the 'old' EC Member states that have hitherto not participated in the specific project, as well as to new Member States is obviously one means of enhancing the European dimension.

In particular:

- Whilst it is possible that some of these projects may have been instigated as cooperative activities between Member States (for example TISPOL), or out of commercial interests (for example EuroNCAP), it is highly unlikely that, without EC funding, coordination, and provision of suitable pan-European structures, they would have been implemented. This is particularly relevant to the information sharing projects.
- Added value from this sample of projects is derived from the partnerships and networks established between organisations at the European level.
- Additionally it should be noted that Transport Safety Policy implementation, via these projects, brings added value to the policy making process itself. For example, in the absence of EC financing of these projects (policy-off scenario), it is possible that EC policy making may have been less evidence-based.
- All the projects evaluated contributed – directly or indirectly - to the European policy on safety, so that no need emerges for strategies to increase their contribution to European policies.
- In general, methodologies adopted (when described) were consistent with the projects' objectives.

Some of the projects related to information sources which were under development (for example, CARE and EQUASIS). There will be added value in making sure that such projects are suitably directed to ensuring that their **information is up to date**, has full coverage and is accurate to encourage use and reliance on the results.

There is a common theme that **improved communication of results** would be beneficial across all projects. This includes not only the circle of directly interested researchers and government agencies which are intimately involved in the work but also a wider audience across the safety arena who might be able to connect disparate strands of information in unexpected ways. For example, ways of approaching collaboration between public and private sector in providing information for general use as in EQUASIS might be usefully transferred to other projects which have a similar dissemination objective.

Better support for **wide dissemination of results** would be achieved by distribution of reports to interested parties, publication on a dedicated, EC sponsored readily accessible web site, and through frequent and established newsletters.

Finally, the value added of much of the funding might increase through greater efforts at reaching **economies of scale**. This should primarily happen through collaboration with extra-EC bodies or with efforts going on in parallel at the national

level. The intense collaboration with US researchers in the context of ROSITA is an example of this.

1.4 GENERAL RECOMMENDATIONS

Our conclusions and recommendations arising from the detailed evaluation questions have been presented in the previous section. In addition, on the basis of the findings and the conclusions formulated, the following general recommendations which are likely to be applicable to all projects funded under the Transport Safety Policy are presented.

1.4.1 Overall recommendations arising from the sample

Recommendation:

While some general lessons can be learnt, it is strongly recommended to follow-up this first evaluation with a second, wider exercise. This second exercise could build on the results and experiences of this first evaluation in terms of methodology and evaluation tools.

Further reasons for follow-up evaluations:

- Some projects were not finished at the point of this evaluation;
- Some projects were about to enter major extension activities (e.g. EuroNCAP moving into active safety);
- Several projects require in principle such a methodologically complex evaluation that this was impossible within the context of the present evaluation;
- Several projects were about to be extended to additional countries (e.g. EuroBOB); if there are new EU members among such additional countries, the background conditions for the project and hence its likelihood for being relevant, effective, efficient and having impact may differ substantially.

Recommendation:

Within any project, there should be a clear focus on a limited number of objectives. Recent moves within DG TREN to better elaborate requirements in calls for proposals should be extended.

The evaluation has indicated that some projects from this sample have a tendency to be too all embracing and as a result the effort can be spread too thinly. (This may be the result of applicant contractors trying to demonstrate the extensive nature of their activities, and could be avoided by limiting the number and/ or scope of objectives).

Each project under consideration should be reviewed by a peer group, within the scope of the main objectives and resources available, to ensure that there is a clear focus on a limited range of objectives and associated activities and that they are feasible.

Recommendation:

Programmes with a recognised long term potential should be considered for long term funding support.

Most of the projects considered in the sample were part of a long term commitment to providing information. These relate to EU wide databases or activities which derive their principal benefit from the fact that they are consistent and comparable across Member States and across time. These types of projects should be examined to establish whether

a more secure long-term funding and procurement regime can be arranged. This will ensure stability and most likely enhance value for money as repeated contract procurement is avoided.

Recommendation:

Monitoring through specific indicators, (including qualitative and cost indicators) at all levels within the projects should be an integral part of all projects. This relates particularly to efficiency, effectiveness and impact measures.

Following the Logical Framework approach each objective should be accompanied by a number of objective indicators, measured both quantitatively and qualitatively, and which can be independently and objectively verified. Straightforward objectives indicators on total cost, cost per person day, cost per output, and cost per user can all be readily achieved and are normal aspects of any project reporting system. A standard form of reporting should be built into all projects for this.

Qualitative monitoring of outputs and the impact on decision-making are more difficult. Nevertheless, it is possible to consider at the outset how these objectives are to be set and therefore how success in achieving them will be measured. User feedback and surveys to assess quality and use of information can either be built into projects or carried out independently.

Recommendation:

Effective accountability mechanisms, linked to monitoring, should be designed and implemented. Monitoring performance against targets, and particularly whether it delivers the agreed services at the specified costs, should be an integral part of the accountability system.

Responsibility itself is not sufficient assurance of effective performance. Yet something may be lost when responsibility is reduced to a set of performance indicators and auditable statements. New forms of performance assessment, and auditable statements should be considered, to more effectively account for the transport safety budget.

Recommendation:

Communication of the results of projects and of the transport safety initiatives overall should be improved.

The projects demonstrate a profound understanding of activities in their respective areas of interest. They are usually well known with their specialist fields. However there is scope for more general communication of results both from individual projects and for the programme as a whole.

Communication of results should be built into each project as an integral activity and suitably funded and monitored. More widely, the disparate activities undertaken within the safety arena might be referenced collectively through a single web site and information made available through newsletters and wide media coverage of the overall work carried out.

2 INTRODUCTION

The contract for the ex-post evaluation of specific projects funded under the EC Transport Safety Policy with the general objective of reducing accidents in Road, Maritime and Air Transport was signed between the European Evaluation Consortium (TEEC) and the Directorate-General for Energy & Transport (DG TREN) on the 29th of December 2003.

An **Inception Report** was delivered on 31 March 2004, and approved following a meeting with the Steering Group of the evaluation. A **Draft Final Report** was then submitted on the 28th May 2004. Due to unexpected challenges in the appointment of a transport expert to this evaluation, an extension was granted and Jacobs Consulting was appointed to work together with The European Evaluation Consortium (TEEC) to produce a **Revised Draft Final Report**.

The present **Final Report** is therefore the fourth of four deliverables to be presented by TEEC during its evaluation of ten projects funded under the Transport Safety Policy. It presents and summarises the findings of the evaluations and provides evaluative conclusions and recommendations for each individual projects.

The report is organised as follows:

- Section 1: Executive Summary
- Section 2: Introduction
- Section 3: Methodology
- Section 4: Evaluation Findings - General
- Section 5: Conclusions
- Section 6: Recommendations
- Section 7: Evaluation Grids-Case studies
- Annex 1: Task Specifications for the Assignment
- Annex 2: Initial Methodology
- Annex 3: The Policy Context

We would like to thank the project coordinators and other experts and stakeholder that accepted our invitation to express their opinions and perceptions on specific projects assessed in the course of this overall evaluation. In doing so, they greatly supported and enhanced the evaluation efforts.

3 METHODOLOGY

This chapter details the methodology that was followed during the evaluation, including project identification and data gathering, an explanation of the evaluation grid applied to each individual project, and further details on the evaluative stage. Importantly, the methodological approach to project evaluation was already detailed and presented in the Inception Report and approved by the Steering Committee.

The evaluation follows three sequential stages: briefing and preparation, field work and draft final reporting, and final reporting. As planned, the activities of the first stage were concluded with the submission of the Inception Report; those of the second stage are concluded with the delivery of the present Final Report for approval by the Steering Committee.

3.1 PROJECT IDENTIFICATION AND DATA GATHERING

During the briefing and preparation phase, the basic project documents needed to assess the projects under evaluation were collected with the help of relevant Task Managers at DG TREN. The following documents were collected and mapped into the evaluation grids for each individual case study:

- Formal identification of the project (contract number; year of contract; nature of financing).
- Terms of Reference of the projects.
- Intermediary and Final Reports of activity.
- Basic budget figures (overall budget, and overall budget financed by the EC, number of the overall working days of the contractor). Note here that it was generally difficult to obtain detailed information on the overall budget for fees and the overall budget for fees financed by the EC – as foreseen by the evaluation grid.

Further substantial research was carried out to assess the impact of the projects on the media, research, and industry. This included extensive internet research (via the use of major search engines), consultation of various external documents (articles from scientific journals, industry magazines, etc)., and intensive contact and coordination with Task Managers.#

3.2 THE EVALUATION GRID

The project documents were examined in order to adjust and test the methodology proposed. The objective was to make the methodology fully coherent with the evaluation objectives.

Key concepts were extracted from the logframe approach to customise a more specific, project-oriented analytical tool, called “Project evaluation grid”. The purpose of the grid is to present the basic information and the evaluation findings of each

project in a standardised format. The four evaluative areas mentioned in the mandate (Relevance; Effectiveness; Impact; and Efficiency) were considered for every project under evaluation.

The filling out of the grid for each project was progressive throughout the first two stages of the evaluation. It means that some descriptive sections were filled during an initial desk-based activity, while others were gradually filled following the interviews conducted with the EC Task Managers, Contractors, and External Stakeholders, where possible. Further bibliographic research was conducted for all the projects towards the end of the evaluation, and its results reported in the grids. Before their finalisation, the evaluation grids were validated by the relevant Task Managers.

The standard project evaluation grid is presented below, with some explanatory notes to clarify its use during the project evaluations.

The main elements for the identification of the project.

<i>Project title and number</i>			
<i>Type of funding</i>		<i>% of financing</i>	
<i>Overall EC budget €</i>		<i>Contract: year</i>	
<i>Budget for fees € (Overall EC budget minus reimbursables and direct costs)</i>		<i>N. person/days (overall person days, irrespective of categories of experts)</i>	

Background and genesis

Policy background of the project under assessment.

Typology of project

<i>The role of the project in the policymaking process</i>	<p><i>Role: pre-legislative study; study for the assessment of legislation; preparation of technical specifications ...</i></p> <p><i>Methodology adopted by the contractor</i></p> <p><i>Geographic coverage of the contract under assessment</i></p>	
<i>The methodology adopted</i>		
<i>Geographical coverage</i>		

Specific project objectives

Reformulation from the Tory.

Possibilities and limits of evaluating the project

Limitation to the assessment of the project during the evaluation.

Activities undertaken during the evaluation

Desk-study, interviews, visits...

Relevance to the Policy	
Is the project evaluated relevant to the Policy goals?	<p>Relevance is defined as the degree of adequacy of the objectives of each project to (some of) the objectives of the EU Safety Transport Policy.</p> <p>The following question is furthermore answered: "Could a higher level of relevance have been obtained through adjustments of the project?"</p>
How could the relevance of the project be improved / have been improved through adjustments at the margins?	
Further project-specific remarks	

Effectiveness	
Has the project evaluated been effective in addressing its specific objectives?	<p>Effectiveness is analysed in two ways:</p> <ol style="list-style-type: none"> the capacity of the project to achieve its objectives. the capacity of the project to address the specific policy goals. <p>The focus of the analysis of effectiveness is on project outputs.</p> <p>The following question is furthermore answered: "Could more effects have been obtained by organising the implementation differently from what originally planned?" Lessons learned.</p>
Have the outputs been effective in addressing the Policy goals?	
How could the effectiveness of the project be improved / have been improved through adjustments at the margins?	
Further project-specific remarks	

Sustainability	
Aspects in which the project will continue and how to ensure the continuation of EC involvement	<p>Sustainability centres on the question of whether the project will be able to maintain the momentum of the initiative when EU funding ends. The focus of a sustainability analysis may be</p> <ul style="list-style-type: none"> What aspects and impacts of the project are likely to continue and in what form, following the end of the initiative or of EC involvement? Are there clearly identifiable factors that influence sustainability? (e.g. an individual who has driven the project to an unusually high degree, and whose departure might compromise the sustainability of the project) How viable is the project financially even if one of the current financiers (EC or other) drops out?
Factors influencing the sustainability of the project	
Financing alternatives	

Impact	
Impact on making	<p>Impact refers to the ultimate results or outcomes of the projects. It is here analysed as an indirect consequence of the project activities, in five different areas. Unexpected effects are also taken into consideration, if they can be observed.</p> <p>In order to be observed, certain impacts require a considerable elapse of time after the end of the project activities.</p>
Secondary impacts on policies	
Communication and media	
Impact on infrastructure	

Efficiency		<p>Efficiency is defined as the capacity to obtain the (planned) effects at a reasonable cost. Efficiency is here assessed both at inputs level (use of resources) and at outputs/outcomes level (in terms of results and impact)</p>
Efficiency in the use of resources		
Cost effectiveness in terms of results and impact		

Scope for integration of indicators into the monitoring of current and future interventions
<p>Wherever possible, projects should also be evaluated on the basis of (quantifiable) Indicators</p>

Suitability of extension/ future recurrence of similar activities
<p>Other instruments that have not been used during this evaluation because of limited resources, but could be of further help for the analysis of the project.</p>

Ways of increasing value added from the funding
<p>The same project might yield greater value added for the same amount of money through appropriate adjustments at the margin</p>

3.3 THE EVALUATIVE STAGE

After the gathering of the needed project documents and an initial pre-filling-in of the project evaluation grids, further evidence was collected through analysis of policy context, desk research into the individual projects, field visits, and evaluative interviews. The clustering of projects helped to identify appropriate stakeholders.

The evaluation grid provided the basic format for the structuring of the qualitative analysis of information gathered during field visits and interviews. Questions addressed the projects' impact, relevance, effectiveness, and efficiency, against the specific and general objectives. Two focus projects (RESPECT, EuroNCAP) were also selected during the first evaluation phase to test the evaluation grid approach.

In the process of mapping the evaluation grid, important contacts were established with EC Task Managers, Contractors, and External Stakeholders.

3.3.1 Analysis of the policy context

One of the key points of the evaluation was the analysis of the relevance of the cases to the objectives of the EU Transport Safety Policy. A short analysis of the Policy context was therefore carried out with a historical perspective in order to understand and report the fundamentals of the Policy of reference, and its developments over time. The Policy context analysis is presented in Annex 3.

3.3.2 The desk research

The desk research yielded a descriptive analysis of the 10 projects under evaluation and classified the selection within the policy context by:

- Collecting existing information for the case studies from the Commission.
- Identifying stakeholders and potential interviewees.
- Completing the project background and typology sections of the evaluation grid.
- Developing questionnaires for the telephone and visit interviews.
- Conducting initial telephone interviews.

For specific projects, we have proposed the following approach to obtain the value of a human life in Europe:

Approach to the value of a human life

Before embarking on an evaluation of a series of Transport Safety projects, the evaluators had to take a stance on the basic question of how to put a statistical / monetary value of a human life. The evaluators considered this crucial, particularly in the 'efficiency'-parts of the grid where, as much as possible, the financial input into the project is compared to the output of saved lives.

After inspecting the evidence on this issue, several studies were found to be of sufficient reference and soundness to be included.

One of the most convincing approaches was found in a study from the German context, and values the cost of a fatal accident at 1,174,064 Euro.⁸ The method is developed on the basis of earlier conceptual and empirical research.⁹

The main types of costs on which the calculation model is based are, firstly, those that spring from the attempt to reproduce the situation of before the accident; and, secondly, those that spring from the 'loss of resources' resulting from accident-related damage to persons:

- The cost related to the rehabilitation of the accident victims can in turn be divided into a direct and an indirect kind. The direct cost, in this sense, means

⁸ Bundesanstalt für Strassenwesen (2001): Wissenschaftliche Informationen der Bundesanstalt für Strassenwesen: Volkswirtschaftliche Kosten durch Strassenverkehrsunfälle in Deutschland 2001.

⁹ Krupp, R., Hunhausen, G. (1984): Volkswirtschaftliche Bewertung von Personenschaden im strassenverkehr, Bergisch Gladbach.

the medical cost in treating the victim; as well as the cost involved in ensuring that the victim is professionally 're-integrated' subsequent to the accident. The indirect cost relates to those expenses associated with the work of the police and judicial bodies as well as insurance companies in attempting to re-establish the pre-accident situation.

- The costs related to the loss of resources result from the inability of the injured or killed persons to contribute to national output.

3.3.3 Selection and scrutiny of the first two projects

During the first phase of the evaluation, two projects were selected for scrutiny (RESPECT, EuroNCAP). Detailed analysis of these projects, including extensive desk and field research as well as interviews with EC Task Managers and external stakeholders on the basis of the grid gave an opportunity to test the adopted evaluative tool and demonstrated the usefulness of the evaluation grid.

The selected projects were presented in the Inception Report, approved in the Second Steering Group Meeting on 2 April 2004 and then developed into "Focus Case Studies".

3.3.4 Project clusters and identification of appropriate stakeholders

As interviews with Stakeholders are the most representative way to assess effectiveness and impact of the projects under analysis, one of the key activities of the evaluation consisted of interviewing an appropriate sample of stakeholders to collect evaluative evidence and opinions.

Stakeholders are "individuals, groups or organisations with an interest in the evaluated project". Both Task Managers and Contractors are essential stakeholders of the projects under assessment. To better identify relevant stakeholders, consultants identified project clusters following preliminary desk research.¹⁰ The nature of the relevant stakeholders of each project changes according to the different characteristics of these clusters of projects. The clusters are:

1. **Studies following legislation** – they aim to support the European Commission with instruments to report to the European Parliament and the Council of the European Union on the effectiveness and the state of application of a given piece of legislation. The main Stakeholders in this cluster include the main client of the study inside the EC and related personnel preparing the report to the European Parliament and the Council, the President of the relevant European Parliament Commission, and other DGs/ services of the EC and other EU institutions.
2. **Studies preceding legislation** – they aim to support the European Commission with instruments to decide whether to launch a legislative process; or to support the European Commission in the preparation of a legislative initiative. Stakeholders are again the client of the study inside the EC and other personnel involved in preparing the legislative proposal, external experts consulted in the process, and the appropriate contacts from the relevant European Parliament Commission.

¹⁰ The classification of a project into one cluster is not exclusive. A given project could have different scopes, letting it fall under different cluster of projects.

3. **Studies/ initiatives aimed to support industry and/ or Member States** – they aim to provide industry and/or Member States with studies, services or technical standards to support their decisions; and/or to facilitate the implementation of their national policies, in application of a common European approach/policy; and/or to support them with operational instruments for the application at national level of a European legislative act. In this cluster, the identification of the most relevant stakeholders turned out to be most difficult as the wide access to deliverables/reports meant that any reader addressee was a Stakeholder of the project. Groups of users and federations (of services, of industry) could generally be said to be the preferred addressees in this cluster.

On the basis of these clusters, projects were classified as follows:

1. **Studies Following Legislation:** CARE, EQUASIS, ETSC.
2. **Studies Preceding Legislation:** ROSITA.
3. **Studies Aimed to Support Industry and/or Member States:** CARE, EuroNCAP, SARTRE, EuroBOB, RESPECT, TISPOL.

As a general rule, only stakeholders already informed about the project outputs were interviewed. Furthermore, the decision about the relevant stakeholders to be interviewed for each project was determined on a case by case basis, taking into consideration the specific characteristics of each study/subsidy and by closely coordinating this with EC Task Managers. To ensure a well-balanced evaluation, EC Task Managers sought to put consultants into contact with Contractors that were critical of their specific projects.

3.3.5 The evaluative interviews

Following extensive desk research and the identification of relevant stakeholders, consultants identified gaps in their knowledge and developed questionnaires aimed at filling precisely those gaps left over from desk research.

A semi-structured approach was adopted for all the interviews and questionnaires sent by e-mail. Besides the project-specific questions posed to fill the gaps identified, EC Task Managers, Contractors, and other stakeholders were also given the entire list of evaluation questions as contained in the grid to allow them to comment on any of the major issues. In other words, while keeping a very flexible and project-oriented approach, all the interviews and questionnaires covered some common issues.

Given the involvement of EC Task Managers in the implementation and monitoring of the project activities and outputs, their contribution provided the evaluation with invaluable elements to understand specific issues of the projects that could not be obtained from any other stakeholders. Stakeholders possessing an “external” nature provided additional elements needed for the assessment of the projects from an outsider perspective.

Interviews with Task Managers typically touched upon the following topics:

- Validation of the background and genesis of the project.

- History of the project, its management, obstacles and solutions adopted.
- Adjustments of the project (contractual/extra-contractual).
- Satisfaction with the achievements of the project.
- Effectiveness in relation to the project objectives.
- Effectiveness in relation to the policy objectives.
- Impact of the project under the relevant areas.
- Publicity given to the project and its outputs.
- Actions/activities/further projects undertaken/launched/planned after the project.
- Review of the contact details already given / request for support in the identification of stakeholders.
- Further project-specific issues.

Interviews with “external” Stakeholders were carried out after interviews with the Task Managers. To acquire additional elements for the assessment, the following evaluative issues were typically addressed:

- Effectiveness in relation to the policy objectives.
- Impact of the project under the relevant areas.

Interviews with Contractors or Project Managers to acquire further evaluative elements from an insider perspective, wherever necessary, did not follow a standard format, but usually followed the evaluation grid set up.

The interviews needed to evaluate the projects were primarily conducted via phone or on the basis of questionnaires sent by email. Project visits and the possibility to conduct face-to-face by the Project Manager and the Transport Expert in Brussels were taken up whenever considered effective and efficient to the scope of the project.

4 EVALUATION FINDINGS - GENERAL

4.1 THE POLICY BACKGROUND

4.1.1 *The European Union Policy on Transport*

The aim of this section is to provide the reader with an understanding of the essential elements of the present European Union policy on transport and in particular on transport safety. The text below is a summary of the policy derived from the White Paper issued in 2001, with a clear focus on road safety. A more detailed description of the broad approach to Transport Safety Policy across all transport sectors is set out in Annex B.

In September 2001, the European Commission published a White Paper entitled “European Transport Policy for 2010: Time to Decide”¹¹. This document provides clear direction for the development and implementation Europe wide and national policies in transport. The key priorities are set out in the White Paper as follows:

- **To shift the balance between modes.** This sets the tone for the paper as a whole. The paper argues that the total costs of transport need to be internalised so that users at the point of consumption can make rational decisions. In particular the paper sets out the need to improve quality in the road sector, revitalise the railways and improve interoperability, to control the growth of air transport and to improve interconnection between transport modes.
- **To eliminate bottlenecks.** This sets out the need for improved integrated transport for both freight and passengers, the provision of new infrastructure at key points in the TENs network and the need to find and support innovative means of financing these schemes.
- **To place users at the heart of transport policy.** This sets out the need to consider transport from the point of view of the driver, passenger and resident who has to interact with transport vehicles and facilities. Significant themes include alleviating the appalling tragedy of 40,000 fatalities on our roads each year, overcoming poor integration and interoperability and promoting good urban transport.
- **To manage globalisation in transport.** This sets out ways to ensure that international developments in transport are compatible with European sensibilities.

The White Paper identifies 60 measures ranging from pricing, to revitalising modes of transport alternative to road, and targeted investment in the trans-European network. These measures are presented as a ‘...first essential step towards a sustainable transport system that will ideally be in place in 30 years’ time’. The

¹¹ COM(2001)0370

thirteen basic guidelines presented for the Common Transport Policy until 2010 were:

1. To revitalise the railways.
2. To improve quality in the road transport sector.
3. To promote short sea shipping and inland waterway transport.
4. To strike a balance between growth in air transport and the environment.
5. To turn intermodality into reality.
6. To continue the building of the trans-European transport.
7. To improve road safety.
8. To adopt a policy on effective charging for transport.
9. To recognise the rights and obligations of users.
10. To develop high quality urban transport.
11. To put research and technology at the service of clean and efficient transport.
12. To manage the effects of globalisation.
13. To develop medium and long-term environmental objectives for a sustainable transport system.

4.1.2 Transport Safety

A key element in the transport policy relates to safety. The White Paper sets out the need for improved safety actions in:

- **Air transport** – through the establishment of a European Aviation Safety Authority to ensure cooperation between all administrations.
- **Sea transport** – tightening up safety rules and cooperation with International Maritime Organisation and International Labour Organisation and developing a maritime traffic management system. Information on the quality of vessels is a primary consideration. This led directly to one of the sample projects EQUASIS.
- **Rail transport** - through the issue of the Safety Directive, setting of standards for interoperability and establishing a European structure for railway safety.
- **Road transport** – a comprehensive approach to cutting by half the number of road deaths by 2010 through better enforcement, use of new technologies, harmonised approaches to signs, training, alcohol levels, in-vehicle passenger protection means and the shift of emphasis from the vehicle to the human who has to face living dangerously with ever increasing traffic.

4.1.3 Road Safety

Of particular concern for the sample of projects under evaluation is safety in relation to road transport which concerns nine out of ten of the interventions examined.

The EUR-15 now has more than 40,000 fatalities and 1.7 million persons injured every year in road accidents, at a total cost estimated at 160 billion €/ year. To

modify this situation the Commission has proposed an ambitious target of reducing by 50% the number of road fatalities by the year 2010.¹²

In order to contribute to the achievement of this target the Commission published a European Road Safety Action Programme in June 2003. This programme offers a framework for all partners and it guides the EU action by:

- Stimulating road users towards a more responsible behaviour, in particular through a better respect of existing rules, initial and continuous training of private and professional drivers and a better enforcement against dangerous behaviour.
- Making vehicles safer through improved technical performance standards.
- Improving the road infrastructure, in particular through the identification and diffusion of best practices and the elimination of black spots.

4.1.4 The Way Forward

The White Paper includes an action programme extending until 2010, with periodic milestones. In 2005, the Commission will make an overall assessment of the implementation of the measures advocated in this document. Taking into account economic, social and environmental consequences of the proposed measures, this review will check whether the precise targets are being attained or whether adjustments are needed.

4.2 REPRESENTATIVENESS OF THE PROJECTS SELECTED

4.2.1 Introduction

The evaluation covered ten projects or interventions selected from the range of activities undertaken by DG TREN over the period 1998 to 2003. This section sets out our review of the sample as a whole and assesses its representativeness with regard to the overall work undertaken under the safety budget line.

The representativeness of the projects selected is analysed within the context of the overall balance of projects and expenditure within the budget line, the size of the sample projects relative to all safety interventions and the balance of the sample across the range of activities undertaken. The following paragraphs in turn discuss these aspects.

4.2.2 Analysis of overall budget and project support

The Transport Safety Policy was, until 2003, funded on an annual basis under the budget line B2-7020. From 2004 onwards, Transport Safety Policy is funded according to the new Activity Based Budgeting under 06 02 03, in compliance with the general competencies allowed by the Treaty to the Commission. Commitments are entered into through three basic routes:

¹² White Paper on the European Policy for Transports, September 2001

- A call for proposals against a limited number of programme themes. Proposals are submitted and evaluated. EC contribution can be up to 50% - typically “subventions”¹³;
- A call for tender against a clearly defined specification set out by the EC. Proposals are submitted and evaluated. EC contribution will normally be 100% - typically “studies”.
- “Services” – commitments made to secure services directly, for example computer support services of the sort identified for the later CARE contracts. EC contribution will normally be 100%.

The following table gives a brief overview of the evolution of the budget line for Transport Safety between 1998 and 2004.

Year	Budget Transport Safety (in €)	Number of projects	Average EC contribution
1998	5,311,483	36	147,000
1999	7,457,629	44	186,000
2000	6,763,658	28	241,000
2001	6,928,215	22	346,000
2002	14,921,185	41	403,000
2003	10,461,270	36	307,000
2004*	3,701,278	17	264,000

Figure 2 – Evolution of the overall budget

Note: (to April 2004 only)

Funding has been consistent over the period at around Euro 7 million. Two years showed significant increases related basically to an increased number of projects. Over the period there has been a significant increase in the average size of the intervention, virtually a doubling. This reflects a deliberate decision by the EC to fund through a smaller number of larger contracts, therefore increasing the impact of the funding while at the same time simplifying and reducing the administrative burden.

The budget over the period 1998 -2003 is further analysed by the type of funding commitment entered into as follows:

¹³ Subventions are co-financing of activities of the Beneficiary that contribute directly or indirectly to the attainment of one or other of the objectives of the European Union. With the words of the Council Regulation No 1605/2002 on the Financial Regulation applicable to the general budget of the European Communities (Article 108), “Grants are direct financial contributions, by way of donation, from the budget in order to finance: (a) either an action intended to help achieve an objective forming part of a European Union policy; (b) or the functioning of a body which pursues an aim of general European interest or has an objective forming part of a European Union policy.” Since the present Financial Regulation, grants are subject to an annual programme, to be published at the beginning of each year.

Year	Studies	Subventions	Services	Other
1998	240,900	3,755,400	929,800	385,400
1999	383,400	6,058,100	28,800	383,400
2000	131,500	5,515,200	1,117,000	
2001	1,212,400	5,715,800		
2002	2,554,900	11,435,300	681,100	250,000
2003	1,819,800	7,163,200	1,478,400	
Overall	13%	76%	8%	3%

Figure 3 – Analysis of the budget by commitment type

The majority of the budget, 76%, was directed at supporting cooperative or ongoing activities. In this way the EC was able to gain maximum leverage from the funds which it contributed. Studies carried out to full terms of reference from the EC represented 13% of the budget. The balance of 11% related to all other commitments entered into under the budget line.

In the selected sample 70% were subventions (including CARE initially), 20% were studies (although in the cases of CESARE and SARTRE both had partner funding), and 10% related to a service contract. Thus the overall balance of the sample is reasonably well representative of the balance of spending within the budget line as a whole.

4.2.3 Commitment analysis of the sample

The sample is analysed by the sector, the number of contracts which were affected during the project to date, the years in which commitments were entered into, the range of commitment amounts entered into. The total funds committed by the EC to the projects over the evaluation period were also considered. The results are set out in Table below.

Project	Sector	Number of Contracts	Start of commitments	Range of EC contributions ('000 Euro)	Total EC contribution ('000 Euro)
ROSITA	Road	2	1998, 2002	399 - 400	800
EuroNCAP	Road	6	1999, 2000, 2001	52 - 480	2,200
ETSC	Road	2	2001	150 - 360	510
CESARE	Road	2	1998, 2000	400 - 600	1,000
RESPECT	Road	1	2002	960	960
CARE	Road	12	1996, 1997, 1999, 2000, 2002	30 - 3,000	6,100*
SARTRE III	Road	1	2002	1,200	1,200
TISPOL	Road	1	2002	800	800
EQUASIS	Maritime	4	1998, 2001, 2002, 2003	230 - 431	1,250
EuroBOB	Road	2	2001, 2002	785 - 1,100	1,885
TOTALS		33			16,705

Figure 4 – Commitment Analysis of the sample

Note (* Euro 3.4 million under associated programmes – STAIRS, CRASH, PENDANT and Euro 689,000 prior to 1998)

The sample has examples from each of the years since 1998, contains a range of contract types and complexities and has examples of the full range of contract commitments.

In total the budget for the sample of projects was Euro 16.7 million, which allowing for the fact that in CARE the Pendant project (Euro 3 million) appears to have been funded from other sources and several contracts were prior to 1998 (Euro 2.5 million), means that the sample represents 11.2/51.7, or 21% of the total committed funds over the period 1998-2003. Thus while the number of projects evaluated is limited, the scale of the EC activities in the safety sector is reasonably well represented.

Nine of the ten programmes evaluated were in the road sector and one in the maritime sector. This reflects the change of responsibility for the air and maritime safety aspects to alternative budget lines (Air and Maritime Agencies). It also reflects the principal concern of the EC in transport safety considering the huge, Euro160 billion/ annum, estimated cost of road accidents in the EU.¹⁴

4.2.4 Functional analysis of the sample

The sample demonstrates a good cross section of the activities which might be expected to be addressed at EC level. As set out in the European Road Safety Action Programme, the actions expected at the level of the EU relate to:

- Setting of rules or **legislation** (e.g. on mandatory use of seat belts) which would be drawn up at EU level and enacted in Member States.
- Establishing **standards** for common use so that transport users, equipment manufacturers and operators have clear interoperability.
- Ensuring uniformity in **enforcement methods** and of penalties so that transport users expect a similar level of enforcement in each Member State.
- Support for communications campaigns and provision of **information** so that the advice on improved safety derived from research is widely disseminated and can be acted on.

We have set out these intervention areas as a series of headings in the table below and highlighted the main area(s) where we consider that the projects have been focused.

Project	Legislation¹⁵ (in EU or MS)	Information & Forums	Enforcement Methods	Standards
ROSITA	✓		✓	
EuroNCAP	✓			✓
ETSC		✓		
CESARE				✓
RESPECT	✓			✓
CARE		✓		

¹⁴ White Paper, EC Transport Policy-Time to Decide, 2001.

¹⁵ Projects undertaken in direct support of expected future EU legislation of enactment in Member States.

SARTRE III		✓		
TISPOL	✓		✓	
EQUASIS		✓		
EuroBOB	✓	✓		

Figure 5 – Functional analysis of the sample

As can be seen the sample covers a wide range of the activity areas which might be expected at EU level in addressing safety. They demonstrate a good spread of activities and should permit the drawing of clearer general conclusions if common concerns or best practice can be identified across the sample.

Although each of the projects or interventions is separate they do demonstrate that there is an opportunity to consider inter-dependencies and linkages through which it might be possible to gain additional benefits outside the scope of any one intervention. For example there might be lessons on best practice in providing information and communication of results from the experiences gained in the five projects related principally to information exchange; experiences in sharing the methods of enforcement techniques between TISPOL and ROSITA; approaches to the development of standards through EuroNCAP, CESARE and RESPECT. EuroBOB for example, deals with raising awareness about the effects of drink driving but will be made more effective if the uniform enforcement of drink driving were to be delivered in the way envisaged through TISPOL.

4.2.5 Particular attributes of projects in the sample

The commitments in the sample range in size from less than Euro 50,000 to in excess of Euro 1 million, reflecting the full range of budget allocations which were included in the period from 1998. They include some which have been totally completed and some which are ongoing. All of the projects were part of long-term programmes in one form or another. In this regard much of their value will lie in repeated application of a standard approach (e.g. SARTRE, CARE, EQUASIS), or the extended application or development of their work (e.g. CESARE concluding the standard, RESPECT getting Member State legislation in place). This will have an implication for the future funding conclusions that might not be generally applicable to other one-off projects.

4.2.6 Ability to draw general conclusions

Overall, from the point of view of project and programme management, the sample should be sufficiently representative across project size, duration and type to be able to draw some valid conclusions relating to the management of projects within the budget line as a whole. While the road sector is the one particular sector most clearly represented, there are lessons that can be developed from these projects that might be applicable generally across the work of the whole section. Naturally, lessons relating to specific projects or programmes should be valuable in their own right to guide future work in that particular field.

5 CONCLUSIONS

5.1 CONCLUSIONS FOR THE MAIN EVALUATION QUESTIONS

5.1.1 Overview

This section of the report provides, in summary form, the conclusions from the evaluation of the projects organised under the headings of the principal evaluation questions (see section 1.2.2). They are based on the evaluation findings, which are reported project by project, in full evaluation grids (see Section 7). Conclusions are presented at the project level, and then as general conclusions drawn from the sample.

This section summarises the conclusions against the four main evaluation terms (Relevance, Effectiveness, Impact, and Efficiency) that are discussed in the rest of the section. A rating was attributed to each of the projects, under each of the four above areas. The possible ratings were:

5.1.1.1 Ratings - General assessment guidelines

- **LOW** Design/ performance require significant modifications for improvement
- **MEDIUM** Design/ performance are generally solid, though some adjustments are required for improvement
- **HIGH** Design/ performance are strong, there is scope for marginal improvement
- **VERY HIGH** Design/ performance are outstanding and are considered to be benchmarks

5.1.1.2 Ratings across projects

Project	Relevance	Effectiveness	Impact	Efficiency
ROSITA	HIGH	HIGH	HIGH	HIGH
EuroNCAP	HIGH	VERY HIGH	HIGH	HIGH
ETSC	HIGH	HIGH	HIGH	HIGH
CESARE	LOW*	MEDIUM	MEDIUM	MEDIUM
RESPECT	HIGH	HIGH	HIGH	HIGH
CARE	HIGH	MEDIUM	MEDIUM	MEDIUM
SARTRE III	HIGH	HIGH	MEDIUM	HIGH
TISPOL	HIGH	MEDIUM	MEDIUM	MEDIUM
EQUASIS	VERY HIGH	HIGH	MEDIUM	HIGH
EuroBOB	VERY HIGH	MEDIUM	HIGH	MEDIUM

Figure 6 - Rankings attributed under each of the main evaluative questions

Note (* CESARE relates more to mobility and interoperability rather than directly to safety).

5.1.2 Conclusions relating to RELEVANCE

This section examines: firstly, the relevance of each project against the policy objectives; secondly, where marginal changes in the scope of the project might have improved the relevance of each project; and thirdly, some general conclusions for the overall sample as a whole that might be applicable to the entirety of projects funded under the Transport Safety Policy.

5.1.2.1 Relevance against the EU policy on Transport Safety

The relevance of the projects was considered from the viewpoint of EU policy and the way in which the project supported or could be attributed to the execution or preparation for policy. There is a shared understanding of the basic approach to improving transport safety and the White Paper sets out a number of ways in which the EC hopes to improve safety. It also sets out the overarching goal, in road safety, of halving fatalities by 2010 and in maritime safety of eliminating the use in European waters of single hulled tankers.

The table below presents assessments of the degree of relevance of the projects to the European Union Transport Safety Policy. To summarise this analysis, nine out of ten of the projects scrutinised below are considered to be directly relevant, while in one case (CESARE) this relevance appears to be indirect. We also considered how the relevance of the project as described might have been improved through marginal changes in the specification or direction of the project. Results are summarised in the table below:

Project	Relevance to EC policy goals	Potential for improvement
ROSITA	<p>HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • ROSITA prepares the ground for major legislative/ policy measures to counteract driving under influence of drugs and medicines. • Noting the increased concern with drugged driving, ROSITA is firmly embedded in EC Road Policy Safety. 	Duplication should be avoided in the work of ROSITA, (ROSITA 2 does appear to be exploiting potential synergies).
EuroNCAP	<p>HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • EuroNCAP has helped the successful establishment of market for safety. As a result, comparatively safe cars are widely marketed by industry as such, with EuroNCAP widely accepted as a reliable 'safety label'. • EuroNCAP has led to transparency on car safety information that has helped to 	EuroNCAP is so far mainly limited to passive safety, and should move into active safety.

	<p>raise consumer awareness on safety.</p> <ul style="list-style-type: none"> • EuroNCAP is also the leading mechanism on the testing of pedestrian-friendliness of cars. 	
ETSC	<p>HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • ETSC provides a high level and well regarded pan European forum for discussion and exchange of information on safety. • This is a direct measure set out in the White Paper. 	<p>There could be better focus on a more restricted range of issues, for example only on road safety.</p>
CESARE	<p>LOW relevance against EC policy goals on safety.</p> <ul style="list-style-type: none"> • CESARE is developed in support of interoperability and implementation of charging system for roads across Europe. • This is only indirectly associated with transport safety. 	<p>As the detailed approach to a standard develops, there will be a need to involve a wider audience of stakeholders.</p>
RESPECT	<p>HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • RESPECT is a well-targeted and nevertheless comprehensive way of addressing the need for truck-driver training (a need which is raised in a number of EC documents). • It also provides evidence on the usefulness of simulators in such training (which is important given the high cost of these devices). 	<p>There should be an effort to add more specialised training modules (e.g. for drivers of dangerous goods) to the project.</p>
CARE	<p>HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • CARE is the direct outcome from a Directive requiring such information. • It provides the only source of comparable consistent accident data across the EU. 	<p>To further improve CARE's relevance it should be made comprehensive and extended to new Member States.</p>
SARTRE III	<p>HIGH relevance against EC policy goals.</p>	<p>To improve SARTRE's</p>

	<ul style="list-style-type: none"> • It is the only source of comparable consistent trend and attitudinal data across EU. • SARTRE is the direct outcome of an EC request for such information. 	relevance results should be better disseminated both to the research community and, in a more readily understood manner by legislators and the public.
TISPOL	<p>HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • The existing inter police work activities are targeted at improving the chances of the implementation of policy on uniform enforcement across the EU. • This is a direct policy measure in the White Paper. 	Improvements could be made by more tightly focusing objectives and localising approaches.
EQUASIS	<p>VERY HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • EQUASIS is the direct outcome of an EC request for such information, a freely available access to worldwide databases on vessel quality. • It is in direct accord with the policy to remove single hulled tankers. 	To improve EQUASIS's relevance to policy, the database, it must be made as comprehensive as possible.
EuroBOB	<p>VERY HIGH relevance against EC policy goals.</p> <ul style="list-style-type: none"> • Drinking and driving among young people is a serious road safety problem. • Awareness-raising is key to tackling it. 	The target group could be defined more narrowly, e.g. especially targeting young men who are more likely to be involved in drunk driving compared to young women.

Figure 7 – Evaluation findings related to relevance

5.1.2.2 Further findings regarding relevance

Several projects have been set out in planned stages. In this way the EC is able to control the development of the project and adjust its content to evolving circumstances. Examples include the development of the information databases (e.g. EQUASIS in four phases, CARE over 12 related contracts) and the standards (e.g. CESARE which is in four phases). Other projects similarly structured include SARTRE which is repeated every five years but allows for customisation each time. However, delays between the stages of the project can hamper its development and

prove very costly. This has been especially the case for RESPECT, which has experienced delays between Phases 1 and 2, leading to considerable costs (particularly due to high running costs of the driving simulators that are central to the project).

There are, however, potential risks in this approach. The CARE programme illustrates the difficulties that might arise over a long programme period, especially administrative challenges for example through changes in Task Managers and the execution and monitoring of multiple contracts.

5.1.2.3 General conclusions on relevance drawn from this sample of projects

There are some common themes related to relevance that can be drawn from the sample that might be applicable to the entirety of projects funded under the Transport Safety Policy. In summary these are:

- The individual projects or programmes all stem from a clear understanding of the policy needs.
- Directions are focused on supporting policy goals.
- Ways to improve relevance appear to tend towards the need to ensure focus so that within the resources available a clear set of reasonable objectives are set. Careful review of the scope of work at the time of setting the terms of reference is necessary.

5.1.3 Conclusions relating to EFFECTIVENESS

This section examines: firstly, the effectiveness of each project against contractual objectives; secondly, against the specific policy objectives; thirdly, where marginal changes in the scope of the project might have improved the effectiveness of each project; and finally, some general conclusions for the overall sample as a whole that might be applicable to the entirety of projects funded under the Transport Safety Policy.

5.1.3.1 Effectiveness in addressing the project objectives

The possibility of assessing the effectiveness of a project bears a direct relation to the performance of the contractor/beneficiary; the level of detail of the terms of reference; and the quality of the project outputs.

The specific objectives of the projects in the sample were clear and understandable, and set out precisely the objectives of the contract. Reports, even those of a highly technical nature, were written in clear and understandable terms. Project outputs were of a general good quality, and allowed the evaluators to assess whether project objectives were achieved. In most cases the outputs were practical - databases, draft MoUs, enforcement exercises, which could be observed. However, effectiveness was considered to be hindered in a number of cases through restricted access to the information which had been collected or made available. For example the detailed CARE statistics are only available to a small number of users.

In general, all the projects selected for evaluation were effective in addressing their specific contractual obligations; some differences in the degree of effectiveness were remarked in a few cases. Several specific comments were formulated, which are fully reported in each individual evaluation grid.

The following table summarises the main findings from the assessment of effectiveness:

Project	Meeting its specific objectives	Effective in addressing policy goals	Scope for improvement
ROSITA	HIGH effectiveness		
	The contractor quantified and qualified the prevalence of drugged driving; evaluated the newest roadside tests; identified collection of oral fluid as the preferred means of roadside drug testing.	The project helps legislators to assess importance and feasibility of countermeasures against drugged driving, and manufacturers to improve equipment and estimate demand.	Improvements could be made through improving existing contacts with other projects / initiatives (e.g. CERTIFIED; IMMORTAL). Additionally, more work is needed on best practice in 'drugged driving' and relevant police training.
EuroNCAP	VERY HIGH effectiveness		
	The contractor carried out the tests as planned, and on this basis provided the safety ratings for a range of car types.	The project supports the policy goals since there is a proven inverse relationship between number of stars and fatal accident risk.	In addition to increased attention to active and pedestrian safety, effectiveness may be improved via more precise empirical studies.

ETSC	HIGH effectiveness		
	The contractor produced all the expected deliverables including: ETSC’s Annual Brussels Lecture, ETSC’s Annual Traffic Safety Conference in Brussels and ETSC Newsletters. Users confirmed the high regard for the work of ETSC.	The project clearly supported the policy goal through wider awareness of road safety.	Improvement could be made through a focus on smaller range of key activities allowing more input to improved communication.
CESARE	MEDIUM effectiveness		
	The contractor produced all the expected deliverables. Including: Phase I: Service definition, technical and operational Interoperability. Phase II: Contractual interoperability and feasibility validation Outputs are being field tested in next Phase of the project.	The project supports wider use of IT to enable interoperability for charging at point of road use.	Improvement could be made through higher involvement of a wider stakeholder group.
RESPECT	HIGH effectiveness		
	The contractors produced all the expected deliverables for Phase 1. (Phase 2 is not part of this evaluation): RESPECT has successfully been defined and been made operational in Switzerland. The contractor has also established a convincing measurement and evaluation scheme.	The project supports the policy objectives by successfully implementing truck driver training for improved road safety, called for in many policy documents. RESPECT also prepares the ground for legislation on truck driver training and use of simulators.	The measurement evaluation scheme could be statistically more rigorous, e.g. through stratification by company size, driver age or experience. Industry knowledge might further assess the effectiveness.
CARE	MEDIUM effectiveness		

	The contractor produced all the expected deliverables for CARE I including: Feasibility study for the creation of the CARE database, pilot operation of the CARE database, harmonisation of the data contained in the database and full operation. The database is still incomplete for EU-15 for reasons outside the contractor's control.	The project supports the objective measure of meeting the EC goal on halving road deaths by 2010.	Improvement might be better effected through enabling improved access to results.
SARTRE III	HIGH effectiveness		
	The contractor produced all the expected deliverables to date. Including a survey and detailed analysis on attitudes and self-reported behaviour of car drivers. Further detailed analysis and dissemination stages still underway.	The project supports the objective measure of pan-EU attitudes towards enforcement and new legislation in safety.	Improvement could be made through more dissemination of results.
TISPOL	MEDIUM effectiveness		
	The contractor has produced all the expected deliverables to date on pan-European road safety checks and improvement to safety measures. These relate to alcohol and driving, commercial vehicle and bus/ coach roadworthiness, techniques for safe driver monitoring and dissemination on best practice. Further work on enforcement best practice and dissemination still underway.	The project supports the harmonisation of enforcement methods across the EU.	Improvement could be made through a focus on a number of smaller cooperation activities as well as expanding the database.

EQUASIS	HIGH effectiveness		
	The contractor produced all the expected deliverables but the database is still incomplete for reasons outside the contractor's control. The aim of the EQUASIS project is to provide a readily available database covering safety related information on the whole worldwide fleet.	The project supports the EC goal on removing unsafe ships from the fleet.	Improvement could be made through more communication of results.
EuroBOB	MEDIUM effectiveness		
	The contractor has successfully implemented the project in a number of countries, with focus on each country's cultural specificities.	The project supports the objectives through a combination of awareness-raising with co-ordinated repressive measures of proven effectiveness in combating drink driving.	Improvements could be made through going beyond 'message dissemination' with respect to the avoidance of drink driving, to measuring behavioural change.

Figure 8 – Evaluation findings related to effectiveness

5.1.3.2 Further findings, effectiveness in addressing the specific policy goals

In the majority, the projects were effective in addressing the policy goals to which they refer. Only one exception is noted:

- The CESARE project relates more to interoperability and transport mobility rather than transport safety. In this case; its effectiveness is likely to be found when addressing the specific goals of those policies.

5.1.3.3 General conclusions on effectiveness drawn from this sample of projects

There are some common themes related to effectiveness that can be drawn from the sample that might be applicable to the entirety of projects funded under the Transport Safety Policy. In summary these are:

- All projects were targeted at clear policy goals and all specific objectives were met. It is worthwhile taking the time to clearly define the expected project outputs.
- Where projects are part of a long-term programme there is a need to ensure continuity of aims, project leadership and procurement (e.g. CARE, CESARE). A balance must also be struck between keeping the overall aim clearly in mind but having a project structure which permits opportunity for reconsideration of the means and adjustments to the methods.
- Improving access to the results, improving communication of results/activities is a clear need across all projects.

Similarly, improved focus on a limited number of key attributes might be better than wider efforts. For example a focus on making sure that information is up to date and complete (e.g. CARES where the information from Germany might be made available or EQUASIS where more timely data on vessel safety status might be available).

5.1.4 Conclusions relating to IMPACT

This section provides: firstly, a summary overview of impact per project; secondly, their impact on policies other than that of transport safety; thirdly, their impact through communications and the media; fourthly, their impact on industry; fifthly, where marginal changes in the scope of the project might have improved the effectiveness of each project; sixthly, of the impact of each project on policy making in transport safety; and finally, some general conclusions for the overall sample as a whole that might be applicable to the entirety of projects funded under the Transport Safety Policy.

A largely accepted definition of impact, which is adopted in the present Report, is; *“The ultimate planned and unplanned consequences of a programme; an expression of the changes actually produced as a result of the program, typically several years after the programme has stabilised or been completed”*¹⁶.

Due to the short time that has elapsed since the completion of (some of) the projects selected for this evaluation, assessing impact is difficult. Therefore, the evaluation team consulted with Task Managers, contractors as well as users to document their

¹⁶ Organizational Assessment, A Framework for Improving Performance. Charles Lushes, Marie-Hélène Adrian, Gary Anderson, Fred Cardin, and George Pinion Montalba. IDRC/IDB 2002; ISBN 0-88936-998-4.

views on actual and expected impacts. These results are set out in full in the main evaluation grids.

5.1.4.1 Overview of Project Impacts

The following table shows the areas where a positive impact was observed, per project, under the four areas that were taken into consideration for all the projects. At the crossings between rows (the projects under assessment) and columns, one of the three following values is reported:

- **Yes** - a positive impact was observed.
- **No** - no impact was observed.
- **Expected** - a positive impact is likely to be produced in the near future.

Project	On Policy making in safety	On development of other policy	On communication	On Industry	Totals per project		
					Yes	No	Expected
ROSITA	Yes	No	No	Yes	2	2	
EuroNCAP	Yes	No	Yes	Yes	3	1	
ETSC	Yes	No	Yes	Expected	2	1	1
CESARE	Expected	No	No	Expected		2	2
RESPECT	Yes	No	Yes	Yes	3	1	
CARE	Expected	No	Yes	No	1	2	1
SARTRE III	Expected	No	Yes	No	1	2	1
TISPOL	Expected	No	Yes	Expected	1	1	2
EQUASIS	No	No	Yes	Expected	1	2	1
EuroBOB	Yes	No	Yes	Yes	3	1	
Totals					17	15	8

TOTALS					Totals
Yes	5		8	4	17
No	1	10	2	2	15
Expected	4			4	8

Figure 9 - Impact of the projects – a summary

Every project under scrutiny was considered to have a positive impact. In consideration of the short time elapsed since the completion of (some of) the projects, this has to be regarded as a very conservative evaluation result. Some projects, in fact, are expected to produce their full impacts in a longer term perspective, and a later evaluation would better help to understand this aspect. No negative impacts of the projects under scrutiny have been observed.

Impact on policymaking - Any direct impact on policy formulation that the project was expected to have (such as support for the formulation of a legislative initiative) is considered here:

- All of the projects were derived from the stated policy objective of the EC to improve transport safety. They are intended to continue to keep safety at the forefront of legislators agendas (e.g. the work of the ETSC in researching and communicating safety issues), to inform decision makers about the progress of their actions (e.g. CARE providing a single source of accident data to monitor the EC overall safety objective), to assist in understanding how policy should be best formed (e.g. SARTRE revealing, in a standard way, attitudes to driving and enforcement across Europe) or improving enforcement methods (e.g. TISPOL where Member States police forces can share best practice).
- 9 out of 10 projects are judged to have had or expected to have a direct impact on policy making in transport safety. The other 1 related to actions which have directly resulted from policy decisions.

Secondary impact on other policies – We consider under this category any direct impact on formulation of policies different from the direct safety related policy.

- Overall there was little or no discernable impact on policies in other areas. The work pursued through these projects was very focused on the objectives in mind (i.e. transport safety). Some of the results might be expected to encourage the more rapid adoption of safety policies in Member States (e.g. the introduction of better enforcement or more rigorous training requirements). Some projects might benefit from potential secondary impacts being monitored more closely, especially if such secondary impacts have beneficiaries that could participate in the future funding of the project (e.g. if RESPECT leads to fuel-efficient driving being adopted by truck drivers/ transport firms on a large scale, the project may benefit from additional funding from public funds aimed at emissions reduction).
- There might also be some indirect impacts on policy development in other arenas such as health and environment. Almost all projects are likely to ultimately have an effect on public health policy by reducing death and injury (and, by reducing the cost associated with these, the policies have an impact on the public purse). Secondly, some projects are likely to have impacts even beyond that – e.g. if truck drivers are taught fuel-efficient driving in RESPECT, the emissions-reducing (hence environmental) effects could be sizeable).
- None of the projects are judged to have had or are expected to have a direct impact on policy making in the development of other policies in other areas. However, there might be secondary impacts through greater awareness of, for example, health and environmental impacts.

Impact on Communication and media – Under this category we considered the communication developed within the project and the evidence that the work accomplished in the project had been disseminated.

- All projects were well known within their community of users or researchers.
- There was evidence in all cases that the results of the projects had been communicated more widely (e.g. TISPOL reports included evidence of newspaper articles, EQUASIS has a distinctive promotional brochure, ETSC conferences and newsletters are widely distributed)

While communication to those directly interested in the work of the project (researchers, government agencies etc) was generally observed, the depth of impact

is likely to be restricted due to difficulty in accessing the detailed information available in the project (e.g. access to the CARE database is very restricted).

8 out of 10 projects are judged to have had or expected to have a direct impact on communications and media in relation to transport safety. The other 2 relate to actions which have directly related to specific technical outcomes which are mostly relevant to a very narrow specialist user community.

Impact on industry – We consider under this category any impact on transport-related industries.

- Most projects in the sample were not directly related to industrial processes nor outputs. Even in the case of CESARE and EQUASIS, which are targeted at their sectors, the former has not delivered a standard and the latter is regarded only as one tool in vessel charter decision-making.
- Nevertheless, certain projects could have an impact in time such as CESARE on the standardisation of electronic road charging equipment or TISPOL in the development of standard enforcement equipment.

5.1.4.2 Impact related to projects

A detailed summary of the impacts of the projects is set out in the table below under the four headings related to impact.

Project	Impact on Policy making in safety	Impact on Communications & media	Impact on industry
ROSITA	ROSITA has a HIGH impact		
	ROSITA's recommendations are incorporated in national drug testing requirements worldwide. Governments use/ await results for the activation of legislative proposals (e.g. Netherlands; UK).	There is still a need for a clearer and better-funded communication strategy to industry and experts, including a more detailed website.	Industry has been involved in ROSITA from early stage. ROSITA has also been shown to clearly influence company's R&D on drug testing devices.
EuroNCAP	EuroNCAP has a HIGH impact		
	There has been some, albeit limited, impact on policymaking (e.g. Directive 2003/102/EC).	Impact in this respect is very strong, with much of it being done by industry itself in their car marketing strategies.	Impact in this respect is strong, but the rate of adoption of specific measures following from EuroNCAP is not yet clear.

ETSC	ETSC has a HIGH impact		
	<p>The project arose as a direct result of policy to provide support for an independent forum to inform pan-EU policy-making. Cited as being formative in</p> <ul style="list-style-type: none"> • pedestrian protection Directive; • 20 mph speed limits in UK; • introduction of airbags. 	<p>The work of ETSC is well known and well regarded in its relevant sectoral circles. Wider dissemination is not considered a priority.</p>	<p>None discernable.</p>
CESARE	CESARE has a MEDIUM impact		
	<p>The project is formative in policy making, seeking standards for interoperability. Development of Memorandum of Understanding for a new standard on interoperability is expected to be the basis for EU wide enactment.</p>	<p>The work is well known in relevant sectoral circles. Its impact beyond these spheres is limited.</p>	<p>There has been limited up take of results to date as no standard is yet in place.</p>
RESPECT	RESPECT has a HIGH impact		
	<p>This has been limited so far (with one example being Directive 2003/59/EC), given the early stage of the project.</p>	<p>Due to the early stage of the project, this can only be assessed for Switzerland, where there clearly has been some impact on media.</p>	<p>There has been a high interest from industry, suggesting that RESPECT may bring high potential gains to industry.</p>

CARE	CARE has a MEDIUM impact		
	The project arose as a direct result of policy to provide an independent means to inform pan-EU policy-making. Cited as being used to support the European Road Safety Action Programme; Safe Child Campaign of the International Red Cross.	The work is well known in relevant circles but this is undermined by access, which is very restricted.	None discernable.
SARTRE III	SARTRE III has a MEDIUM impact		
	The project arose as a direct result of policy to provide an independent means to inform pan-EU policy-making. Cited as being supportive in the development of policy in relation to drink driving alcohol limits.	The work of the project is well known in relevant sectoral circles. Wider dissemination is not considered to be a priority.	None discernable.
TISPOL	TISPOL has a MEDIUM impact		
	The project arose as a direct result of policy to encourage effective enforcement on safety pan-EU. Testing new speed monitoring equipment which might be introduced EU wide.	The work of the project is well known in relevant circles. It has helped to establish good contacts between police forces.	There is some potential for enforcement equipment manufacturers.

EQUASIS	EQUASIS has a MEDIUM impact		
	The project arose as a direct result of policy to provide an independent means to inform decision makers about choosing a safe vessel.	The work of the project is well known in relevant circles.	There might be scope for changes in the insurance sector and selection of vessels.
EuroBOB	EuroBOB has a HIGH impact		
	EuroBOB has influenced recommendations at the EC level even though this was not intended.	Impact in this respect has been very high – publicity is at the very heart of the project.	Brewer and bar-owner associations are heavily involved in some participating countries.

Figure 10 – Review of Impacts of the projects

5.1.4.3 General conclusions on impact drawn from this sample of projects

There are some common themes related to impact that can be drawn from the sample that might be applicable to the entirety of projects funded under the Transport Safety Policy. In summary these are:

- Projects were directly supportive of policy making.
- As might be expected, little impact was felt beyond their direct relevance in their particular field but collectively there was an opportunity to deliver a consistent high-level message.
- Improving access to the results, improving communication of results/ activities is a clear need across all projects.
- Direct impacts on industry are small and difficult to determine.

5.1.5 Conclusions relating to EFFICIENCY

This section examines the efficiency of each project through: firstly, setting out its procurement profile; secondly, examining its use of resources; thirdly, examining the cost effectiveness of each project in achieving its outputs; and finally, providing general conclusions for the overall sample as a whole that might be applicable to the entirety of projects funded under the Transport Safety Policy.

The analysis of efficiency was undertaken via an examination of inputs and outputs/ outcomes. As most of the projects were directed at supporting a common aim, accident reductions, it has been impossible to define cost effectiveness in terms of outcomes as each might have contributed to the overall objective and there is no

current method for distinguishing the impact of the different factors presented in the projects. Nevertheless, we have attempted to benchmark the cost of resources and the cost of activities wherever possible including overall fee rates where they were able to be estimated.

Project	Procurement	Use of resources	Cost effectiveness
ROSITA	ROSITA has a HIGH efficiency		
	Provided over two contracts. ROSITA: up to 50% of allowable costs or 100% of additional costs. ROSITA 2: 44.69% of estimated total cost.	This was high given the large number of inputs (especially experts' time) provided for free.	This was high, given the considerable economies of scale reached through intense cooperation and sharing of work with US partners.
EuroNCAP	EuroNCAP has a HIGH efficiency		
	Provided over six contracts. EC funding ranging from 25% to 50%, co-funding in particular from public national sources.	Generally high, but there is greater scope for car industry shouldering part of cost. Average fee rates: €470 in 1999-2000.	Benefits in terms of life saved are considerable when compared to inputs. Depending on the value given to a human life, EuroNCAP is cost effective as soon as savings between 3 to 6 human lives are reached (1 to 2 lives when measured against EC contribution).
ETSC	ETSC has a HIGH efficiency		
	Provided over 2 contracts, 50% EC funding with co-funding.	Support for administration and communication. Average fee rates: €379 in 2001.	The work is well thought of but ETSC is operating in a market with many providers of safety information. While there are details on attendees there is no direct measure of cost effectiveness.

CESARE	CESARE has a MEDIUM efficiency		
	Provided over 2 contracts, 50% EC funding with co-funding from private sector.	Average fee rates: €461 in 1998-1999 in CESARE 1. The development of the MoU required legal and tax advice in CESARE 2.	The project is phased and two further stages required to complete the expected interoperability standards
RESPECT	RESPECT has a HIGH efficiency		
	One contract, 50% EC funding. (Contract for RESPECT Phase 2 was not part of this evaluation as Phase 2 only started in April 2004).	This could be improved, especially since delays between RESPECT 1 and RESPECT 2 led to a suboptimal use of resources.	Efficiency was achieved at the company level as soon as 4 companies became involved (which is currently the case), efficiency at the public level as soon as 2550 drivers have been trained.
CARE	CARE has a MEDIUM efficiency		
	Provided over 12 contracts, EC funding rising from 50% to 100% over the period 1996-2004.	Large number of individual contracts and support funded irregularly. This is likely to have had a high transaction coordination cost.	Limited access to the database restricts its wider usefulness and thus cost effectiveness.
SARTRE III	SARTRE has a HIGH efficiency		
	Provided over 1 contract, EC funding of 50%, co-funding from MS authorities.	Average cost per interview with analysis €52 Benchmark comparison is €70 per interview based on experience of the evaluator ¹⁷ .	The survey provides the only consistent, comparable data set across EU.

¹⁷ Jacobs Consultancy LTD, Proposal for surveys, 2004, Department for Transport, UK

TISPOL	TISPOL has a MEDIUM efficiency		
	Provided over 1 contract, EC funding of 50% co-funding from MS police authorities.	Average fee rates: €550. Leverage of over €20 million in associated police time committed.	One part of the project resulted in over 26,000 defective vehicles and drivers being stopped.
EQUASIS	EQUASIS has a HIGH efficiency		
	Provided over 4 phases/ contracts, EC funding falling from 50% to 33%, co-funding from MS authorities.	Average fee rates: €387 in 1998-2000. EC funding gradually reduced as different sources of funding take on further responsibility.	The database is well regarded and records about 93,600 users per annum ¹⁸ . There is no record of users' feedback on the quality or use of the information.
EuroBOB	EuroBOB has a MEDIUM efficiency		
	Provided over two contracts, with EC funding of 44.66% and 41.05% respectively.	High cost (939K Euros p.a)., but very widespread campaign over various countries where such resources are arguably justified. Some minor evidence of suboptimal use of resources in some countries (e.g. Spain).	Input/ output analysis not possible due to the nature of the project. While having different national campaigns is useful for effectiveness of the projects, further synergies between these (with positive cost effects) might be possible.

Figure 11 – Evaluation findings related to efficiency

5.1.5.1 Further findings, efficiency in the use of resources

From an analysis of the efforts allocation, there is no evidence of over-allocation of resources. In addition, all the efforts planned appear to be justified by the objectives of the projects, and the tasks to be carried out by the consultants/ beneficiaries.

Where it has been possible, a basic fee analysis was carried out for the projects under evaluation, dividing the budget for fees of each specific project per the number of its working days. The resulting figures do not take into consideration the professional experience of the experts (senior consultant, expert, junior consultant),

¹⁸ This figure is based on the 7,800 users per month recorded in 2003. It does not differentiate between single and repeat users.

and correspond to the average daily costs of each project in terms of professional fees. The following table reports the results of this analysis, per project and contractual year:

Project	1998/ 1999	2000/ 2001	2001/ 2002	2003/ 2004
ROSITA				
EuroNCAP		473		
ETSC		379		
CESARE	461			
RESPECT				
CARE				
SARTRE III				
TISPOL			546	546
EQUASIS	387	387		
EuroBOB				

Figure 12 - Average fees, per contract, per year

Over the period under evaluation the daily fee rates ranged from Euro 379 to Euro 546. The sample is considered representative of the range of projects funded under the Transport Safety Policy. On average the fee rates are in line with the fees that have been observed by the evaluators in other DGs of the European Commission¹⁹.

5.1.5.2 Cost effectiveness in attaining results and impacts

The work undertaken through the projects under consideration was difficult to define in terms of direct outcomes as all were related to the overall objective of reducing accidents. In some circumstances it has been possible to benchmark against other work in different fields. For example, in the work of SARTRE the average cost of an interview (including all analysis) was Euro 52. This compares well with recent examples known to the evaluators of similar commercial interview programmes which cost Euro 70 per interview. As regards user access to the EQUASIS database on safe vessels, this costs less than Euro 2 per inquiry. Since this database gives unique access to a wide range of vessel data, it is regarded to be good value.

In general, the projects have been successful in terms of effectiveness and impact, they have been judged as using their resources efficiently and so cost effectiveness is likely to have been satisfactory.

¹⁹ The fees observed in other DGs of the European Commission during the same period¹⁹ are in the following ranges:

- Senior experts – from 550 to 750 €
- Experts – from 400 to 500 €
- Junior experts – from 300 to 450 €

5.1.5.3 General conclusions on efficiency drawn from this sample of projects

There are some common themes related to efficiency that can be drawn from the sample that might be applicable to the entirety of projects funded under the Transport Safety Policy. In summary these are:

- That the individual projects or programmes arising from proposals all have appeared to demonstrate a good use of resources in delivering. Given that there is also a substantial Member State or third-party contribution they also will be interested in securing good value for money.
- Objective monitoring indicators are not embedded in the reporting. While there are some general indicators provided in the form of days and fees and the cost of delivery, there are no clear records of actual days input, fee rates, cost per user etc.
- In the case of co-funding there is no overall record (except through the outputs) of the value and effort actually input by third parties.
- Most contracts appear to have been well targeted, possibly in a number of discrete phases to ensure manageability of outcomes. The major exception is CARE where several changes of ownership and a multitude of contracts must have led to less than efficient delivery.
- Changes in EC procurement rules in January 2003 led to the stalling of some programmes (notably RESPECT which was delayed about one year) and extra expense for contractors. Centrally generated change or delays that adversely impact contractors, unless compensated, are likely to lead to poorer future responses.

5.2 CONCLUSIONS FOR THE DERIVATIVE EVALUATION QUESTIONS

5.2.1 Overview

This section of the report provides, in summary form, the conclusions from the evaluation of the projects organised under the headings of the derivative evaluation questions (the sustainability of the activities particularly in the event of the withdrawal of EC funding; the monitoring of current and future interventions the consistency among different objectives; and, the added value of the funding).

These are based on the evaluation findings, which are reported project by project, in full evaluation grids as part of the main body of the report. Conclusions for sustainability are presented at the project level and as general concluding remarks drawn from the sample. The other conclusions to derivative evaluation questions are presented at the general level, as they draw from cross-project evaluation.

5.2.2 Conclusions on Sustainability

Sustainability is assessed for each project through an examination of the following issues: firstly aspects of the projects likely to continue after the withdrawal of EC funds; secondly, factors which promote sustainability; thirdly, proposals for alternative/ supplementary funding sources; and fourthly, some general conclusions for the overall sample as a whole. The results are set out in the table below:

Project	Aspects likely to continue after EC	Factors for sustainability	Alternative and/ or supplementary financing
ROSITA	Expected to stop without EC contribution. (But once devices are defined, strong likelihood that project can be self-sustaining as devices can be marketed and sold).	Key role for Prof Verstraete; but also strong commitment by project partners should he discontinue.	National governments; drug testing device manufacturers. Possibly also from automobile clubs, pharmaceutical industry or medical associations.

EuroNCAP	Expected to continue given that EuroNCAP has managed to attract much funding from non-EC sources.	Relevance to industry demands. Funding agencies' perception of marginal rate of return in safety via further EuroNCAP work. Rate of use of the star-rating system, including in firms' marketing strategies.	National or private road safety associations / research institutes. Private industry, to a limited extent (EuroNCAP needs to carefully guard its independence from private influence).
ETSC	Expected to revert to research institute with limited external communication.	Focus on smaller number of key activities Improve profile and speak with authority.	Private sector or MS research contracts. Private contracts might affect independence.
CESARE	Expected to continue only if there is a clear commercial rationale.	Reaching standards goal rapidly. Achieve wide industry buy-in.	Private sector consortium of operators and manufacturers.
RESPECT	Expected to stop without EC contribution. Other funding sources so far not sufficient.	Ability to evoke demand for training in companies.	Road safety organisations. Contributions (but not full funding) can be expected from participating companies.
CARE	Expected to stop without EC contribution with any particular drive for pan-EU data from Member States individually.	Complete and up to date. Cited with authority and seen to be used.	No alternative funding sources have been identified.
SARTRE III	Without EC involvement the project would end, other funding sources are not sufficient.	Industry involvement, and standardised core questions. Cited with authority and seen to be used.	Possible funding from consortium of Member States.

TISPOL	Expected to be much reduced with only limited Member States initiatives.	Make relevant at local level. Measurable outcomes.	Possible funding from consortium of Member States.
EQUASIS	Expected to continue as its value is clear but cooperation from database providers might be affected.	The quality of the information and industry cooperation. Cited with authority and seen to be used.	Possible funding from consortium of Member States, international maritime agencies and users fees.
EuroBOB	Expected to continue in those countries where project is established (e.g. Belgium). Expected to stop in recent ones and the prospective newcomers.	Level of public interest in drunk driving among young people.	Possible funding from national road safety organisations; private sector (bar owner and brewer associations). Small private organisations very active in combating drunk driving among young people.

Figure 13 – Evaluation findings relating to project sustainability

5.2.3 General conclusions on sustainability drawn from this sample of projects

There are some common themes related to sustainability that can be drawn from the sample that might be applicable to the entirety of projects funded under the Transport Safety Policy. In summary these are:

- That projects directly supportive of policymaking or instigated by EC are unlikely to continue if EC funding is withdrawn. There is likely to be little pan-EU interest in, or capacity to, continue these programmes.
- The key to sustainability is to ensure that once set up (the formative stage) databases and information are up to date and comprehensive and continue to deliver (the maintenance stage). There is often more interest in the formation stage than in the maintenance stage.
- Improving access to the results, improving communication of results/ activities is a clear need across all projects.
- Future sustainability must be considered as an integral part of any intervention. This includes not only technical issues and personnel resources but also the impact on the organisation undertaking the work.

5.2.4 Conclusions on monitoring and indicators

General conclusions on monitoring drawn from this sample of projects

There are some common themes related to monitoring that can be drawn from the sample that might be applicable to the entirety of project funded under the transport safety policy. In summary these are:

- There is a general lack of specific objective indicators for projects except through the means of the deliverables.
- Cost effectiveness, effectiveness and impact are all difficult to measure as the final objective is an improvement in safety/ reduction in accidents. Linking each project/ intervention with the overall outcome in terms of changes in accidents has been a challenge. Nevertheless, specific indicators can be developed at least relating to such aspects as:
 - Cost and volume of inputs.
 - Inputs and access by users.
 - Use/citation of project in EC, research literature, media etc.
 - Website hits by category of user.
- More challenging is the monitoring of the quality of the information produced by a project. This might be monitored through user surveys and feedback conducted either through the project itself or through independent means. Reporting of user feedback should be a standard element of any project.

5.2.5 The consistency among different objectives

The focus of the policy objective on transport safety and the specific objectives of halving fatal accidents on the roads by 2010 and eliminating single hulled tankers from European waters, means that there is a clear consistency in direction for all of the projects.

As previously set out when examining the sample, the projects demonstrate coherent support across all of the areas which might be expected to be generated at EC level – relating to the formation of legislation, providing standards for safe operation, ensuring that legislation is enforced and best practice is enacted and that decision makers can be informed about the progress of their policies.

The measure of the overall consistency between objectives across the sample is the recent Communication from the Commission, “European Road Safety Action Programme”, issued in June 2003. The Communication sets out the plan for achieving the halving of road accident victims by 2010. Within the document each of the road related projects (except CESARE and not directly, SARTRE) is mentioned by name and referenced as a building block in the overall strategy.

5.2.6 The added value of the funding

This section sets out proposals for improving value added from the projects in the future through: firstly, proposal related to individual projects; and secondly, some general conclusions for the overall sample as a whole.

The evaluators were required to assess the need for strategies to improve the added value of the funding.

Based on the evaluation findings, no major project measures are deemed necessary to improve the added value from funding, although extension of project coverage to the new Member States is obviously one means of enhancing the European dimension. Once again, this refers to the sample of the projects selected.

In particular:

- Whilst it is possible that some of these projects may have been instigated as cooperative activities between Member States (for example TISPOL), or out of commercial interests (for example EuroNCAP), it is highly unlikely that, without EC funding, coordination, and provision of suitable pan-European structures, they would have been implemented. This is particularly relevant to the information sharing projects.
- Added value from this sample of projects is derived from the partnerships and networks established between organisations at the European level.
- Additionally it should be noted that Transport Safety Policy implementation via these projects brings added value to the policy making process itself. For example, in the absence of EC financing of these projects (policy-off scenario), it is possible that EC policy making may have been less evidence-based.
- All the projects evaluated contributed – directly or indirectly - to the European policy on transport safety, so that no need emerges for strategies to increase their contribution to European policies.
- In general, methodologies adopted (when described) were consistent with the projects' objectives.

Some of the projects related to information sources which were under development (for example, CARE and EQUASIS). There will be added value in making sure that such projects are suitably directed to ensuring that their information is up to date, has full coverage and is accurate to encourage use and reliance on the results.

6 RECOMMENDATIONS

Recommendations are presented initially at the general level, project specific recommendations follow in section 6.2.

6.1 GENERAL RECOMMENDATIONS

On the basis of the findings and the conclusions formulated in sections 4 and 5, the following general recommendations are presented. They are in four parts: one relating to the basis for these judgements, one relating to the key evaluative terms, one relating to good project management in general, and the other to some broad cross-cutting themes which appeared during the course of the evaluation.

6.1.1 The basis for the judgements

The evaluation undertaken on a sample of selected projects provides indications that are deemed useful for the future European Commission's activities under transport safety. While some general lessons can be learnt it is strongly recommended to follow-up this first evaluation with a second, wider exercise. This second exercise could build on the results and experiences of this first evaluation in terms of methodology and evaluation tools.

6.1.2 General recommendations drawn from the sample

6.1.2.1 Evaluative Term: Relevance

- Projects need to stem from a clear understanding of the policy needs and must be focused on supporting policy goals. For example the EQUASIS database provides a clear example of the development of a specifically targeted information source to assist decision makers in support a straightforward policy goal of eliminating the use of unsafe ships.
- Projects should be carefully established to ensure that within the resources available a clear set of reasonable and achievable objectives are set. For example, particularly when funding is through subventions using an established organisation, there is a need to recognise what that organisation is equipped with to deliver well and what might be better placed in a different project or procured in a different way. For example, the ETSC work is particularly strong through its dissemination channels relating to road safety issues and support should focus on this area.

6.1.2.2 Evaluative Term: Effectiveness

- Projects must be well defined with clear goals and specific objectives. While most projects were well specified, there is a need to relate the specific objectives to the overall objectives within the policy area to ensure a continued clear focus. Building and maintaining a database, as in CARE or EQUASIS or collecting social-behavioural data as through SARTRE, are not ends in themselves but means to informing decision makers in the search to find ways to reduce the number of accidents.

- Where projects are part of a long-term programme continuity of aims, project leadership and procurement must be ensured. Inevitably in any long term project or programme stretching over many years there will be changes of personnel both in the client organisation and in the contractor organisation. For example, this is inherent in the long term nature of the database projects but also is evident in projects which take several years over several phases such as RESPECT and CESARE.
- Wider access to the results of projects through improved communication should be provided, as a general principle. All of the projects have dissemination in their terms of reference. However, it must be recognised that the contractors who are well equipped to deliver technical excellence might not be best equipped to deliver dissemination of their results particularly beyond the immediate circle of their peer group or in a form which is readily digestible by a wider non-technical audience.
- Project objectives should be limited to a number of key outputs. Recognition of the key elements in the work should focus requirements on the key deliverables. For example in SARTRE the contract documents clearly set out the limited but explicit number of tasks all related to the core objective of the survey and analysis of driver behaviour.

6.1.2.3 Evaluative Term: Efficiency

- Objective monitoring indicators should continue to be embedded in the reporting framework for projects. These should relate to standard items that would be normally present in any contract to measure the use of resources, the timeliness of the work and the achievement of deliverables. These include such items as costs, manpower inputs, costs per output, work to plan, quality assessment of deliverables. These should be required as a standard part of the regular project reporting regime.
- In the case of co-funding, an overall record in a standard format of the value and effort actually input by third parties should be required. While commitments entered into and the contracts set out the planned expenditure it should be a requirement to have at least some sort of record of the actual resources input into the project from the third parties. It is only in this way that a check on the actual fee rates and resources consumed can be monitored and efficiency measured.
- For long term projects special consideration must be given to ensuring the continuity of management and direction. Examples in the sample under consideration include the long term database contracts as well as other projects which set out in phases inevitably take a long time to complete.

6.1.2.4 Evaluative Term: Impact

- To improve the overall impact of research, opportunities should be taken to deliver a consistent high-level message calling on a cross-section of projects and results. It might be appropriate to consider the development of a discrete website through which access to all to these projects can be accessed and through which dissemination to a broader non-technical audience could be delivered. This is similar to the way in which the EQUASIS team have provided an invaluable link across a number of separate databases to permit easy access.

- Access to the results through improving communication must be seen as a clear need across all projects.
 - Regulation 1049/2001²⁰ implements the Article 255 of the Treaty, providing for citizens' rights to access documents held by the Commission, the Parliament, and the Council. Every citizen has the right to access (among other documents) the Final Reports of the projects financed. The means of access to these documents are many, and the European Commission is one of the institutions mostly attentive to publishing on its web numerous documents of interest, worldwide.

 - An intrinsic part of most projects is the need to communicate results. The very essence of the work of ETSC is, for example, the dissemination of its work through conferences, papers and newsletters. The EQUASIS database is designed to be freely available to all who wish to use it through the internet. Most projects supported through subvention related to a project web site where information on the work of the project could be consulted. This might relate also to the general work of the supported organisation e.g. SARTRE is available through the general website of the French road safety research organisation INTRETS, TISPOL has its own site and the results of the specific Organisational Project which is being supported by EC funds are alluded to within it.

 - Some projects are less available as they concern privacy of personal data. So the detailed information on the CARE database is restricted to only a very few individuals and the detailed information collected in SARTRE can only be made available in an un-attributable format.

 - Nevertheless, there is a common theme that improved communication of results would be beneficial across all projects. This includes not only the circle of directly interested researchers and government agencies which are intimately involved in the work but also a wider audience across the transport safety arena who might be able to connect disparate strands of information in unexpected ways.

²⁰ Regulation (EC) No 1049/2001 of 30 May 2001 regarding public access to European Parliament, Council and Commission documents.

- Better support for wide dissemination of results through distribution of reports to interested parties, publication on a readily accessible web site, and through frequent and established newsletters, could all help in this regard.

6.1.3 Evaluative Term: Monitoring of interventions

- In addition to the deliverables, specific objective indicators should continue to be included for each project. The output from the projects must be delivered but within the context of the overall objectives. For example, the SARTRE survey is carried out, but only becomes relevant when it is providing information which can be used to understand ways in which research might be directed or enforcement developed to effect accident reductions.
- Qualitative monitoring should be included in projects. This can often be accomplished through user surveys. Some projects include direct feedback as results are taken forward and developed in subsequent phases, for example CESARE 2 to CESARE 3, only if the quality of the deliverable from the initial phase is adequate. Some projects include feedback from users as routine at least in a particular manner through website surveys of users for example EQUASIS. However, there needs to be a more regular and independent means of assessing the outcomes through objective surveys of users to determine whether and to what extent they made use of the project output, and in which way might the data have contributed to the overall objective of accident reduction.
- To refine the application of current monitoring techniques, it is recommended to draw on both emerging good practices and international best practices in performance management. Best practices from the performance management school of thought includes methodological guidelines depicted below:
 - Strategy - Aims, objectives and actions plans: Define aims and objectives and priorities that DG TREN is seeking to achieve, identify key factors that could significantly affect the achievement, and determine activities and resources.
 - Measures - Design measures of objectives and activities that are aligned with strategic objectives, demonstrate results clearly, respond to the Transport Safety policy priorities, do not place unnecessary burdens on DG TREN, and meet stakeholders' needs.
 - Targets - Identify intended levels of performance: Set targets in priority areas and tailor and cascade targets to those who deliver services.
 - Results - Actual performance achieved: Collect sufficiently complete accurate and consistent data to document performance and support decision-making at various organisational levels, report performance information, and communicate performance information to key stakeholders and the public.
 - Verification - Assurance (Internal/ External).
 - Monitoring - Assess progress towards targets and identify variations in performance.

- Evaluation - Review strategy, activities and measurement system using information from a range of sources including evaluation, pilot studies and performance measures.
- Metrics should be evaluated to determine progress towards the objectives as well as to determine whether or not the current metrics are still relevant. As problems are identified, alternative corrective actions can be recommended and evaluated and the appropriate corrective action(s) can be finalised. The corrective actions should either be acted upon immediately or be further assessed to determine the root cause of the problem.
- Collection, reporting, monitoring and analysis of metrics should be executed throughout the life of the initiatives. The assessment of project performance should focus on progress against project baselines, variances between actual and baselines, and other pertinent developments, including quality and risk.
- Items typically addressed during project assessment include:
 - cost (effort) and schedule variances that exceed specified thresholds
 - cost (effort) and schedule performance indices that exceed specified thresholds
 - estimate at completion versus budget at completion actual vs. planned accomplishment of project milestones
 - actual vs. planned resource utilisation
 - trends in cost (effort), schedule, resource utilisation, etc. across multiple reporting periods
 - progress in mitigating project risks and closing project issues
 - progress in achieving project quality measures
- The proposed methodology is expected to bring the associated benefits listed below:
 - Help to clarify objectives
 - Develop agreed measures of activity
 - Gain a greater understanding of the activities
 - Facilitate comparison of performance
 - Facilitate the setting of targets
 - Promote accountability to its stakeholders

6.1.3.1 Evaluative Term: Sustainability

- As it is unlikely that these projects would have been initiated without EC instigation, it is expected that they will require at least some form of EC funding. EU wide databases required by EC policy makers are almost certainly going to require EC funding. This must be secured through the most stable procurement means to ensure continuity both for client and contractor while also permitting regular scrutiny of inputs, outputs and methods.
- The EC should ensure that attention is paid to ensuring that existing projects, especially information/database projects, are up to date and well maintained before embarking on wider activities. Extending existing projects, for example

TISPOL or CARE, into, for example, the new Member States, or widening the range and complexity of the EQUASIS database, are likely to be essential and exciting projects for researchers. Nevertheless equal attention must be paid the need to maintain the existing information sources to ensure that they are up to date and continue to meet policy makers' needs.

- The EC should maximise its role in improving access to the results, and regularly cite source material from projects so that they are regarded as authoritative sources. The European Road Safety Action Programme provides a good example of the way in which the EC brought together and publicised the work which was being carried out over a number of projects. Opportunities such as this and the many times that officials address conference or provide papers should be taken as opportunities to cite the project sources with authority.
- An analysis of future sustainability must be included as an integral part of the terms of reference of any intervention. In particular this should focus on the impact of the project on the organisation undertaking the work and the means to fund the activity, if it is to continue, after EC funding is withdrawn. Feedback from each of the contractors carrying out the projects evaluated indicated that withdrawal of EC funds would lead to the termination of the project or its severe curtailment. To avoid disruption from the termination of projects and to assess how and whether project activities could be delivered in the future without EC support, an assessment of sustainability should be a standard part of each project.
- Without ongoing programmes we would generally expect the impact achieved from the programmes to date to dissipate over time. Without CESARE, SARTRE or CARE individual countries would likely pursue their own agenda with the benefits quickly lost. The EQUASIS database might continue under the current or other private sector partners in their own right, but it is likely that there would be a charge at the point of use. This would be a disincentive to potential users and contrary to the programmes objective of making data available to everyone. ETSC receives part of its funding from private sector firms. Without EC contributions the programme may stop or be tilted towards manufacturers interests.
- RESPECT should be sustainable without EC funding if truck companies can be made aware of the potential benefits to them. Likewise funding for ROSITA is likely to be available from other sources e.g. national governments. TISPOL would likely continue but in a reduced form with high profile blanket operations the most likely to disappear. EuroBOB, effective to date in message dissemination, would likely continue in some countries without EC funding and disappear in others. EuroNCAP would be likely to continue in some form without funding, as manufacturers are aware of the relevance to their industry and the potential benefits to their sales of high ratings.

6.1.3.2 Evaluative Term: Suitability for future funding

- While some of the projects are one-off they might be part of a longer term programme (e.g. CESARE), most are in support of ongoing programmes either required by the EC for analytical purposes (e.g. CARE, SARTRE) or are

targeted at wider dissemination of information or techniques (e.g. ETSC, TISPOL). As a result, unless severe disruption is to be avoided, in all cases continued funding is likely to be required in the short term.

6.1.3.3 Evaluative Term: Potential for extension and/ or alteration

- All the contracts under assessment can be considered for some form of extension or alteration. In particular the enlargement of the EU poses significant challenges in the arena of transport safety.

6.1.3.4 Evaluative Term: Potential for improving value for money extension and/ or alteration

- This is particularly highlighted where long term information sources (e.g. CARE, SARTRE, EQUASIS) are proposed for funding under a more certain funding regime.
- All of the projects can be considered as continuing projects except CESARE and possibly RESPECT which have definite termination goals.

6.2 SPECIFIC RECOMMENDATIONS

This section draws on the conclusions and provides recommendations at the project level. These relate to project-specific monitoring recommendations; programmatic recommendations; and recommendations for future funding.

6.2.1 Specific monitoring recommendations

Monitoring is considered an “exhaustive and regular examination of the resources, outputs and results of public interventions²¹”. Monitoring is an activity to be carried out during the life of the project, or programme. In this, it differs from ex-post evaluation, which is conducted after the ending of the project/programme to be assessed²².

²¹ EC Structural Funds, Evaluating socio-economic programmes. European Commission, MEANS collection, vol. 6. CX-10-99-006-EN-C

²² Monitoring focuses on the outputs of projects/programmes, and their contribution to the planned outcome(s). It tracks and assesses performance through analysis and comparison of indicators over time. It is conducted by project managers, and the funding institutions; sometimes it is externalised to independent consultants. It aims to provide managers and other stakeholders with continuous feedback on implementation; it alerts them about problems in performance; and aims to provide options for corrective actions. For differences between monitoring and evaluation, see also the Monitoring and Evaluation Strategy of UNDP, published at <http://www.undp.org.in/MnE/outcome.htm>. For the externalisation of monitoring activities, see the experience acquired by the programme Tacos of the European Commission. Some useful bibliography includes European Commission, (former) DG XVI: The new programming period 2000-2006: methodological working papers; WP3 – Indicators for Monitoring and Evaluation: an indicative methodology (undated, likely year 1999). See also the issue N.8 of the series “Lessons and Practices” of the Operations Evaluations Department of the World Bank Group: <http://lnweb18.worldbank.org/oed/oeddoelib.nsf/DocUNIDViewForJavaSearch/770FD50EAE49C6CD>

The results of this evaluation can facilitate the definition of indicators that can be recommended for inclusion into a future monitoring plan, and also the tools that will be most appropriate.

These are in addition to the normal monitoring measures that would be expected in any project relating to timeliness, use of budget and resources and quality of output.

Relevant objective indicators and sources for their verification are provided, per project, below:

Project	Objective indicators	Sources for independent verification
ROSITA	<ul style="list-style-type: none"> Extent of production and marketing of drug detection devices by industry in line with ROSITA recommendations. 	<ul style="list-style-type: none"> Project reports. Police and traffic participant feedback on usefulness of devices.
EuroNCAP	<ul style="list-style-type: none"> Impact of EuroNCAP on each class of the car market. Rate of responsiveness of industry to EuroNCAP-findings. 	<ul style="list-style-type: none"> Project reports. Research on the basis of accident statistics. Analysis of safety features developed by car industry.
ETSC	<ul style="list-style-type: none"> Conferences held. Research projects generated Quality and use of information. Citations in research journals. Citations in development of policy in both EU and Member States 	<ul style="list-style-type: none"> Project reports. Conference papers. Number of users, (conference attendees, subscribers). Research papers. User feedback/surveys. Quantified evidence reported.
CESARE	Well defined deliverables: <ul style="list-style-type: none"> MoU. Technical specification. Business model. Stakeholder involvement. 	<ul style="list-style-type: none"> Project reports. Independent technical assessment. Evidence of attendees at working groups. Evidence of dissemination of information.

[852567F5005D80C7?opendocument](http://www.dec.org/partners/evalweb/resources/index.cfm). Finally, refer to the issue 7/1996 of the TIPS series of the USAID Centre for Development Information and Evaluation:
<http://www.dec.org/partners/evalweb/resources/index.cfm>

RESPECT	<ul style="list-style-type: none"> • 'Before-and-after-training' test results. 	<ul style="list-style-type: none"> • Project reports. • Accident statistics. • Feedback from participating firms and possibly from insurance companies.
CARE	<ul style="list-style-type: none"> • Availability of database. • Availability of detailed analysis. • Quality and use of information. • Citations in research journals. • Citations in development of policy in both EU and Member States. 	<ul style="list-style-type: none"> • Project reports. • Analysis of hits on website. • Number of users, (conference attendees, subscribers, applications for information). • Reports of user requests. • User feedback/ surveys. • Quantified evidence reported.
SARTRE III	<ul style="list-style-type: none"> • Availability of survey results. • Availability of detailed analysis. • Quality and use of information. • Citations in research journals. • Citations in development of policy in both EU and Member States. 	<ul style="list-style-type: none"> • Project reports. • Analysis of hits on website. • Number of users, (conference attendees, subscribers). • Reports of user requests. • User feedback/surveys. • Quantified evidence reported.
TISPOL	<ul style="list-style-type: none"> • Well defined deliverables – scale, content and timing of police actions such as road side enforcement and new techniques testing. • Quality and use of activities/ advice. 	<ul style="list-style-type: none"> • Project reports. • Evaluation feedback fro participating police forces. • User feedback/surveys. • Newspaper or police journal citations.
EQUASIS	<ul style="list-style-type: none"> • Availability of database. • Availability of accurate data. • Quality and use of information. • Data accuracy. • Information used in decision on chartering. 	<ul style="list-style-type: none"> • Project reports. • Number of users. • User feedback/surveys particularly from industry sectors including finance, insurance and chartering community.

EuroBOB	<ul style="list-style-type: none"> • Number of young people choosing to become a designated driver, and how many doing so in response to the EuroBOB campaign. • Geographical and temporal correlation between positive developments in accident statistics and intensity of EuroBOB activities. 	<ul style="list-style-type: none"> • Project reports. • Questionnaires for young people on their behaviour. • Statistics comparing EuroBOB activity with accident statistics and/ or alcohol consumption.
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Figure 14 – Evaluation proposals relating to monitoring for specific projects

6.2.2 Specific recommendations on the value added of the funding and on the effectiveness of the project financed.

There are some additional actions which could be easily undertaken, and have a beneficial impact both on the added value of the funding, and on the effectiveness of the projects financed. These are set out in the table below in relation to the individual projects under consideration.

Project	Core recommendations
ROSITA	<ul style="list-style-type: none"> • Draft EU-level guidelines on use of roadside testing equipment on the basis of ROSITA 2 results. • Collect comparable data on the prevalence of drugged driving and the main types of drugs encountered and responsible for fatal accidents. • Moreover, police training to identify and remove drugged drivers from traffic should be improved; a more explicit communication / media strategy on ROSITA results and the dangers of drugged driving should be developed; and efforts stepped up to classify and appropriately label impairing medicines.
EuroNCAP	<ul style="list-style-type: none"> • Continue the work of EuroNCAP on passive safety and pedestrian protection; move into active safety. Effectiveness may be improved via more precise empirical studies. • Assess relative return on investment in various parts of EuroNCAP work (monitoring closely the marginal return on future investments as cars become safer), and apportion funding accordingly. • Design a monitoring/ tracking system to assess the responsiveness of EuroNCAP to technological developments.

ETSC	<ul style="list-style-type: none"> • Concentrate on a more focused number of activities. This is likely to be in the dissemination of their work through conferences, newsletters and other media so that the impact of their work can be more widely felt.
CESARE	<ul style="list-style-type: none"> • Complete the development of the standard. While the work undertaken in the project has value in its own right as an up to date understanding of the technical and business issues related to interoperability in electronic charging for roads, it is in the conclusion of the work and the delivery and implementation of the standard that the fullest impact will be felt.
RESPECT	<ul style="list-style-type: none"> • Consider the array of alternative funding sources. This includes in particular participating transport firms, to whose benefits from RESPECT training are sizeable. • Moreover, RESPECT may consider more closely the positive secondary effects it generates. Again, this may help in future funding if the evidence on positive secondary effects can be used to convince beneficiaries of these secondary effects to participate in RESPECT funding.
CARE	<ul style="list-style-type: none"> • Complete the database. There are significant omissions in the database arising from privacy laws and the sharing of data. Ways to overcome these issues might be pursued. • Extending the data collation and standardisation of results to the enlarged EU-25 is necessary to complete the EU wide nature of the information. The important aspects of data maintenance and the need for consistent and continuous up dating must not be neglected nor underestimated.
SARTRE III	<ul style="list-style-type: none"> • Continue the surveys to ensure that a consistent picture of evolving trends is maintained. • Extending the data collation and standardisation of results to the enlarged EU-25 is necessary to complete the EU wide nature of the information. The important aspects of data analysis and dissemination must not be neglected nor underestimated.
TISPOL	<ul style="list-style-type: none"> • Concentrate on a more focused number of activities which take account of local knowledge more fully. • Europe wide simultaneous activities might be exchanged for more targeted inter-police force actions which still develop cooperation and spread of best practice.

EQUASIS	<ul style="list-style-type: none"> • Ensure that the database is accurate, presents its information clearly and is timely. • This latter feature requires increased cooperation with data providers to capture recent information on vessels more promptly.
EuroBOB	<ul style="list-style-type: none"> • Improve reporting on effectiveness and efficiency, going beyond mere message dissemination towards measuring behavioural change among young drivers and reduced accidents as a result of EuroBOB. • Extend project to other countries (both 'old' EU members that have so far not taken part and new EU members). Finally, risk groups might be defined more narrowly; and cooperation with pub owners and brewers extended.

Figure 15 – Project specific recommendations for improving value for money

6.2.3 Specific recommendations in relation to future funding

Recommendations for the projects evaluated in relation to future funding are set out in summarised form in the table below.

Project	Recommendation regarding future financing	Recommendations for project extension/alteration	Scope for improving value for money
ROSITA	Funding to continue while ensuring move towards marketability of devices (and hence self-financing of ROSITA).	Elaborate complementary strategies, e.g. improved police training on identifying drugged drivers. Classify and appropriately label impairing medicines, and harmonise national approaches.	Consider a more explicit communication/media strategy to promote dissemination of results and raise awareness of Driving Under the Influence of Drugs (DUID) among industries and authorities. Provide more detail on the website.

EuroNCAP	Funding to continue, especially considering the large scope for useful possible project extensions.	Other aspects of passive safety, e.g. whiplash protection, or compatibility of cars in car-to-car impact. Extension into active safety, e.g. ABS.	Design of a monitoring/tracking system to assess the responsiveness of EuroNCAP to technological developments.
ETSC	Funding to continue following review of areas for specialisation.	The project support should focus on a limited range of activities e.g. road safety.	Focus on conferences and research, and research dissemination.
CESARE	Funding to continue if a resulting standard can be achieved in a reasonable time.	The project should specifically include the involvement of a wider stakeholder group.	Take action to ensure that all EU Member States represented and participating.
RESPECT	Funding to continue at current levels.	Specialised training, e.g. for drivers of dangerous goods.	Take positive secondary effects of project more explicitly into account to open new funding sources.
CARE	Funding to continue at enhanced level.	The project should be extended to include EU-25.	Maintenance of the database to be funded under a more stable long term financing regime.
SARTRE III	Funding to continue at enhanced level.	The project should be extended to include EU-25.	Maintenance of the survey to be funded under a more stable long term financing regime.
TISPOL	Funding to continue, following review of areas for specialisation.	The project support should be focused on a limited range of activities e.g. sharing of specific enforcement methods.	Better combination of local knowledge with centrally directed pan-European police force activity.

EQUASIS	Funding to continue at current levels. Develop a plan for eventual withdrawal of EC funds.	The project support should be focused on maintenance of the database.	Maintenance of the database to be funded under a more stable long term financing regime.
EuroBOB	Funding to continue at levels allowing extension to new countries.	Funding to continue into new participating countries.	Using synergies between various national campaigns as much as possible, and providing for better reporting.

Figure 16 – Evaluation proposals relating to suitability for future funding

7 EVALUATION GRIDS-CASE STUDIES

All the main findings resulting from the evaluation of the selected projects are reported in the evaluation grids; therefore, they should ideally be included in Section 4 (Evaluation Findings - General) of this Final Report. However, in consideration of their length, and with a view to the reader's convenience, they are included in this separate section.

7.1 ROSITA

Note: This evaluation covered ROSITA as well as ROSITA 2. This was decided in coordination with the EC.

Project title	Roadside Testing Assessment: ROSITA (R), ROSITA 2 (R2)		
Type of funding	R: Transport Research and Technological Development (RTD), 4 th Framework Programme R2: Grant, DG for Energy and Transport (DG TREN): Evaluation of roadside oral fluid drug tests for the detection of drivers under the influence of drugs	% of financing: R: up to 50% of allowable costs or 100 % of additional costs, as appropriate ²³ R2: 44.69% of estimated total cost (max).	R: Contract N° RO-98-SC.3032 R2: Contract N° Sub/B27020B-E3-S07.18222-2002
Overall EC budget allocated for this project in €	R: Total estimated allowable costs: € 1,103,395. EC contribution: € 399 995 R2: Total Budget € 895 000 .EC contribution: € 400 000	Contract: year	R: 01.01.99 – 30.09.00 (21 months) R2: 31.12.02 – 31.12. 05 (36 months)
Budget for fees allocated for this project €	Precise estimates could not be obtained.	N person/days	R: 31 609 total man-hours or 471 257 € billed to the project. R2: Budget for staff is 558 625 € of which EC paid 164 325 €. ²⁴

Background and genesis

R: The 1997 – 2001 EC Programme '*Promoting road safety in the European Union*' identifies measures '*aimed at combating driving while in a state of fatigue or under the influence of alcohol, medicines or drugs*' as essential elements and emphasises the primary role of the Commission in supporting research. ²⁵

23 FOB the cosa basis, refer to the table Estimated Breakdown of the Allowable Costs in the Actual Cost Contract for ROSITA.

24 Correspondence with Prof. Verstraete, ROSITA Project Co-ordinator, University of Gent, Belgium, 17/05/2004.

25 Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, COM(97) 131 final.

While driving under the influence of alcohol is already established as an offence in all European countries,²⁶ *the use of illicit drugs and some medicines is an increasingly worrying factor...*²⁷ According to the EC contact Mr. Norroy, approximately 10% of accidents are at least in part due to misuse of drugs or medication.²⁸ As opposed to 'drink' driving, 'drugged' or Driving Under the Influence of Drugs (DUID) is not very well understood and legislative/ enforcement activities to combat DUID are hampered by the non-availability of reliable drug tests.

R2: The EC's 2001 White Paper "*European Transport Policy for 2010: Time to Decide*" sets the target of reducing the number of road accident victims by half by 2010.²⁹ Driving under the influence of alcohol and drugs is identified as a major cause of road accidents.

On the basis of extensive research, roadside evaluation of available testing equipment and interviews with police officers, industrial partners and policymakers, the ROSITA study concluded that the need for reliable drug tests had increased, with a preference for oral fluid tests. ROSITA 2's task thus is 'to evaluate innovative oral fluid drug detection technology for use by police either at the roadside or at a police station'.³⁰

Typology of the project

The Role of the project in the policymaking process.

ROSITA and ROSITA 2 are the outcome of EC action programs and official proposals aimed at improving road safety. As this is a research project it does not directly address specific policies. By quantifying and qualifying the need for roadside drug tests, can nevertheless guide laboratories, the police, legislators' and policy-makers' on roadside drug testing and the enforcement of road safety.

R: Given the increasing concern with DUID, a number of EU countries were either preparing or implementing laws addressing this.³¹ To assess the value of planned initiatives, legislators and politicians need to know the strengths and weaknesses of available testing equipment. Device manufacturers can use the results from ROSITA to determine market needs and target research efforts at the problems encountered in the study. Ultimately, the availability of reliable, easy-to-handle drug tests is crucial to make enforcement action against DUID more effective.

R2: Given the ROSITA results, ROSITA 2 only evaluates oral fluid testing devices in the field. The project also seeks to obtain internationally comparable results, which may yield a more accurate picture of the prevalence of drugged driving and facilitate the development of harmonised specifications for equipment in the EU. ROSITA 2's role in the policymaking process is overall very similar to ROSITA.

The methodology adopted

R: ROSITA consists of five deliverables elaborated over the course of 21 months. To identify the requirements for roadside drug testing equipment, ROSITA synthesises existing scientific information on impairing drugs and medicines, surveys operational, legal, and user requirements for such

26 See Commission Recommendation (OJ C 48/2), dated 17/01/2001.

27 EC European Road Safety Action Programme, 'Halving the number of road accident victims in the EU by 2010: A shared responsibility', COM(2003) 311 final, dated 02/06/2003.

28 Mr. Norroy is the EC's Project Officer for ROSITA 2. The information stems from a telephone conversation with him on 10/05/2004.

29 COM (2003) 370, dated 12/09/2001.

30 See Annex 1, paragraph 1(b) of the ROSITA 2 Grant Agreement.

31 The Eurobarometer survey of young people across Europe in spring 2002 found that 79.4% of respondents agreed that police should test for drugs at the same time as alcohol. Cited in the ELDD Comparative Study 'Drugs and Driving' European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), 06/2003, p.3.

Geographical coverage	<p>equipment across the EU, evaluates state-of-the-art roadside drug tests, and makes recommendations for their application.</p>
	<p>R2: For ROSITA 2, US and European teams composed of scientists and local police units test drug detection devices in major metropolitan areas. Data will be collected over two 9-month periods. Following initial training of research teams and the selection of testing devices, each team follows a commonly agreed research protocol and works toward the collection of comparable data (demographic, behavioural, and toxicological variables).</p>
	<p>In both projects, drug tests are evaluated according to accuracy, specificity and sensitivity. Drugs tested for include amphetamines, cannabinoids, cocaine, opiates and, pending the availability of sufficiently sensitive tests, benzodiazepines.</p>
	<p>R: The ROSITA consortium includes the EC and 12 contractors from industry and research institutes based in Belgium, Finland, the UK, Germany, Spain, France, Italy, and Norway.³² The survey of operational, user and legal requirements (D3) covers 13 EU and 6 non-EU countries.³³</p>
	<p>R2: The main co-ordinator of ROSITA and another six contractors continue to be part of the ROSITA 2 team, but ROSITA 2 now works with US partners³⁴, where both sides co-operate on methodology, evaluation protocols, and results through a number of multilateral meetings.³⁵ In Europe, the contractors are based in Belgium, Germany, France, Norway, Spain, and Finland.³⁶</p>

Specific project objectives
<p>R: ROSITA is aimed at identifying the requirements for roadside drug tests and assessing state-of-the-art testing equipment. As specified in the cost contract, the five deliverables survey:</p>
<p>D1) Drugs/ medicines that impair driving as identified by the scientific literature.</p>
<p>D2) Available testing equipment for urine, oral fluid and sweat.</p>
<p>D3) Operational, user and legal requirements for roadside testing equipment across EU Member States.</p>
<p>D4) Validity, reliability, usability and usage cost of existing tests.</p>
<p>The final report (D5) makes recommendations for the use of roadside testing equipment. These are expected to facilitate the development of the legal framework, the harmonisation of technical procedures and the development of EU guidelines for roadside tests, effective enforcement action and, more generally, the deterrence of DUID.</p>
<p>R2: ROSITA 2 is expected to yield:</p>
<p>Data to demonstrate the extent of illegal drugs used by drivers, impairing medication, and their</p>

32 For specifics see <http://www.rosita.org/contractors.html>.

33 The latter include the Czech Republic, Slovenia, Iceland, Norway, Poland, and Switzerland.

34 The US partners are co-ordinated by The Walsh Group (Bethesda MA, USA). The US part of ROSITA will be entirely funded by the US government.

35 The first organisational meeting took place between 04–05/07/2003 in Strasbourg, France. The second ROSITA 2 meeting was held on 25–26/02, 2004 in Tampa, Florida and the third meeting has been scheduled for November 5 – 6, 2004, with a venue still to be determined.

36 For details refer to the ROSITA 2 Grant Agreement, Annex I, paragraph 1(b).

37 See, in particular, the Commission Recommendation on enforcement in the field of road safety, C(2003) 3861 final, 21/10/2003, paragraph 16 and recommendation (4).

combination with alcohol.

Data regarding the accuracy/ reliability of oral fluid tests and information on their practical and operational aspects.

Clues as to whether current police detection capabilities are acceptable.

The results of ROSITA 2 could serve as strategic input into policymaking for transport, health, and safety. The evaluation of newer oral fluid tests may also yield a more concrete basis for legislative changes and targeted measures to improve police training. The data collected will furthermore help to quantify the extent of driving under drugs, which has so far not been clearly documented or data was not comparable across countries.³⁷

Possibilities and limits of evaluating the projects

Since ROSITA and ROSITA 2 are research projects with no direct policy objective, it is difficult to evaluate the project with reference to the policy outcome. This evaluation furthermore only addresses conceptual, procedural and implementation issues and does not entail an in-depth assessment of the scientific implications of the proposals. And while a large number of external sources were consulted, the project-specific evaluation draws heavily from the project documentation and communication with the main co-ordinators. Independent assessments to guarantee a more balanced evaluation were not available.

On ROSITA 2, an interim report is not yet available and the project itself is still in the data collection phase. The project is expected to be completed by the end of 2005.

Activities undertaken during the evaluation

- Background research on the project and policy context and analysis of key project material obtained from the Commission (project contracts and annexes), from Prof. Verstraete (meeting reports, press articles, ROSITA Exploitation and Dissemination Report) and through Internet research (e.g. www.rosita.org; DG TREN websites).
- Various interviews and e-mail exchanges with ROSITA EC contact Mr. Norroy and the main project coordinator Prof. Verstraete; follow-up questions were also been to members of the EC Working Group on Drugs, Medicines and Driving.
- Contact with stakeholders, e.g. the Portuguese Directorate General for Traffic / Ministry of the Interior (Ms M.A. Núncio); and the Swedish National Road Authority (Mr Hans Laurell).
- Consultation of the EC's European Road Safety Action Programme; the Commission Recommendation on Enforcement in the Field of Road Safety; Recommendations by the EC Working Group on Drugs, Medicines and Driving; information provided by the Council of Europe's Pompidou Group; a comparative legal study on 'Drugs and Driving' by European Monitoring Centre for Drugs and Drug Addiction (EMCDDA); and further references contained in the material.³⁸

³⁸ Detailed references are given in the respective footnotes.

Relevance to the policy	
How is the project evaluated relevant to the policy goals?	<p>R: ROSITA is firmly embedded in the 1997–2001 EC road safety programme, which has the objective of establishing the scientific basis for future policy measures to combat drugged driving and thus to reduce the number of (fatal) road accidents.³⁹</p> <p>Because of much lower concentrations and the diverse range of substances, the detection of drugs in body fluids is much more complex than for alcohol. The possibility to use rapid roadside screening tests, supplemented by police training to identify drivers DUID, is a key element in the enforcement process. Their evaluation is thus a prerequisite for developing appropriate legislation and effective enforcement measures. At the same time, it is crucial to vigorously pursue efforts aimed at combating other driving practices that are said to be the main causes of (fatal) road accidents, namely drunk driving, speeding, and driving without seatbelt.⁴⁰ To what extent these practices may be combined with drug use/ abuse is, however, not clear.</p> <p>The Commission involvement clearly allows for a greater scale of the projects in terms of devices and subjects tested. It also improves the scope of both projects by placing them into the broader EC Transport Safety Policy context and by facilitating the co-ordination of national efforts.</p> <p>R2: The policy relevance of ROSITA 2 lies within the objective of the 2001 White Paper of halving the number of road accidents by 2010. ROSITA 2 also responds to the Commission’s Expert Group on Drugs, Medicines and Driving, which recommended in February 2002:</p> <ul style="list-style-type: none"> • <i>‘To support research activities to develop roadside testing for illicit drugs based on non-invasive methods and to support their use in the field by police,</i> • <i>To adopt a harmonised procedure to test for illicit drugs all drivers involved in all fatal accidents.’⁴¹</i> <p>ROSITA 2’s data collection efforts are also likely to provide a more concrete basis for the development of legislative/ policy measures:</p> <p><i>‘Statistics collected by Member States on the prevalence of drugs in road accidents are still too fragmentary and, statistically, are not comparable. They do not give a sufficiently detailed picture of the situation and do not permit identification and evaluation of the most effective possible counter-measures.’⁴²</i></p>
How could the	Duplication should be avoided in the work of ROSITA, (ROSITA 2 does

39 For precise estimates on illicit drugs in road traffic and their impacts, refer to the literature review by de Gier, ‘Review of investigations of prevalence of illicit drugs in road traffic in different European countries’, in Pompidou Group (2000), ‘Road Traffic and Drugs’, pp. 55 – 56. On the UK, see Tunbridge et al. (2000), ‘The Incidence of drugs and alcohol in road traffic accident fatalities’, Transport Research Laboratory Report No. 495. Research from Northern Ireland suggests that the incidence of DUID may have been a multiple in the 1990s of what it was in the 1980s. Further recent evidence is to be found e.g. in Robert E. Mann et al (2003): ‘Effects du cannabis sur la conduite’, Transport Canada; or in Alvarez, F. J., Sancho, M., Vega, J., Del Rio, M. C., Rams, M. A., and Queipo, D. (1997): Drugs other than alcohol (medicines and illicit drugs) in people involved in fatal road accidents in Spain, in Mercier-Guyon, C., (Ed)., Alcohol, Drugs and Traffic Safety. Annecy, France: CERMT.

40 See especially footnote 39.

41 For the findings of the Expert Group on Drugs, Medicines and Driving, refer to http://europa.eu.int/comm/transport/road/roadsafety/behaviour/medicines/index_en.htm.

42 See footnote 40.

relevance of the project be improved / have been improved through adjustments at the margins?	<p>appear to be exploiting potential synergies). By seeking to make improvements over ROSITA, ROSITA 2 has already undertaken a number of adjustments, for further detail see 'Effectiveness'.</p> <p>During the evaluation, the question as to the rationale of funding two complementary projects from different budget lines came up at various points. According to Mr. Norroy, this decision was however of purely pragmatic nature and dictated by a pending rules change.⁴³</p>
Overall Rating on Relevance: HIGH	

Effectiveness	
Has the project evaluated been effective in addressing its specific objectives?	<p>R: The work packages agreed upon set out clear research questions that were timely and comprehensively answered by the project:</p> <p>D1) Identified the detrimental impact of drugs and medicines on driving ability. An up to date, unique comparison of drug classifications across countries and the need for uniform categorisation and labelling of impairing medicines.</p> <p>D2) Provided an inventory of roadside drug testing devices that were in existence at the time of the study. The market study included 19 devices, of which 16 were designed for the screening of urine samples and three for saliva, one of which could also be applied to sweat. Tests were classified according to type (e.g. pipette, dip, and cup tests), single or multiple parameters, and drugs being tested for. The analysis is, however, now partially obsolete and a significant number of new tests have appeared.</p> <p>D3) Identified oral fluid as the preferred sample and provided important information to manufacturers for improving devices. The legal survey showed that most European countries lacked clear legal framework to combat DUID. Two differing legislative approaches currently prevail, impairment-type (UK) or zero tolerance legislation (Germany, Belgium).</p> <p>D4) Tested 2968 subjects in 8 European countries, a survey of unprecedented scale. The tests with oral fluid appeared most promising, but testing methods at the time were not satisfactory. Tests were also not sensitive enough for cannabis and benzodiazepines, the increasing use of which is concerning.⁴⁴</p> <p>Overall, the findings clearly demonstrate the need for reliable drug tests. Such tests can increase the confidence of police officers when prosecuting drugged drivers and, more generally, save time and simplify the enforcement procedure. They can save taxpayers' money by excluding drugs as a cause of the drug impairment, thereby avoiding more expensive laboratory analysis. In addition, effective tests may reduce the inconvenience to people who stopped by the police and found not to be DUID by not keeping them waiting too long at the roadside.</p> <p>R2: ROSITA 2 is an ongoing project and a progress report is not yet available. US partners have standardised research protocols across sites and established a centralised database. The first data collection phase has delayed as testing devices are still under revision and more subjects have to be included. Overall, the goal is to evaluate as many devices as possible and</p>

43 See footnote 28.

44 EMCDDA, as cited in footnote 32.

<p><i>Have the outputs been effective in addressing the policy goals? How could the effectiveness of the project be improved / have been improved through adjustments at the margins?</i></p>	<p>to test up to 3000 subjects. According to Mr. Norroy, the project was going well, with research good progress with research institutes progressing and industry participation.</p> <p>ROSITA 2 improves upon ROSITA in a number of ways:</p> <ul style="list-style-type: none"> • By focusing on oral fluid devices, which ROSITA showed to be the preferred option among the police and testing personnel. • By ensuring uniform study protocols across testing sites to obtain more meaningful and comparable results. • By collaborating with US partners, thus achieving important economies of scale and increasing the scope of the project. • By buying some of the devices to ensure evaluation independent of manufacturers' claims. <p>With a focus on providing internationally comparable data on DUID, developing the specification for testing equipment should fulfil, and identifying gaps in current research and problems encountered in practice, ROSITA 2 will provide for the framework for future legislative and enforcement action. Once the issues with respect to roadside testing have been clarified, harmonised testing specifications for the EU could be developed to guide manufacturers and users.</p> <p>By providing comprehensive statistics on DUID and evaluating existing devices, the project supports the need for legislative/ policy action to combat these practices and provide an assessment of the testing devices.</p> <p>To improve the project's effectiveness, contacts between ROSITA 2 with other projects or initiatives in related fields could be improved, such as with the EC-funded road transport project CERTIFIED (conception and evaluation of roadside testing instruments to formalise impairment evidence in drivers) and the EU-wide initiative IMMORTAL (Impaired Motorists, Methods of Roadside Testing and Assessment for Licensing) to avoid duplication and exploit synergies.⁴⁵</p> <p>The ROSITA study also pointed to the importance of special police training to identify DUID. Even without sufficient legal basis, police counsel may go some way toward reducing the number of accidents caused DUID. A focus on identifying best practices in the field of police control and training could add to drug test evaluations and hence directly target the policy objectives.</p>
<p>Overall Rating on Effectiveness: HIGH</p>	

<p>Sustainability</p>	
<p><i>Aspects likely to continue/not continue after the end of EC involvement</i></p>	<p>ROSITA has already been completed and ROSITA 2 is the second phase of the project. In both cases, the contractors involved account for approximately 50% of the project costs.</p> <p>According to Prof. Verstraete, all partners in the project participate because they believe it is important to independently assess testing equipment. Given the rapid technological progress in this field and the potential bias involved when manufacturers sponsor evaluation, the need for independent evaluation of new testing equipment is not likely to significantly reduce in the short term.</p> <p>ROSITA has already had an influence beyond the borders of the participating</p>

⁴⁵ See <http://www.cordis.lu/transport/src/48319.htm> and <http://www.immortal.or.at>.

	<p>Member States. The US-EU collaboration on ROSITA 2 was initiated by Dr. Walsh, who was impressed with the advances of ROSITA.⁴⁶ Upon successful completion, the reach of ROSITA 2 is likely to increase further.</p> <p>Mr. Norroy noted that once a reliable and easy-to-handle device had been identified, it could be marketed, sold, and the returns be used to finance further improvements. Following the 'big push' investment from public sources, the project could thus be self-financing. Because of the two different legal approaches in Europe, he noted that future legislative work in this area would be unavoidable and that will be based around the availability and technical functioning of testing equipment.</p>
Factors influencing sustainability	<p>Given the long-standing involvement of Prof. Verstraete on both projects, the question of his role in their overall sustainability arises. Given his relatively young age, it is not very probable that he will depart from the project any time soon. In view of the strong commitment by project partners, it is also very likely that one of them would take over should Prof. Verstraete be unable to continue work on the project.</p>
Financing alternatives	<p>Considering the large number of parties concerned with road safety, financing is likely to be available from alternative sources, e.g., national governments and device manufacturers, but potentially also from automobile clubs, the pharmaceutical industry, or medical associations.⁴⁷ Other groups/institutions exploring the relation between drug abuse and road traffic accidents, such as the Pompidou Group, might also be interested in getting involved.⁴⁸</p>

Impact	
Impact on policy making	<p>The ROSITA study has given a general boost to roadside drug testing and its conclusions are still valid: oral fluid is a promising specimen for roadside drug testing, but more research (R&D) is needed. The work of ROSITA was intensely followed by several governments that were considering improved legislation on drugs and driving, including France, Denmark, Austria, the Netherlands, and even Australia. ROSITA's results were discussed during the Pompidou Group's two sessions on drugs and driving in 1999 and 2003 and ROSITA 2 is cited in the EU Council Resolution (2004/C 97/01).⁴⁹ In anticipation of reliable saliva tests, the development of new drugs and driving legislation in the Netherlands was temporarily halted. Mr. Hage informed us that the legislation will be activated as soon as ROSITA 2 results are presented.⁵⁰ Furthermore, the British Forensic Science Service used the results of ROSITA as the basis for drafting requirements for roadside saliva and sweat tests.</p>
Secondary impacts on other policies	<p>Deterrence DUID as a result of effective enforcement or the removal of impaired drivers following a positive test results could yield cost savings to the public health and tax systems by reducing the number of (fatal) accidents.</p>

46 See footnote 35.

47 The British Medical Association closely follows the issue of drugged driving, see <http://www.bma.org/ap.nsf/Content/DrugsDriving?OpenDocument&Highlight=2,drug>.

48 Drugged driving was extensively considered by the Council of Europe's Pompidou Group as part of its 1997 – 2000 work programme. See the special report in the Group's newsletter No. 1, 03/2004.

49 Council Resolution on combating the impact of psychoactive substances use on road accidents, published in the Official Journal of the European Union on 22/04/2004.

50 Mr. Aad Hage works in the Traffic and Vehicle Safety Directorate, Dutch Min. Verkeer en Waterstaat. He participates in the WG on Drugs, Medicines and Driving. E-mail of 24/05/2005.

Communication and media	<p>The direct and indirect cost of injuries and deaths associated with road accidents have been estimated at € 160 billion p.a., or 2% of EU GNP.⁵¹</p> <p>Increased awareness of the effects of drugs on driving could reduce the consumption of illegal drugs and provide incentives for people under medication to take these in a more responsible manner, again indirectly lowering costs to the public health and welfare systems.</p> <p>The finding that special police training to identify drugged drivers increased the probability of obtaining positive drug test results, has resulted in a greater focus on appropriate police control and training and led to the establishing best practices, perhaps even at EU level. Increased contact between US and EU police officers as a result of ROSITA 2 could also lead to new policy and training approaches.⁵²</p> <p>Mr. Norroy confirmed that the media and communications aspect had not played a large role in either project. ROSITA 2 was not even officially launched with the press. Much of this stems from the fact that drugged driving is difficult to address with a public that tends to confuse it with the issue of drugs in general.</p> <p>The ROSITA website does not go beyond basic project information and the deliverables. More detailed procedural information or links to related projects would be desirable. ROSITA 2 is, apart from a little note, not mentioned at all. Prof. Verstraete agreed that there should be more information on the website, but this had not been budgeted for and has been done on a voluntary basis.</p> <p>To achieve a large distribution of results, plans for the exploitation of the results of ROSITA have nevertheless been pursued extensively.⁵³ They were presented at scientific meetings and published in various journals.⁵⁴ ROSITA has also been mentioned in newspapers in some of the participating countries.⁵⁵</p> <p>ROSITA 2 foresees the publication of the results in the scientific literature and will make the final report available on the internet. According to Prof. Verstraete, ROSITA 2 was covered by Spanish and Finnish newspapers and on Finnish TV.⁵⁶</p>
Impact on industry	<p>Three device manufacturers were amongst the contractors working on ROSITA, this demonstrates the interest of industry in having their tests evaluated and in the project more generally to '<i>help them determine the needs of the European market for roadside testing</i>'.⁵⁷ Indications of greater demand for such products may then stimulate private research and development activities or investment in manufacturing.</p>

51 See COM(2003) 311 final, 02/06/2003, p. 6.

52 Following the ROSITA 2 Tampa meeting, several EU police officers were invited to observe police checkpoints in the US.

53 For more details, refer to the ROSITA 'Exploitation and Dissemination Report, 20/05/2003 (confidential document).

54 E.g., Kintz, P., Cirimele, V., and Ludes, B. (2000), 'Detection of cannabis in oral fluid (saliva) and forehead wipes (sweat) from impaired drivers', *Journal of Analytical Toxicology* 24, pp. 557–561; and Gronholm, M and Lillsunde, P. (2001), 'A comparison between on-site immunoassay drug-testing devices and laboratory results', *Forensic Science International* 121, pp. 37–46.

55 The Exploitation and Dissemination Report (see footnote 30) lists all newspaper articles.

56 For a recent article, refer to <http://www.helsinginsanomat.fi/english/article/1076152512752>.

57 See ROSITA Technical Annex, Section 9.

Regarding ROSITA 2, the transatlantic cooperation increases the project's credibility and profile with the industry, which attracts the participation of manufacturers of testing equipment. It also gives manufacturers the opportunity to have their equipment evaluated in the US or to collaborate on new devices. For example, the new system concept to detect drug abuse was developed by Dräger Safety and the US Company OraSure Technologies on the basis of ROSITA findings. The press release makes explicit reference to ROSITA, illustrating the project's impact on industry.⁵⁸

Overall Rating on Impact: HIGH

Efficiency

Efficiency in the use of resources

Both projects are considered to be quite cost-efficient, not least because of the fact that police officers mainly participated for free and industry donated devices for evaluation. Furthermore, equipment evaluations could be undertaken at little extra cost to laboratories: a lot of the work is performed with instruments that laboratories use in their routine work.

The EC's resources increase scale and scope of the projects. Prof. Verstraete underlined that EC involvement allowed for EU-wide coverage, thus enabling a (quantitative) comparison of drug tests under different legal system, climatic conditions, and types of drugs.

R2: The preliminary laboratory phase was performed and financed by the US partners. Economies of scope and scale, due to intense co-operation and sharing of the work with US partners, will further improve the cost-efficiency of the research.

Compared to ROSITA, ROSITA 2 has a larger budget for testing devices. Project partners wanted to be freer in selecting devices for inclusion in the evaluation to assure independent evaluation and avoid problems with manufacturers that are not happy with the results, as was the case with ROSITA. Using more sophisticated methods for testing saliva specimen in the laboratory will also be more costly, but as this assures more accurate and reliable evaluation, cost-efficiency should still be warranted.

Cost effectiveness in terms of results and impact

According to Mr. Norroy, the projects when compared with other similar projects of its size and complexity, gives very good value for money.

Overall Rating for Efficiency: HIGH

Scope for integration of indicators into the monitoring of current and future interventions

The key indicator that might serve ROSITA would be to what extent drug devices are developed by industry in line with ROSITA's recommendations.⁵⁹

58 The press release can be found at

http://www.draeger.com/ST/internet/CS/en/PressCenter/pressreleases2004/26_2004/26_2004.jsp.

59 Correspondence and Interview with Hans Laurell of the Swedish National Road Authority, 12/07/04 and 16/07/04 respectively.

Suitability of extension / future recurrence of similar activities

Besides completing ROSITA 2 and continuing the evaluation of new devices, a number of extensions to the current ROSITA approach to this project should be considered to ensure that the project remains focused on its primary policy objectives.

- Enforcement actions will only be optimally effective when combined with campaigns to raise awareness about the dangers of DUID. Even without a legal basis for enforcement, awareness campaigns on the basis of ROSITA evidence could deter DUID. Mr. Norroy support the view that enforcement of DUID backed up with information campaigns could yield significant synergies. Prof. Verstraete nevertheless noted that drink driving awareness campaigns, such as EuroBOB, were hesitant to cover DUID as this was considered a different problem.⁶⁰
- Given that even a drug test that is fully acceptable to all stakeholders will take a bit more time to be realised, a focus on training police officers/simple tests to detect DUID may be an important interim step to reducing DUID casualty accidents.⁶¹
- Efforts on labelling and categorising impairing medicines should be pursued on a larger scale and in line with recommendations by ROSITA. In view of an increasing use of anti-depressants and an ageing population with the potential increase use of medication, this step could help both the medical professionals and the users in providing appropriate guidance.⁶²
- Future activities in the context of ROSITA could aim at collecting more disaggregated data on the profile of DUID drivers to permit identification and evaluation of the most effective counter-measures, e.g. targeted awareness campaigns or enhanced drivers' license requirements. For wider dissemination, ROSITA 2 data could be included in the CARE database on traffic accidents.⁶³
- As the new EU Member States have yet been fully engaged in ROSITA/ROSITA 2, an extension of coverage and involved should be considered.

Ways of improving value added from the funding

As already mentioned above, ROSITA and ROSITA 2 were not considered very expensive projects. Hence, the EC did not really consider the question of how to improve the value added from a funding perspective. The importance of this question, as well as of the previous one on suitable extensions to ROSITA/ ROSITA 2, is also diminished by the fact that the EC is planning a € 15 million research project on driving under the influence of drugs (to date unnamed) under the heading '*Research to support the European Transport Policy*' as part of the 2002–2006 work programme.⁶⁴ Suggestions on how to improve value added from the funding may nevertheless be used to guide future activities in this field.

Given the explicitly stated aim of a large distribution of results/obtained data and exploitation and dissemination efforts undertaken by project partners, setting a small part of the budget aside for a more explicit media/communication strategy may increase the project's outreach beyond

60 For an overview of Commission-supported awareness campaigns, refer to

http://europa.eu.int/comm/transport/road/roadsafety/behaviour/campaign/index_en.htm.

61 Even without sufficient legal basis, accurate identification of drugged drivers through improved training of police officers and making drivers aware of the possible dangers may still lead to a reduction of serious road accidents as a consequence of drugged driving.

62 As suggested by the European Road Safety Charter launched on January 29, 2004. See

http://europa.eu.int/comm/transport/roadsafety/charter/news/index_en.htm.

63 The CARE database is available to the public via graphs and tables at

http://europa.eu.int/comm/transport/care/index_en.htm.

64 For more details on the new project, refer to point 1.6.2: 'Sustainable Surface Transport' of the 2002 – 2006 work programme, in particular objective 4 and the research domain 4.2.

researchers and legislators. The suggestions made above, including the sharing of data with established traffic accident databases, co-operation with related projects, and co-ordination efforts with awareness campaigns, should also be seen in this light.

Prof. Verstraete remarked that there had been some budget reallocations for ROSITA and ROSITA 2. However, as he had not yet been provided with precise cost statements, more detailed information is not available. Another point to note is that it took the EC two years to approve the final cost statement for ROSITA so that partners had to pre-finance the project. Timely provision of funds would allow the project to focus on research objectives.

Conclusions

Relevance: HIGH As research projects, ROSITA/ROSITA 2 prepare the ground for major legislative/policy measures to counteract driving under the influence of drugs and medicines. By evaluating existing roadside drug tests, they also provide a major stimulus to industry research and development (of new and improved testing devices) and put DUID into the spotlight. Noting the increasing concern with DUID, ROSITA and ROSITA 2 are firmly embedded in EC Road Safety Policy and will help to understand the problem/prevalence of DUID better.

Effectiveness: HIGH Through quantification and better understanding of the prevalence of DUID and evaluation of the most recent roadside drug tests, the projects help legislators to assess the importance and feasibility of countermeasures, and manufacturers to improve equipment and estimate market demand for such tests. ROSITA has indeed been highly effective in demonstrating the need for reliable drug tests. ROSITA 2 is still in progress, so effectiveness can only be judged upon its completion. With regard to achieving the specific policy goals, the projects can, by their research nature, not be explicitly assessed with regard to their effectiveness. Those involved in the ROSITA project have confirmed its high relevance. The need to bring the project to the stage where its implementation can be achieved is of significant benefit to the member States and to the Commission's explicit Road Safety objective to reduce road traffic accident casualties. This project will provide additional support to the existing drink driving campaign that has already been highly successful in several of the Member states.

Impact: HIGH Besides a high impact on industry research and development, the ROSITA projects are followed by national governments all over the world, recommendations are incorporated into national drug testing requirements, and results are eagerly awaited for the activation of legislative proposals. The Netherlands and Britain provide concrete examples on ROSITA being used in the first steps of policy aimed at combating DUID. Private industry has been involved and has through ROSITA received the basic research on which it can soon expect to build for the regular production and marketing of testing devices. The overall impact could nevertheless be improved by defining (and budgeting) a complementary communication strategy and by making obtained data more widely accessible to inform industry/policymakers/legislators about the prevalence of DUID – on which there is, to date, no widely available data.

Efficiency: HIGH In view of the relatively small size of the projects and a large number of inputs provided for free (e.g. many researchers participated for free in ROSITA), project efficiency is clearly warranted.

Recommendations

Future funding: Continue funding at current levels. Continue the evaluation of devices under the new framework programme until testing devices are satisfactory developed and implemented across Member States, with the expectation being that the project will then be self-financing by the device-producing industry.

Improve value added of the funding: Consider the drawing up of EU-level guidelines for the use of roadside testing equipment on the basis of the ROSITA 2 results. Focus explicitly on the collection of broadly comparable data on the prevalence of DUID driving, the

main type of drugs encountered and responsible for driver impairment leading to casualty accidents, and possible linkages between drug use/abuse and other risky driving practices. Elaborate complementary strategies and activities aimed at reducing the number of fatal road accidents,⁶⁵ with a special emphasis on improved police training to identify and remove DUID drivers from the road.

Consider a more explicit communication/media strategy to promote dissemination of results and raise awareness of DUID among industries and authorities and giving full information on impairing drugs and medicines. This could be accomplished in a very effective and efficient manner by exploring and exploiting synergies with other related (EC) projects.

Promote efforts to classify and appropriately label impairing medicines. EU-wide standards or guidelines should be considered as a possibility to harmonise national approaches and render them more effective.

⁶⁵ See footnote 38.

7.2 EuroNCAP

Note: the evaluation of EuroNCAP consists of a series of contracts .After the initial discussion with EC contact Mr. Maes, the evaluators decided to treat these contracts as one project in the context of the evaluation.

Project title, numbers and type	EuroNCAP 2 (according to our EC contact Mr Maes, the first project relevant for our purposes is contract No. 2 on the list of individual EuroNCAP contracts)		
Type of funding	Subvention	% of financing: 30%	Total budget: € 1 346 969 EC contribution: € 401 127
Overall EC budget €	Contract no.2 (B2-702B-SI2.53983): Phase 7A, Safety rating of super mini cars and city cars	Contract: year	Period: 20.04.99 - 20.04.2000
Budget for fees € (Overall EC budget minus reimbursables and direct costs)	Total staff cost of project indicated as €54,099. (This only indicates cost of the EuroNCAP staff. It does not include certain expenditures of fees for subcontractors, in particular the costs of the personnel employed by the subcontractors to execute the crash tests).	N. person/days	In Progress

Project title, numbers and type	EuroNCAP 3		
Type of funding	Subvention	% of financing: 50%	Total budget: € 105 391 EC contribution: € 52 431
Overall EC budget €	Contract no.3 (B2-702B-SI2.62183): Training for inspectors	Contract: year	Period: 10.05.99 - 10.02.2000
Budget for fees € (Overall EC budget minus reimbursables and direct costs)	Total staff cost of project indicated as 13,230. (Does not include certain expenditures of fees for subcontractors, e.g. interpretation at meetings.)	N. person/days	28

Project title, numbers and type	EuroNCAP 4		
Type of funding	Subvention	% of financing: 42%	Total budget:€ 937 381 EC contribution: € 397 449
Overall EC budget €	Contract no.4 (B99-B2-7020 10-	Contract: year	Period: 01.10.99 -

	SI2.100754/IB399009/SUB NCAP): Phase 7B		01.10.2000
Budget for fees €a (Overall EC budget minus reimbursables and direct costs)	Total staff cost of project indicated as 98,178. (Does not include certain expenditures of fees for subcontractors, e.g. personnel to move cars).	N. person/days	In Progress

Project title, numbers and type	EuroNCAP 5		
Type of funding	Subvention	% of financing: 37%	Total budget: € 1 126 760 EC contribution: € 418 785
Overall EC budget €	Contract no.5 (B2-702B-SI2.230241): Phase 8	Contract: year	Period: 01.05.2000 - 01.10.2001
Budget for fees €a (Overall EC budget minus reimbursables and direct costs)	Total staff cost of project indicated as 90,200. (Does not include certain expenditures of fees for subcontractors, e.g. website maintenance, bookkeeping).	N. person/days	In Progress

Project title, numbers and type	EuroNCAP 6		
Type of funding	Subvention	% of financing: 43%	Period: 06.11.2000 - 06.01.2002
Overall EC budget €	Contract no. 6 (B2-702B-SI2.294279): Phase 9 (Safety rating of family cars)	Contract: year	Total budget: € 1 073 226 EC contribution: € 456 954
Budget for fees €a (Overall EC budget minus reimbursables and direct costs)	Category has remained empty in financial report made available to evaluators.	N. person/days	In Progress

Project title	EuroNCAP 7		
Project title, numbers and type	Subvention	% of financing: 25%	Period: 12.10.2001 - 12.12.2002
Overall EC budget €	Contract no. 7 (TREN/E3/012/SI2.324366) : Phase 10A (Safety rating of Sports utility vehicles, four wheel drive vehicles and some other models)	Contract: year	Total budget:€ 1 923 672 EC contribution:€ 479 355
Budget for fees €a (Overall EC budget minus	Total staff cost of project indicated as 87,250. (Does not include certain	N. person/days	In Progress

reimbursables and direct costs)	expenditures of fees for subcontractors, e.g. interpretation at meetings).		
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Background and genesis
<p>The Road Safety Communication of 1997 announced the EC's intention to support the development of a New Car Assessment programme in order to create a market for safety. It is to do so by making available adequate consumer information about the passive safety of cars, i.e. their safety 'once an accident has happened'.⁶⁶</p> <p>EuroNCAP aims to provide an incentive for manufacturers to improve the safety of cars and make comparative safety information about cars available to consumers. The Commission is actively involved in EuroNCAP's decision-making process, including the technical committee, which shapes the technical content of the programme.</p>

Typology of project
<p>The role of the project in the policymaking process.</p> <p>The case for encouraging a market for safety through increased and transparent consumer information was endorsed in the Commission's Green Paper entitled: 'Towards Fair and Efficient Pricing in Transport'. It stated that:</p> <p><i>"Publicising the relative safety performance of cars through analysis of their performance in road accident crash simulations has proved to be successful in influencing buying decisions and so reducing user's risk. Relative safety evaluation of passenger cars should be encouraged at EU level."</i>⁶⁷</p> <p>The EC White Paper on Transport (2001) stresses the importance, among other measures, of making <i>"life safer for pedestrians and cyclists."</i> In this way, the paper argues that <i>"safety standards could help save up to 2000 lives a year."</i>⁶⁸</p> <p>EuroNCAP is not principally designed to develop policy, as it requires more than what current legislation prescribes. Rather, it is a mechanism to encourage the development of safety mechanisms that are more rigorous than currently</p>

66 Thus, passive safety contrasts with active safety, which refers to accident avoidance.

67 EC, Green Paper: Towards fair and efficient pricing in transport. (2000) p. 26.

68 The European Commission: European Transport Policy: time to decide (2001), p. 72.

69 Interview with Mr. Willy Maes, 03/05/04.

The method adopted	<p>required.⁶⁹ EuroNCAP is a crash test programme. In 1996 the programme began with frontal collision tests, adding in 2000 side-impact pole tests and today also covering 'pedestrian friendliness' tests.⁷⁰</p> <p>During the various tests crash investigation experts assess the risk of injury using a number of sources, including data from dummy's, the examination of high-speed film as well as the crashed vehicle. Following the tests, a vehicle is given a rating of injury risk in relation to different body regions.</p> <p>In recent years EuroNCAP has also compared the cars' performance against vulnerable road users as well as the performance of cars in protecting children when child restraint systems are used.</p> <p>The programme works both as a catalyst for car safety, and responds to technological developments in car safety.⁷¹</p>
Geographical coverage	<p>The EuroNCAP consortium now involves the EC, the UK, German, French, Swedish and Dutch Departments of Transport, the Foundation for the Automobile and Society (FIA) / Alliance Internationale de Tourisme (AIT) and their touring clubs, some motor insurers as well as consumer organisations.⁷² Evidently EuroNCAP extends beyond the borders of these countries in various ways, for example the 'star rating system' is used by companies to market cars beyond the borders of involved countries and equally consumers in other countries are taking the star ratings into account when making decisions.</p>

Specific project objective
<p>DG TREN's involvement in EuroNCAP serves two objectives, shared by the Commission, namely:</p> <ul style="list-style-type: none"> • Greater consumer awareness and understanding based on objective scientifically sound information. • The encouragement of a market in safety with car manufacturers competing to market the enhanced safety performance of their cars in crashes.

Possibilities and limits of evaluating the projects
<p>The safer cars become, the longer it takes to obtain/ gather credible real work data on how these vehicles have performed in crashes.⁷³ (As cars become safer, in the passive sense, the more injuries are reduced, therefore extending the time needed to collect adequate observations for serious statistical analysis). It is important therefore that ex-post/ retroactive studies are commissioned several years after initial testing, in order to align initial results with real-life accident statistics. For this evaluation, few studies of EuroNCAP results on real-world crashes and injuries were available; those available were of limited value due to a lack of adequate data. The main obstacle to better study effects of EuroNCAP are the lack of usable national police statistics as well as individual police accident reports. In order to better test the effect of EuroNCAP, policy accident reports and police statistics would have to specify car models, type of crash, and suffered injuries.</p>

Activities undertaken during the evaluation

70 John Berry / EC (2003): Evaluation of the Previous Achievements Before Launching the 2003 Phase, p. 3.

71 John Berry / EC (2003): Evaluation of the Previous Achievements Before Launching the 2003 Phase, p. 3.

72 European Commission (no date given): Communication from the Commission to the Council, the EP, the Economic and Social Committee and the Committee of the Regions. Note that the government of Catalonia is also represented.

73 The 1st European Transport Safety Lecture. Speech by Neil Kinnock, then European Commissioner for Transport, Brussels, 26th January 1999.

Relevance to the policy	
How is the project evaluated relevant to the Policy goals?	<p>EuroNCAP is relevant to its stated policy goals as it is clearly designed to enhance safety; it has lead to transparent and well-marketed information contributing to consumer awareness; and has established a market in safety, in which industry participates.</p> <p>Furthermore, EuroNCAP has raised the profile of protection of pedestrians in car safety: In 1999 EuroNCAP stated that the frontal structures of modern cars are being strengthened in a way that, in some cases, has negative effects on pedestrian protection.⁷⁴ EuroNCAP is the forum in which the issue of ‘pedestrian friendly’ cars has been raised, and is therefore meeting the White Papers policy objective of reducing pedestrian fatalities.</p> <p>While EuroNCAP has mainly focused on passive safety aspects, it has now taken steps to also move to issues related to active safety, and has recently appointed a project manager to look at these issues.⁷⁵ There now is a technical working group drafting guidelines for active safety assessments on for example braking and lighting.⁷⁶</p>
How could the relevance of the project be improved / have been improved through adjustments at the margins?	<p>Relevance of EuroNCAP is high, however its testing procedures have been limited due to limited funds. This has lead to the omission of statistics on certain accident types.⁷⁷</p> <p>Additionally, EuroNCAP continues to only focus on the dangers of children sitting in the backseat, and is not looking at the effects of a crash on adults, an issue particularly important for elderly persons.</p> <p>Another adjustment at the margins could be the examination of problems related to seat belt loads.</p> <p>Finally, in striving for greater relevance EuroNCAP might strive at a greater balance between being industry-focused on the one hand and on the other hand taking the views and arguments of accident victim support groups into account. During interviews with these groups, two suggestions were put forward: possibly developing a black box that keeps a record of speed, and would thus be the most effective way in deterring speeding.⁷⁸ Another suggestion was to place more emphasis on design of speedometers that enable drivers to more effectively see the different speed limits (i.e. highlight the national or – once they exist – European speed limits).⁷⁹ Unfortunately, both suggestions are likely to face opposition by industry, but should nevertheless be explicitly discussed by EuroNCAP without being led merely by the demands and opinions of industry.</p>
Further project-specific remarks	None
Overall Rating on Relevance: HIGH	

Effectiveness

74 EUroNCAP Press launch, Brussels, 26 January 1999.

75 Correspondences with Mr Maurice Eaton of EuroNCAP, 17/06/04; and Mr Willy Maes of the EC (DG TREN), 14/06/04.

76 Correspondence with Mr Willy Maes of the EC (DG TREN), 14/06/04.

77 Interview with Mr. Adrian Hobbs, Secretary-General of EuroNCAP, 14/05/04.

78 Interview with Ms Z. Stow of RoadPeace, 16/07/04

79 Interview with Ms Z. Stow of RoadPeace, 16/07/04

Has the project evaluated been effective in addressing its specific objectives?

EuroNCAP has so far been considered a particularly effective project, as the following quotes illustrate:

*"EuroNCAP is seen by all Road Safety institutions and interest groups to be the jewel in the crown promoting the application of state-of-the-art vehicle safety."*⁸⁰

*"It is clear on this basis that the EuroNCAP programme which has done so much to reduce the severity of injury in accidents in recent years is still regarded as the most significant Road Safety action to improve Road Safety in the future."*⁸¹

*"EuroNCAP is a success and has been the catalyst for dramatic improvements of crashworthiness performance of modern cars."*⁸²

*"Established in 1997 and now backed by five European Governments, the European Commission and motoring and consumer organisations in every EU country. Euro NCAP has rapidly become a catalyst for encouraging significant safety improvements to new car design. The program has helped to make Europe the leading market for safety."*⁸³

EuroNCAP has become the single most important mechanism for achieving advances in vehicle safety. This will continue as EuroNCAP's testing and assessment protocols are extended to take account of developing vehicle safety technology, as well as technology that encompasses accident avoidance as well as injury reduction systems.⁸⁴ EuroNCAP provides consumers with an independent and harmonised assessment of the safety performance of many popular cars sold in Europe.

When examining independent, outside assessments of EuroNCAP similar positive evaluation results were reported, confirming positive EC-internal assessments.

For instance, one study⁸⁵ found that each star awarded according to the criteria of the EuroNCAP programme can be associated with a reduction of almost 10% in fatal accident risks to occupants. The study showed that cars awarded five stars have a 36% lower intrinsic fatal accident risk than vehicles that are simply designed to meet the legal standard.

A Swedish study⁸⁶ compared real-world crash outcomes with crash test results and found that drivers of vehicles that earned ratings of four stars are about 30% less likely to be severely injured in a crash. To come to this conclusion, the researchers investigated police-reported injuries of 12,214 drivers in Sweden over a period of six years, and compared the results to EuroNCAP ratings. The result was a statistically significant decrease in injury risk for the driver for each additional star.

80 Evaluation of the Previous Achievements before launching the 2003 phase, Action n. 3.

81 European Commission (no date given): Communication from the Commission to the Council, the EP, the Economic and Social Committee and the Committee of the Regions.

82 Ibid.

83 EC (2003): Saving 20 000 Lives on our Roads – A shared responsibility.

84 John Berry / EC (2003): Evaluation of the Previous Achievements Before Launching the 2003 Phase, p. 3.

85 'Quality criteria for the safety assessment of cars based on real-world crashes.' Project SARAC, conducted by Mr Langwieder, Munich.

86 Anders Lie and Claes Tingvall: "How do EuroNCAP results correlate with real-life injury risks?" in: Traffic Injury Prevention 3: 288 – 93.

<p>Have the outputs been effective in addressing the policy goals?</p> <p>How could the effectiveness of the project be improved/ have been improved through adjustments at the margins?</p>	<p>Furthermore, Jeremy Broughton of the Transport Research Laboratory, UK, found that one of the most important aspects in reducing accident injuries is the improvements in vehicle safety.⁸⁷</p> <p>The programme has had an effect on the design of new car models and installation of safety equipment in car models. It has also raised consumer awareness.⁸⁸</p> <p>However, EuroNCAP has been less effective in addressing pedestrian protection. The final report on EuroNCAP Phase 10 showed dramatic differences in the Vehicle rating (average 3.875 out of 5) and Pedestrian rating (average rating 1.14 out of 5).⁸⁹ The same report also indicated that there are still “poor frontal impact results for some recently introduced models.”⁹⁰</p> <p>However, overall the use of stars has allowed EuroNCAP to create conditions whereby the car industry is now using passive safety as a competitive issue. A result of the Action Plan is that more progressive manufacturers in Europe are now keen to extend the EuroNCAP’s testing protocol to include innovative safety systems.</p> <p>The project has been effective in addressing policy goals.</p> <p>More precise empirical studies on the precise nature of injuries incurred in cars of different safety levels would be useful and could then be linked to EuroNCAP crash tests. This could aid in determining precise weak points of specific cars e.g. protection of the head.⁹¹</p> <p>Studying what precisely happens, during a crash, to cars of different safety levels would be useful. (e.g. if one type of car of a certain ‘safety level’ leads repeatedly to head injuries, it would help to know what the type of accident impact on this car is that leads to these frequent head injuries).⁹²</p> <p>Crash test should continue to be improved to better mimic real crashes.</p>
<p>Further project-specific remarks</p>	<p>None</p>
<p align="center">Overall Rating on Effectiveness: VERY HIGH</p>	

87 Broughton, Jeremy (2000): The numerical context for setting national casualty reduction targets. TRL Report 382, Transport Research Laboratory, London.

88 The 1st European Transport Safety Lecture. Speech by Neil Kinnock, then European Commissioner for Transport, Brussels, 26th January 1999.

89 Final Report on EuroNCAP Phase 10, of 10 December 2002. Calculations of averages of ratings were done by the authors of this evaluation on the basis of figures presented in the report.

90 Final Report on EuroNCAP Phase 10, of 10 December 2002.

91 The lack of knowledge about the precise types of injuries is closely linked to the fact that policy reports on accidents tend not to be detailed enough on this front. (In this context it should also be pointed out that all studies so far have been based on national statistics; cross-national studies might yield far more useful results, but are bound to be difficult e.g. due to different reporting formats in police reports in different European countries).

92 Interview with Mr. Adrian Hobbs, Secretary-General of EuroNCAP, 14/05/04.

Sustainability	
<i>Is the initiative sustainable in the longer term?</i>	<p>The project has continued to be successful, despite decreased ratio of EC contributions, mainly due to the wide-use of the star rating system, and the publicity this resulted in, as well as the high relevance to the industry.</p> <p>The programme reaches beyond the borders of participating Member States, this is likely to continue with the result of possibly increasing the possibilities of financial support should current sources of finance discontinue.</p> <p>Moreover, the science of developing crash testing to better simulate real life accidents is developing and the increasing competitiveness within the industry for the EuroNCAP 5 star assessment means that there are significant opportunities for EuroNCAP to lead in this field. This is even more the case when taking into account that with its extension, the project is likely to reach scale economies through a fixed cost for equipment being spread over an increasing number of cars.</p> <p>There is no possibility, with the material made available to the evaluators, to assess whether EuroNCAP has so far proved diminishing marginal returns to investment in safety. At present, such diminishing marginal returns might hamper the future growth of EuroNCAP or even its financial viability, as car manufacturers could lose interest once they have reached a certain level of safety.</p>

Impact	
<i>Impact on policy making</i>	<p>EuroNCAP is not principally designed to develop a policy, since it purposely requires more than what current legislation prescribes.⁹³ “The rationale of EuroNCAP lies in the recognition that progress with vehicle safety legislation can be slow, particularly as all EU Member States views have to be taken into account. In order to speed up the safety improvements, EuroNCAP has developed a combined star rating to indicate the safety level of a vehicle.”⁹⁴</p> <p>Nevertheless, there have been some considerable policy impacts: Firstly, partly as reaction to negative tests in EuroNCAP, a Directive came about at the end of 2003 which will likely lead to better pedestrian protection.⁹⁵ Secondly, there have been requests from Member States represented on the Motor Vehicle Working Group to strengthen EU requirements for construction of new cars, taking into account results obtained in EuroNCAP.⁹⁶</p> <p>EuroNCAP is likely to have further policy impacts as technical car safety improvements are likely to result in increasingly higher passive safety standards. Furthermore, as EuroNCAP results in increased demands for improvements in active and pedestrian safety, legislation for these areas may also be expected to follow. Although impact on policymaking is not high, there is a considerable probability that the policy impact of EuroNCAP will</p>

93 Interview with Mr. Willy Maes, 03/05/04.

94 The 1st European Transport Safety Lecture. Speech by Neil Kinnock, then European Commissioner for Transport, Brussels, 26th January 1999.

95 Directive 2003/102/EC approved by the European Parliament and Council on 17 November 2003, published in the official journal on 6 December 2003.

96 Interview with Mr Maes of DG TREN on 19/07/2003.

	rise towards a high or even a very high level.
Secondary impacts on other policies.	<p>There is considerable evidence that EuroNCAP has led and is leading to a saving of lives on a large scale.⁹⁷ This in turn means that EuroNCAP impacts on savings to the public health system, resulting from fewer injuries.</p> <p>Given that EuroNCAP provides highly transparent, publicly available and easy-to-understand product safety information to consumers, there is a considerable gain from EuroNCAP for consumer protection policy.</p>
Communication and media	<p>EuroNCAP has an extensive communications programme, including media events for every phase of the project.⁹⁸</p> <p>The Commission ‘endorses’ the results and ensures that they are disseminated in the fairest possible way.</p> <p>It has received considerable publicity, particularly given that the programme won the 1998 Road Safety Award from Autocar, the UK’s leading motoring magazine.⁹⁹ It also received the FT Global Automotive Award 1999; the IMI Gold Medal Award 2000; and the Quattroroute Special Award for Safety 2001.¹⁰⁰</p> <p>According to the Federation Internationale de l’Automobile, the program took only two years to become the industry standard for safety.¹⁰¹</p>
Impact on industry	<p>Industry has used EuroNCAP to create much publicity for the safety label.¹⁰²</p> <p>There are other signs that car manufacturers are reacting, for example, Renault re-tested (at their own expense)¹⁰³ their Megane to demonstrate their improved side impact protection, and to signal that the coveted four-star rating may now not be enough.¹⁰⁴</p> <p>Non-European car manufacturers might be catching on more slowly. Apart from Toyota, there has been little if any significant passive safety improvements offered by the popular models from the Far East.¹⁰⁵</p> <p>Impact on industry is arguably greater through much industry involvement / cooperation. However, some of the aspects of this cooperation may appear to be problematic to outsiders, and need to be closely monitored. For example, the Grant Agreement for EuroNCAP Phase 10a states that “manufacturers are allowed ... to agree to the test set-up. All the results and inspection reports are shown to the manufacturer before any results are published.” This is of course agreeable up to a point, but given such features of the project, EuroNCAP needs to guard against any external claims that car manufacturers can, at any point, influence the results of the testing.</p>

97 As mentioned, this is shown in various studies, including Anders Lie and Claes Tingvall: “How do EuroNCAP results correlate with real-life injury risks?” in: Traffic Injury Prevention 3: 288 – 93; or in Broughton, Jeremy (2000): The numerical context for setting national casualty reduction targets. TRL Report 382, Transport Research Laboratory, London.

98 Telephone interview with EC contact Mr. Maes, 30/03/04.

99 www.autocar.co.uk

100 EuroNCAP Phase 10, Final Report.

101 www.fia.com

102 See e.g. http://www.renault.fr/RenaultSITE/news/articles/nw_article.jsp?art=228396 or

<http://www.807.peugeot.fr/html/detail/securite/wineuroncap.asp>

103 Personal interview with Mr. Willy Maes at the EC, 24/03/04

104 EuroNCAP Press launch, Brussels, 26 January 1999.

Overall Rating on Impact: HIGH

Efficiency

Efficiency in the use of resources

While there are no clear inefficient uses of resources, the evaluators believe that so far the capacity (and willingness) of car manufacturers to contribute to the cost of EuroNCAP might be under exploited.

Generally, car manufacturers take great interest in EuroNCAP. They are in direct communication with the programme's coordinators in order to time product launches to ensure that the latest (and safest) model of car is crash-tested.¹⁰⁶ The question of whether car manufacturers should be made to pay a modest fee for the testing is not addressed adequately in the material, as this could lead either to a real or a perceived lack of independence of the EuroNCAP programme. However, a carefully designed modest fee system would put EuroNCAP on a sounder footing without endangering its independence. If all car manufacturers were charged the same fee (at least the same for each type of car), there would, with close monitoring by auditors, be little scope for distortion of results through the payments. While a fee would deter some car manufacturers from participating, consumers can be trusted to understand that those manufacturers who submit their cars for testing are those likely to be most confident about the safety of their cars.

Cost effectiveness in terms of results and impact

The last Road Safety Communication of the European Commission assesses EuroNCAP to be the most cost-effective Road Safety initiative that the EC can invest its Road Safety budget on. This view was endorsed by both the Council and the Parliament in their positive response to the Road Safety Communication, both singling out EuroNCAP for its outstanding success in Road Safety.¹⁰⁷

No cost-benefit analysis has been conducted for EuroNCAP. The benefits have so far been considered so overwhelming that such an analysis was considered to be of secondary priority.¹⁰⁸

The evaluators believe that EuroNCAP is a cost-efficient project in terms of results and impacts. The total cost of the EuroNCAP contracts under evaluation here is 6,513,399 euros. Comparing this to the monetary value of a human life used in this evaluation (1.74 million euros), EuroNCAP would only need to have saved five human lives to be considered efficient. (The total EC contribution is 2,206,101 Euros, thus that EuroNCAP could be considered efficient from the viewpoint of the EC contribution as soon as it has saved two human lives). The studies cited in the effectiveness section of the grid clearly suggest that more than four lives have been saved, which leads us to the conclusion that the project is efficient both at a general level and at the level of the EC contribution.

Overall Rating on Efficiency: HIGH

Scope for integration of indicators into the monitoring of current and future interventions

There are currently no discussions on indicators taking place in the EuroNCAP consortium.¹⁰⁹

¹⁰⁵ EuroNCAP Press launch, Brussels, 26 January 1999.

¹⁰⁶ European Commission (no date given): Communication from the Commission to the Council, the EP, the Economic and Social Committee and the Committee of the Regions.

¹⁰⁷ John Berry / EC (2003): Evaluation of the Previous Achievements Before Launching the 2003 Phase.

¹⁰⁸ Interview with Mr Adrian Hobbs, Secretary-General, EuroNCAP, 14/05/2004.

Further evaluation activities for the programme could include a study into its impact on each class of the car market. For example, are impacts evenly distributed between medium-heavy and lightweight cars? Or are improvements emanating from the star rating system at the high-cost end of the market being replicated at the lower end? This type of study may aid in better identifying any gaps to allow for the programme to be adapted.

Specific research activities should also develop indicators for how responsive industry continues to be, in relation to EuroNCAP's findings, by implementing specific safety improvements shown to be necessary by EuroNCAP.

Suitability of extension / future recurrence of similar activities

There are opportunities for further developments of the EuroNCAP program into other aspects of passive safety, e.g. whiplash protection (through better construction of seats and headrests),¹¹⁰ and the compatibility of vehicles in the event of car-on-car impact.

Additionally there could be an extension into active safety, i.e. accident avoidance. Car manufacturers are already very active in this area. Other areas are:¹¹¹

Examples of active safety advances include:

- Anti-lock braking system (ABS), Electronic Stability Program (ESP).
- Avoidance of collisions between lorries and cars: Community legislation already lays down requirements for the rear end, side guard and front of heavy goods vehicles in order to limit under-run by cars.¹¹²
- Intelligent transport systems, particularly those analysing information from the vehicles environment to evaluate risk of accident. Need for integrated approach to improve effectiveness of these technologies (i.e. the Commission's eSafety-initiative¹¹³).
- It should be borne in mind that a project manager has just been appointed to work on some of these issues.

EuroNCAP could also build on the already introduced 5 star rating, for example, by including for example assessments for pedestrian protection integrated in the overall rating (they are currently rated separately)¹¹⁴, or better child protection through model-specific child restraint system design.¹¹⁵ Some of these measures would also clearly enhance the relevance of the project, because, for example, pedestrian protection is given considerable focus in the White Paper (2001). For all 'extension activities', the key question is whether to have a separate rating or whether to integrate it in the current rating. The latter is presumably the simpler solution but would 'lump together' a set of fairly disparate issues. It would also raise methodological issues of how to weigh different safety aspects in the overall rating.

If some manufacturers score consistently low in the EuroNCAP tests, the threat of withholding vehicle type approval certifications should be implemented on top of the mere threat to manufacturers of bad testing results.

The questions of whether EuroNCAP has so far been reaching or might soon be reaching economies of scale, and whether there are currently signs on decreasing returns to scale to investment in safety, have not been treated extensively in the evaluation, as there was no information available on these aspects.

109 Telephone interview with EC contact Mr Maes, 30/03/04.

110 Speech by the Dutch Minister of Transport, Public Works and Water Management, Mrs T. Netelenbos, Euro-NCAP phase 4 in Delft on 23 September 1998.

111 Interview with Mr. Maes, 24/03/04.

112 This goes back to Council Directive 70/221/EEC of 20 March 1970 on the approximation of the laws of the Member States relating to liquid fuel tanks and rear protective devices for motor vehicles and their trailers.

Ways of improving value added from the funding

This might be obtained through small-scale studies into possible gaps in the testing methodology and the design of a monitoring/ tracking system to assess the responsiveness of EuroNCAP to technological developments (EuroNCAP may be lagging behind industry advances into active safety).

In the long term, one should aim at establishing further statistical proof of the effectiveness of EuroNCAP, ideally taking into account cross-country data. However, the severe methodological difficulties (in particular limited availability of suitable data on police accident records; and at car manufacturer level) that have been discussed in this evaluation have to be borne in mind in this context.

Furthermore, further research should be focused on:

- The effectiveness of EuroNCAP's new areas of work on improving passive safety (such as work on whiplash protection).
- The effectiveness of EuroNCAP's current efforts of moving into active safety.

Ideally, such research would establish a comparison between the value for money achieved within a certain timeframe (and with comparable amounts of funds) in work on improving passive safety versus improvements in passive safety.

Conclusions

Relevance: HIGH EuroNCAP has successfully established a market for safety that is eagerly used by firms to market their cars. It has also resulted in transparent and well-marketed information contributing to consumer awareness. Finally, EuroNCAP is the leading testing mechanism on the 'pedestrian-friendliness' of cars. However, the project is limited to passive safety, and would need to be more inclusive (in particular concerning active safety and different types of impact) to increase relevance. The evaluators do recognise that EuroNCAP has started to actively look into these issues (e.g. by appointing a project manager to look into active safety, or by engaging in frequent discussion on the types of impacts to which the testing is to be extended). Should these gaps be filled, as currently appears likely, the evaluators suggest that the relevance of EuroNCAP is likely to be rated as 'Very High'.

Effectiveness: VERY HIGH Each star awarded according to EuroNCAP criteria can be associated with a reduction of 10% in fatal accident risks to occupants. Drivers of cars with four-star EuroNCAP rating have 30% lower risk of severe injury than drivers of cars with one-star EuroNCAP rating. EuroNCAP's work also receives support from research showing that the greatest improvements in injuries from accidents resulted from improvements in vehicle safety (rather than from, for example, enforcement of speed limits). Effectiveness measurements of EuroNCAP would nevertheless benefit from further statistical research, especially at a cross-country level. There is also a great need to establish why many cars have performed worse in real-world crashes compared to the EuroNCAP crashes.

Impact: HIGH There has been some impact on policymaking so far. It is also likely that technical car safety improvements will likely result in increasingly higher passive safety standards demanded by law. Once this materialises, the policy impact of EuroNCAP will likely move towards 'Very High'. There is also strong evidence for a high impact of EuroNCAP on industry; the establishment of indicators on the spill over from EuroNCAP into industry might help in defining the importance this latter impact more precisely.

Efficiency: HIGH EuroNCAP is highly efficient as the total costs of the projects evaluated is lower than the monetary value of the number of lives saved as a result of EuroNCAP's activities (see main

113 http://europa.eu.int/information_society/programmes/esafety/index_en.htm

114 This has already been started and will result in pedestrian impact legislation in the EU, likely by late 2005 (see 'Automotive Engineer', April 2004).

115 EuroNCAP Press launch, Brussels, 26 January 1999.

efficiency section for full details). However, there is still room for further efficiency improvements. In particular, the evaluators believe that further savings to the firm could be achieved by ensuring further provision of free cars given current high interest from industry in EuroNCAP.

Recommendations

Future funding: Further funding at previous levels. There has been no recent funding for EuroNCAP. However, based on this assessment, the project deserves further funding. Commission participation would mean that more cars and a wider variety of cars can be tested and that the project could move towards extending its activities (other aspects of passive safety such as whiplash protection; a general move into active safety, e.g. anti-lock braking system; extension of the 5-star rating to include e.g. pedestrian protection in the overall rating).

Improve value added of the funding: In particular, design of a monitoring/ tracking system to assess the responsiveness of EuroNCAP to technological developments. Moreover, as EuroNCAP moves into new fields (active safety; pedestrian protection), research on the respective return on investment in work on these different fields might help in difficult funding decisions.

7.3 ETSC

Project title, numbers and type	ETSC #1 Programme of activity to identify and promote effective transport safety measures in the European Union		
Type of funding	Grant	% of financing	50%
Overall EC budget €	Total Budget: € 729.650, EU Contribution: € 364.825	Contract: 24 months	B27020B/E3/06-SI2.321795-2001
Budget for fees € (Overall EC budget minus reimbursables and direct costs)	€ 475,350	N. person/days	1,210

Project title	ETSC #2 Programme of activity to identify and promote effective transport safety measures in the European Union		
Type of funding	Grant	% of financing	50%
Overall EC budget €	Total Budget: € 299.100, EU Contribution: € 149.550	Contract: 24 months	B27020B/E3/10/SI2.322610-2001
Budget for fees € (Overall EC budget minus reimbursables and direct costs)	€ 130,650	N. person/days	390

Background and genesis	
<p>Created in 1993, ETSC is a non-governmental organisation dedicated to the reduction of the number and severity of transport crash injuries in Europe. With the preparation of a series of reviews, briefings and the participation in key European events, ETSC seeks to identify and promote best practices in Transport Safety Policy. Specifically, ETSC provides factual information to be used in the development of effective transport safety policies.</p> <p>Project stakeholders:</p> <p>a) ETSC council members: National Road Safety Boards (e.g. Austrian Road Safety Board); NGOs focusing on accident prevention (e.g. Swiss Council for Accident Prevention); Universities and Research Centres with a Transport / Transport Safety Focus (e.g. Danish Transport Research Institute).</p> <p>b) Parties that receive the reviews and information issued by ETSC: E.g. European Commission, DG TREN; Council of Ministers: Permanent Representatives (transport).</p> <p>c) Attendants to the ETSC's annual Brussels Lecture.</p> <p>d) Participants of the ETSC's annual traffic safety in from Brussels</p>	

Typology of project	
The Role of the project in the policymaking process.	The activity undertaken by the ETSC promotes the exchange of information about policy making in the transport safety area. Understanding the nature of the transport safety problems in Europe would eventually lead into the design and implementation of effective policies in the Member states.

	<p>A key reference point for this is the: 'European Transport Policy for 2010: 'time to decide.'</p> <p><i>"Set a target for the EU of reducing by half the number of people killed on European roads by 2010 (...). Tackle dangerous driving and exchange good practices with a view to encouraging responsible driving through training and education schemes aimed in particular at young drivers."</i>¹¹⁶</p> <p>Moreover, the cooperation and generation of information over issues related to road safety are key factors to achieve the policy goal of halving the number of deaths in road accidents by 2010.¹¹⁷</p>
The methodology adopted	<p>The activity undertaken by the ETSC is realised by the three following means:</p> <ol style="list-style-type: none"><u>1. ETSC's Annual Brussels Lecture</u> An event organised to draw attention to the success of research based Transport Safety Policymaking and to provide the opportunity for professional networking and information exchange.<u>2. ETSC's Annual Traffic Safety Conference in Brussels (Best in Europe).</u> This event highlights best practices and innovation in EU countries that can make a difference in casualty levels.<u>3. ETSC Newsletters</u> ETSC provides factual information contained in newsletters in support of high safety standards in EU harmonisation, the take-up of best practice and transport safety research. <p><u>3.1 ETSC Safety Monitor</u> A bi-monthly newsletter that provides information on major Transport Safety Policy developments in the EU and information on ETSC activities.</p> <p><u>3.2 ETSC Annual CRASH Newsletter</u> CRASH is an Annual technical newsletter on vehicle crash protection that assist researchers who need to keep up to date with scientific developments in their fields. Topics of interest include impact test procedures, secondary safety rating systems, dummy development and modelling techniques.</p> <p><u>3.3 ETSC Update Newsletter Series</u> The ETSC Update Series monitor policy development in the EU and in Member States in key areas of interest providing a source of useful information on the new programmes introduced. It is issued on a quarterly basis.</p>
Geographical coverage	<p>Although ETSC is based in Brussels, the information elaborated by the organisation is based on transport policy development in all the Member States. That information is also available to the authorities of all EU members.</p>
Specific objectives	<p><u>Preparation of a series of reviews and briefings</u>, to give updates and comprehensive account of the knowledge and experience, advantages and disadvantages of how specific transport safety problems may be solved¹¹⁸.</p> <p><u>Participation in key European where transport safety improvements are discussed</u>. ETSC attends and makes contributions and presentation to key</p>

116 The European Commission: European Transport Policy: time to decide (2001), p. 102.

117 The European Commission: European Transport Policy: time to decide (2001), p. 66

118 Detailed Project Description, p.3

conferences and meetings in Europe¹¹⁹.

Respond to transport safety enquires from transport-safety related institutions.

Technical reference section. A technical reference section provides a resource for ETSC's reviews. This section is open for both researchers and policy makers for better decision-making.

Possibilities and limits of evaluating the projects

The evaluation of the project is complex since it has to be addressed in a two step process

- Evaluation of primary objectives: This is a straightforward evaluation of the delivery of the publication and events that ETSC agreed to do.
- Evaluation of secondary objectives: The ultimate effect of this information sharing policy on the overall goal: To increase the transportation safety standards in the EU.

This project presents two major challenges in the evaluation:

- Although the evaluation of the primary objectives is clear, the effects on the overall policy are more difficult to address. None of the activities of the ETSC mentioned can unequivocally be said to have brought about a certain policy impact. Moreover, ETSC works in close association with a number of national Transport Safety Associations or Automobile/ Travel Clubs. Being members, these institutions 'make up' the ETSC, so any policy impact brought about with the help of the ETSC will always, to an unknown degree, have been brought about through the know-how of these various national institutions. In many ways, the ETSC is more a 'catalyst' of the know-how of these institutions.
- The other challenge that this evaluation faces is the fact that ETSC is not a one-off project. It is an on-going organisation that has been developing its diverse activities for several years. This makes for less straightforward evaluative statements than a temporally-limited, thematically clearly focused project.

Activities undertaken during the evaluation

- Background research into the policy context and the project.
- Analysis of background material provided by the EC.
- Correspondences with Mr Jean Paul Repussard of DG TREN (14/5/04) and Mr Jörg Beckmann of the ETSC (18/5/04).
- Information visit to the World Road Association, Paris.
- Discussions with transport safety consultants.
- Correspondence with users, e.g. the German Council on Transport Safety (Deutscher Verkehrssicherheitsrat), Bonn; the Danish Transport Research Institute; Fundación Instituto Tecnológico para la Seguridad del Automóvil; and the Vehicle Safety Research Centre, University of Loughborough, RvTV, Netherlands.

Possible project extension activities not undertaken during the evaluation (e.g. activities that would necessitate a longer time frame)

Since the ETSC relies on the exchange of information as a means to improve road safety, a longer timeframe of impact observation is needed to assess more reliably whether this activity delivered positive impacts upon Transport Safety Policy.

119 Detailed Project Description, p.4

Relevance to the policy	
<i>Is the project evaluated relevant to the Policy goals?</i>	<p>The core of the support to ETSC goes to Objectives 1 and 2. These are clearly well focused in support of a primary policy implementation aim regarding better information on safety well disseminated.</p> <p><u>Objective 1: Preparation of a series of reviews and briefings</u>, to give updates and comprehensive account of the knowledge and experience, advantages and disadvantages of how specific transport safety problems may be solved.¹²⁰ Updates on recent research findings, or experiences in other countries are key for public policy makers aiming to solve transport safety problems.</p> <p><u>Objective 2: Participation in key European where transport safety improvements are discussed</u>. ETSC attends and makes contributions and presentation at key conferences and meetings in Europe¹²¹ Through its unique status as a pan-European organisation ‘bundling’ the knowledge of national private and public transport safety-related institutions, ETSC is a vital participant in transport safety-related conferences and meetings across Europe.</p> <p>Secondary objectives relate to the role of ETSC in handling inquires and as a source of safety information.</p> <p><u>Objective 3: Respond to transport safety enquires from transport-safety related institutions</u>. There are many transport safety-related institutions in Europe to which inquiries about the subject can be addressed.¹²² However, ETSC is the only one with a pan-European perspective, and has hence a unique comparative advantage in providing this specific knowledge.</p> <p><u>Objective 4: Technical reference section</u>. A technical reference section provides a resource for ETSC’s reviews. This section is open for both researchers and policy makers for better decision-making. Again, there are many transport safety-related institutions in Europe with relevant technical reference sections. It is harder to see in this context how ETSC has a comparative advantage through its pan-European perspective; one example is presumably questions relating to comparisons and / or standardisation across European borders.</p>
<i>How could the relevance of the project be improved / have been improved through adjustments at the margins?</i>	<p>At the margins, the overall relevance of ETSC could be improved by scaling up the activities undertaken in support of Objectives 1 and 2, and scaling down the activities undertaken in support of Objectives 3 and 4.</p> <p>The recognised independence of ETSC and its pan-European pedigree underline the potential for making a significant impact through improved dissemination.</p> <p>Concentration on road safety might provide a better focus than attempting to fund safety activities in other sectors e.g. maritime.</p>
<i>Further project-specific remarks</i>	None
Overall Rating on Relevance: HIGH	

120 Detailed Project Description, p.3

121 Detailed Project Description, p.4

Effectiveness	
<i>Has the project evaluated been effective in addressing its specific objectives?</i>	<p>ETSC has been effective in sharing best practices and delivering independent road safety information. The focus of these reports is naturally biased towards road safety: there are seven on road safety, one on air safety, but none on shipping or rail safety. ETSC was set up primarily, in response to concern about road casualties.</p> <p>The outputs involve many of the most prominent/ recognised transport safety experts as well as experts in public policy on transport problems in different EU Member countries (e.g. the ETSC Working Parties are without exception chaired by a recognised European academic specialising on transport safety issues). This ensures that the research provided by ETSC is in line with, firstly, cutting-edge research on transport safety in Europe; secondly, relates to the most prominent public policy problems of a given time in the Member countries.</p> <p>The conferences and lectures carried out received positive feedback from the stakeholders interviewed.¹²³ Moreover, the information is freely available on the ETSC website and is, after the sighting of a number of documents, of considerable analytical quality.</p> <p>A limitation is that few of the documents are translated which hampers the effectiveness of dissemination.</p>
<i>Have the outputs been effective in addressing the Policy goals?</i>	<p>As the specific objectives of ETSC are relevant to the policy objectives and ETSC has been effective at addressing its specific objectives, its outputs are judged to have been effective in addressing the policy goals.</p> <p>Moreover, all the stakeholders involved in this evaluation remarked on the fact that the publications and events developed by ETSC are considered as reference in the field of road safety. For instance, the UK Parliamentary Advisory Council for Transport Safety holds that the information and recommendations provided by ETSC were a milestone in the development of road safety policies in Member States.¹²⁴</p> <p>Moreover, there are various examples to show that the ETSC reports serve as a reference tool to evaluate the effectiveness of the policies implemented in several member states and the feasibility of their implementation at the local level.¹²⁵</p>

122 E.g. Allgemeiner Deutscher AUtomobil-Club (ADAC), www.adac.de; Birmingham Automotive Safety Centre, University of Birmingham, barc.bham.ac.uk; Comisariado Europeo del Automovil, www.cea-online.es; Deutscher Verkehrssicherheitsrat, www.dvr.de; Dutch Transport Safety Board, www.rvtv.nl; European Federation of Road Accident Victims, www.rvtv.nl; Fédération Internationale Motocycliste, www.fim.ch; Fundación Instituto Tecnológico para la Seguridad del Automóvil, www.fundacionfitsa.org; National Society for Road Safety, www.ntf.se; Nordic Traffic Safety Council, www.rfsf.dk; Parliamentary Advisory Council for Transport Safety, www.pacts.org.uk; Swiss Council for Accident Prevention, www.bfu.ch; Vehicle Safety Research Centre, University of Loughborough, www.vsrc.org.uk; and the Verkehrsclub Deutschland, www.vcd.de.

123 www.etsc.be contains a detailed list of all the deliverables produced by ETSC. The website contains all the publications that were aimed to be produced in the original project description.

124 The Parliamentary Advisory Council for Transport Safety (PACTS), UK. Draft Directive 6065/2000

125 The Parliamentary Advisory Council for Transport Safety (PACTS), UK. Executive Summary about the effectiveness of Airbags. Improving the standards of Airbags: The need for further research. PACTS research briefing (RB3/00) November 2000.

126 E.g. the Dutch Transport Safety Board, www.rvtv.nl; Swiss Council for Accident Prevention, www.bfu.ch; or the Austrian Road Safety Board, www.kfv.or.at.

<p>How could the effectiveness of the project be improved / have been improved through adjustments at the margins?</p> <p>Further project-specific remarks</p>	<p>Additionally, ETSC is key in generating reliable and updated road safety information. It also succeeds in communicating best practices identified in the different member states. This can be illustrated by the fact that every major road safety organisation in the EU is provided with information from the ETSC.¹²⁶</p> <p>At the margins, effectiveness could have been improved through:</p> <ul style="list-style-type: none"> • Focusing on dissemination of EU wide safety issues and research through conference, newsletters and papers rather than on inquires and resource centre activities. • Improved linkages between ETSC web site and safety related website in other Member States. • A focus on a limited number of sectors, possibly only road transport. • Translation of more documents. <p>None</p>
<p>Overall Rating on Effectiveness: HIGH</p>	

<p>Sustainability</p>	
<p>Aspects likely to continue / not continue after end of EC involvement</p> <p>Factors influencing sustainability</p>	<p>The basic resources of funding for ETSC is mainly provided (50%) by the EU grant. Without these resources the day to day activities of the organisation could not be undertaken¹²⁷.</p> <p>Other sources of funding include various private sectors firms (including BP, KeyMed, Ford, Toyota, Shell and Volvo), however the future availability of these funds is not clear¹²⁸. These private funds tend to be for specific projects only. There is also the risk that greater reliance on such funding will lead to the tilting of the work of the ETSC towards those aspects of transport safety where the private sectors has a particular interest. This would be to the detriment of such aspects of ETSC with lower and less immediate payoffs for the private sector.</p>
<p>Financing alternatives</p>	<p>ETSC Members and other national-level transport safety institutions provide an alternative source of (increased) funding. Private foundations with an interest in transport safety are a further alternative, however one should note that any involvement of such organisation will, similar to the situation with the private firms mentioned above, interfere with ETSC's reputation for impartiality.</p>

<p>Impact</p>	
<p>Impact on policy making</p>	<p>There is considerable evidence that ETSC has been influential in the development of policy and action across Europe particularly in the field of road safety. They have established a reputation for independent, high level advice with the aura of academic objectivity. Examples include:</p> <ul style="list-style-type: none"> • Conclusions made by ETSC were used on the overall draft of the EU Road Safety Policy found in the White Paper.¹²⁹ • ETSC recommendations were used to assess the feasibility of certain policies in Member States.¹³⁰

127 Correspondence with Mr Jean Paul Repussard

128 <http://www.etsc.be/mem.htm>

129 The European Commission: European Transport Policy: time to decide (2001), p. 68

	<ul style="list-style-type: none"> • There is a formal commitment to ETSC with the Commission Road Safety Charter. ETSC was one of the first signatories to the EU Road Safety Charter. In signing the Charter, ETSC has committed itself to broadening and deepening the charter beyond road transport.¹³¹ ETSC is committed to launch 'The European Transport Safety Platform (ETSP)' that will identify examples of best safety practice from one or more modes. Additionally, it will provide experts, practitioners and decision makers with a forum to explore possible 'lessons-learned' from their own experiences. • It has become evident that recommendations provided by ETSC could and have lead to the implementation of new policy. A clear example of this is 'The Third Road Action Safety Programme'. • The Commission stated that "a great proportion of Commission Road Safety Policy has been inspired by the ETSC reports".¹³² In particular the Pedestrian Protection Directive.¹³³ <p>Moreover, the EC white paper emphasises the importance of ETSC as an independent organisation that "would improve the existing legislation".¹³⁴</p>
<p>Secondary impacts on other policies</p>	<p>No perceived impact on other policies outside road safety. As the work supported in the project was exclusively focused on dissemination of road safety issues it is not unexpected that no wider impacts were noted.</p>
<p>Communication and media</p>	<p>ETSC developed some important aspects to achieve media coverage. For 2001 and 2002 11 press releases were released, in 2003 there were 14. Specifically, they issue press releases for every major activity they undertake.¹³⁵</p> <p>When the media covers policy making in the road safety sector, ETSC is usually covered as well.</p> <p>While ETSC recognise that they have good coverage in the sector of road safety, there is always the feeling that more media coverage is deserved.¹³⁶</p>
<p>Impact on industry</p>	<p>The fact that several prominent private firms are funding ETSC¹³⁷ allows for the conclusion that the industry is, to some extent, interested in the activity and development of the organisation.¹³⁸ Industry associations such as the European Automobile Manufacturers Association (ACEA, www.acea.be) are also involved in ETSC activities. As improvements in vehicle safety are an essential element in overall safety (e.g. development of pedestrian protection in vehicle design¹³⁹) the higher profile given to the work of ETSC through the EC funding has enhanced the standing of its work and therefore influence on the industry partners.</p>
<p>Overall Rating on Impact: HIGH</p>	

130 The Parliamentary Advisory Council for Transport Safety (PACTS), UK. Executive Summary about the effectiveness of Airbags Research briefing (RB3/00) November 2000.

131 TETSC News Release Broadening and Deepening the Road Safety Charter, ETSC commitment strengthens Commission Road Safety Charter 6th April 2004

132 Correspondence with Mr Jean Paul Repussard

133 Directive70/156/EEC(COM(2003)67 final,19.2.2003)

134 The European Commission: European Transport Policy: time to decide (2001), p. 68

135 In <http://www.etsc.be/pre.htm> we could find more than 30 press releases starting from 1999.

136 Correspondence with Dr Jörg Beckmann and Mr Jean Paul Repussard

137 Especially from the automotive sector (Volvo, Ford, Toyota) and from the energy / fuel sector (BP, Shell).

138 <http://www.etsc.be/mem.htm>

139 PACTS, conversation

Efficiency	
Efficiency in the use of resources	<p>With an average annual budget of about 150,000 Euros, ETSC is able to fulfil its mandate with only five members of staff. The EC contribution of 50% is evidence of a substantial interest from other funding bodies to this work. Costs per person day range from Euro335 in the first phase to Euro390 per day in the second. This is well within the norms for such work¹⁴⁰.</p> <p>ETSC manages to maintain 17 Working Parties; in each of these, there is much reliance on outside recognised experts, many of who are unpaid (or at least not paid out of the ETSC budget) for their contributions to ETSC. This is evidence of good leverage of EC and other direct contributions.</p> <p>The budget has also supported numerous publications in recent years which on sample inspection appear to be of high analytical quality (this holds both for the four extensive reports produced in 2003 and for the quarterly newsletter). While this is in fulfilment of the objectives, we suggest that consideration of whether an alternative means of delivery of the same information could achieve the objective more efficiently.</p>
Cost effectiveness in terms of results and impact	<p>There is no clear relationship between the ultimate results of the policies implemented and the resources absorbed by ETSC. Being able to trace the fact that a conference was held through ETSC and that this led to a reduction in accidents might be difficult to establish. There is a need to obtain user feedback on where information was obtained and the value that was placed on it in decision making.</p> <p>There are comparable organisations including the World Road Association (www.piarc.org) and the European Conference of Ministers of Transport, which do much work on topics similar to those of ETSC. PIARC has a much broader and more diverse membership and relies on a good deal of free service from members/experts. The European Conference of Ministers of Transport has the broader institutional support from the OECD and substantive / analytical support from other relevant OECD Directorates. There might be benefit in examining the overall cost effectiveness of using alternative channels for the delivery of this information as part of a wider evaluation of dissemination mechanisms.</p>
Overall Rating on Efficiency: HIGH	

Scope for integration of indicators into the monitoring of current and future interventions
<p>Indicators for ETSC relate either to its outputs (conferences, papers, attendees, feedback quality assessments, website hits) or to its outcomes (reference/citation in development of policy). It is possible to develop these indicators into a formal monitoring framework focused as far as possible on outcomes rather than outputs. The outcomes focus on the quality and use of the information. This is most likely to be affected through user surveys or citations in the build up of policy which can be directly attributable to information made available through ETSC.</p>

¹⁴⁰ The fees observed in other DGs of the European Commission during the same period are in the following ranges:
 Senior experts – from 550 to 750 €
 Experts – from 400 to 500 €
 Junior experts – from 300 to 450 €

Suitability of extension / future recurrence of similar activities

The success of ETSC as an independent collaborative body in providing high quality, high profile advice and information in the critical area of road safety suggests that this might be a model for further interventions. Targeted support for specific research or dissemination could be considered. The extension of the work of ETSC to the new Member States might also be a possibility.

Ways of improving value added from the funding

The key to improving the value added from the current funding is most likely through improved support for dissemination of results. This might include improvements to the website and linkages to other national or international research sources, support for publicity of results and support for limited translation of key documents and executive summaries especially targeted to high accident countries.

Conclusions

Relevance: HIGH The ETSC is highly relevant in its direct support of EU policies on the improvement of transport safety particularly road safety. Its role is primarily in the understanding causes and dissemination of best practice methods of accident reduction.

Effectiveness: HIGH ETSC is well known and its outputs are well regarded by the safety community. At the margins there might be scope for further dissemination and wider translation of its key findings.

Impact: HIGH ETSC work is cited in the development of crucial legislation (seat belts) and standards (vehicle design for reducing pedestrian damage in accidents).

Efficiency: HIGH With a small central agency and high input from a wide cross section of acknowledged industry leaders it is able to provide authoritative contributions from a low cost base.

Recommendations

Future funding: Further funding is recommended. This should follow a review of the ways in which ETSC can best deliver its safety message. This might require EC funding for particular dissemination activities or a commitment to support particular investigations. EC funding should focus on road safety. A particular project could be the support of the extension of ETSC into the new Member States.

Continued evidence of matching funding from other sources should be provided. However, in doing so one has to take particular care not to introduce private interests to the governance of ETSC, as it is important for ETSC to maintain a reputation of impartiality for long-term credibility.

Improve value added of the funding: Additional small scale support for publicity, website development and maintenance and translation of key documents could enhance the effectiveness of ETSC's work and give overall improved value for money.

7.4 CESARE

Project title, numbers and type	Common EFC System for an ASECAP Road Tolling European System CESARE I and II. Financial Grant no. B98 B5-700		
Type of funding¹¹	Study	% of financing	Not exceeding 50%
Overall EC budget €	CESARE I Total budget: .3 Million ECU/Euro Contribution: 0.4 Million ECU/Euro CESARE II Total budget: 1.35 Million Euro Contribution: 0.6 Million Euro	Contract: year	1998 - 1999 2000 - 2002
Budget for fees € (Overall EC budget minus reimbursables and direct costs)	CESARE I €955,938	N. person/days	CESARE I 2075

Background and genesis

The CESARE project deals with the design, development, and implementation of a common interoperable Electronic Fee Collection System (EFC) on European toll roads.

As a background to the project, the ASECAP¹⁴¹ Steering Committee decided in 1997 to study the feasibility of a common EFC system for its members¹⁴² to give vehicle drivers the opportunity of interoperable EFC systems on the Trans European Road network (TERN).¹⁴³ This system must allow existing electronic toll systems to be preserved for national or local application and be compatible with them under acceptable economic conditions. It should also be readily extendable to other, non-ASECAP countries.

Interoperability of EFCs involves three main aspects:

- **Technical Interoperability:** standardisation of the technical characteristics of both roadside and on-board equipment.
- **Operational Interoperability:** standardisation of all procedures involved in toll payments through an electronic means - from the distribution to the use of the on-board terminal and the charging of the user to the crediting of transport service operators.
- **Contractual Interoperability:** establishment of a contractual instrument binding signatory parties to provide a standardised service.¹⁴⁴

141 Association Européenne des Concessionnaires d'Autoroutes et d'Ouvrages à Péage, www.asecap.com.

142 Members include Austria, Belgium, Croatia, Denmark, France, Greece, Hungary, Italy, Norway, Portugal, Serbia, Slovenia, Spain, and Ukraine.

143 Before the launching of the CESARE suite of projects the ASECAP members have contributed to the definition of a European Common Electronic Fee Collection (EFC) system providing their expertise in a number of studied financed by EC, TARDIS, VITA 1, CASH, and MOVE-IT.

144 "The Business Integration Model is used to gain an integrated view of business and form a single coherent vision. It highlights the dependencies between the elements which must integrate to operate a business and is the structural model for planning, analyzing, improving, designing and engineering a business with the goal of delivering predictable quality outputs." See www.asecap.com.

The CESARE project takes place inside a group of projects managed by a Regulatory Committee of the Member States created by Directive 53/2004. This Committee is named "Comité Télépéage". The aim of the Committee is to work through an association of the EC, Member States and private sector stakeholders to deliver the objectives for interoperability of the Commission.

Project stakeholders include:

- ASECAP and non-ASECAP Transport Service Providers (TSP)

ASECAP:

- AISCAT Italy, AIKA Hungary, ASETA Spain, ASFA France,
- ASFINAG Austria, BRISA Portugal, DARS Slovenia,
- NORVEGFINANS Norway, TEO Greece.

Non-ASECAP:

- TRL, Finland (Country Representative), The Netherlands
- (Country Representative), Sweden (Country Representative),
- The United Kingdom(Country Representative)
- Manufacturers active in the market of EFC Systems
- (roadside equipment, monolithic on-board equipment and Smart
- Card based on-board equipment):
- Combitech Traffic systems AB Sweden, CS Communication &
- Systems France, GEA France, Thales and Transactions France, Kapisch AG Austria, and Q-Free ASA Norway.
- Ian Catling Consultancy, UK
- ITS, University of Leeds, UK
- FTA, UK
- Intelligent Transport Systems Forum, UK
- Strabag
- Department for Transport, UK

Typology of project

The Role of the project in the policymaking process.

A common interoperable EFC system on European toll motorways as envisaged by CESARE will allow European users to travel throughout the TREN and pay for tolls through a unique interface by simply entering into a contractual agreement with one of the possible providers.

The role of this project in the policymaking process has to be assessed from two different points of view:

- From the Commission side, interoperability is an important pre-requisite for putting important transport policies into practice, especially those dealing with pricing and environmental protection. In the 2001 White Paper 'European Transport Policy for 2010: time to decide' interoperable intelligent transport services and systems are considered a key tool to reducing congestion via congestion charges and environmental and safety improvements.¹⁴⁵
- From the perspective of ASECAP members, CESARE is not merely a study, but a market project in which more than 20 different businesses have to find a compromise on what requirements they are ready to accept for EFCs. The first priority for Toll Road Operators, however, is to make money, and interoperability is a cost. From this second point of view the

¹⁴⁵ White Paper on the European Policy for Transports, September 2001, page 73.

	<p>project can be seen as an opportunity to "bring reality into the game", but this has to be done bearing in mind "how far the real market is ready to compromise."¹⁴⁶</p>
<p>The methodology adopted</p>	<p>CESARE is implemented in four phases:</p> <ul style="list-style-type: none"> • Phase I: Service definition, technical and operational Interoperability. This phase was closed by the end of 1999. • Phase II: Contractual interoperability and feasibility validation. The second phase was completed in 2002. The main output of CESARE II has been the text of the Memorandum of Understanding (MoU), defining the behaviour to be respected by all actors involved (operators, payment mean issuers, and users). • Phase III: Tenders and system implementation. The third phase is expected to begin before the end of 2004. • Phase IV: Service rollout of EFC. <p>Based on a "Business Integration Model",¹⁴⁷ which highlights the dependencies between all the elements that must be integrated to operate a business, the CESARE project develops an integrated architecture for all strategic elements, importantly the Memorandum of Understanding (MoU) and organisational, operational, technical requirements, and EFC service delivery support.¹⁴⁸ For the implementation of CESARE, a three-step methodology is proposed that seeks to establish:</p> <ol style="list-style-type: none"> 1) Requirements Agreement - defining the requirements that will drive the architecture definition by detailing the service capabilities and the way they can be implemented for each architecture element (organisation, processes, and equipment). The set of capabilities considered will define the scope of the services architecture. 2) Architecture Definition - for the conceptual design of each of the model elements or groups of elements (organisational, operational, technical). 3) Detailed Design - where all models elements are specified to allow for the construction of a system and test specifications for the whole system are detailed.
<p>Geographical coverage</p>	<p>ASECAP countries: Austria, France, Italy, Norway, Portugal, Slovenia, Greece, and Spain.</p>

Specific project objectives	
	<p>"The main purpose of the CESARE common EFC System is allowing users to pay for transport services offered by toll road operators and, in case of further extensions, by new European operators in a dynamic way. The payment will be made by means of a single on-board equipment (OBE) linked to a unique contract."¹⁴⁹ CESARE thus deals with all aspects of developing and implementing a Europe-wide EFC system.</p> <p>Given this complexity, each project phase has its own specific objective. Most relevant to this evaluation, the second phase aimed at producing the draft text of the MoU, which defines the behaviour to be respected by all actors involved. On the basis of the finalised and signed MoU, operators are expected to set up the common circuit by adopting the CESARE specification for their own network. Other operators can join the circuit as soon as they are willing and able to commit to the commonly defined rules.</p> <p>In the broader context of transport policy, a common interoperable EFC also supports the policy</p>

146 Phone interview with Mr. Kallistratos Dionelis (ASECAP).

147 CESARE Project Technical Annex, Detailed Work plan, page 11.

148 The starting point for the architecture definition is the one defined in the Operating Vision of the MOVE-IT project.

149 CESARE II D013 Project synthesis page 4.

objectives of making sure that road transport decisions include the economic and ecological costs.

Possibilities and limits of evaluating the projects

The evaluation is based on the two preliminary phases of the project that have been completed. Project effectiveness, impact and efficiency conclusions are thus based on the current status of the overall project. To this extent, there is the potential to consider whether the results to date merit the conclusion of the project rather than the focus on the evaluation of the incomplete CESARE project.

The evaluation of the CESARE project would benefit from an analysis of the work undertaken by related initiatives and other euroconsortia working in the same field to consider overlaps, gaps and potential for synergies. While this is outside the scope of this evaluation, it is understood that this is the principal work of the Comité Télépage.

Activities undertaken during the evaluation

- Background research on ECF and interoperability inside and outside the EU.
- Analysis of material provided by the EC: Reports; CESARE I and CESARE II.
- Telephone Interview with EC Task Manager Mr. Hamet and Mr. Kalistratos Dionelis, Secretary General ASECAP.
- Further contacts with the Spanish Toll Road and Tunnel Association; Sund & Bælt (a Danish Company operating and maintaining the Great Belt Bridge, maintaining the Øresund motorway and collecting payment from users of the Great Belt Bridge); the 'World Highways' organisation; the International Bridge, Tunnel and Turnpike Association.
- Telephone contact with Ian Catling, Ian Catling Consultancy, UK. (No comment made)
- Telephone interview with Andrew Pickford, ITS, University of Leeds, UK
- Telephone interview with Donald Armour, Manager of Telematics, FTA, UK
- Telephone interview with Brian Grimwood, FTA, Intelligent Transport Systems Forum, UK
- Email exchange with Dr Herwig Schwarz, Strabag (No comment made)
- Telephone contact with Eric Sampson, Department for Transport, UK (Referred to their agent - Walnut Consulting)
- Telephone contact with Ken Perrett, Walnut Consulting (Agent of DfT, UK – No comment made)
- Questionnaire response from Maurizio Rotundo, Aiscat.

Relevance to the policy

Is the project evaluated relevant to the policy goals?

The Council Resolution of 17 June 1997 on the development of telematics in road transport (with a special emphasis on EFC)¹⁵⁰ calls on the EC and Member States:

- *"To develop a strategy for the convergence of EFC systems in order to achieve an appropriate level of interoperability at a European level, taking into account systems already existing and the work in the European standardisation bodies."*
- *"To propose and participate in projects to validate and/or implement road transport telematics solutions to transport problems,...and to encourage, by way of these projects, active participation of the private sector in the deployment of road transport telematics."*
- *"To put forward a code of practice on the human machine interface, covering in particular in-vehicle information devices" in consultation with Member States and industry.*
- To take action to promote the acceleration of the standardisation process in electronic fee collection.

¹⁵⁰ OJ C 194, 25/06/1997.

The 2001 White Paper (WP) on European Transport Policy further stresses the importance of developing EFC systems at European level and the need for a strategy to achieve appropriate levels of interoperability of existing systems.¹⁵¹ More specifically, the White Paper links the introduction of EFC to several specific policy objectives, including safety improvement, the harmonisation of penalties, monitoring of road haulage, and the charging for external costs of road traffic.

CESARE responds to these calls and concerns as follows:

- Road charging objectives / economic objectives: EFC serves to meet the requirement of new road charging policies planned at Community and Member State level.¹⁵² In particular, the need for an interoperable EFC has become more important as studies on road transport externalities and on fair competition between modes¹⁵³ have called for new pricing policies in the road sector.¹⁵⁴
- Environmental objectives: EFC, by reducing congestion in toll plazas, reduces the negative environmental impact of waiting and restarting vehicles.

It is not obvious why this project is funded under the safety budget line as it has little or nothing directly relevant to safety. It is possible to consider that EFC could contribute to reducing the risk of accidents, particularly if combined with other on-board components, such as emergency call capabilities; however, this is not currently a consideration for the project team.

How could the relevance of the project be improved / have been improved through adjustments at the margins?

Given the tangential relevance of the project to fulfilling Road Safety Policy objectives it is difficult to consider marginal changes that would have rendered it more relevant. For these reasons two ratings have been provided, relating both to safety and mobility/interoperability.

In the context of the project as undertaken, the relevance of CESARE, could have been improved. Increased participation in the project, especially with a view to extending EFC to non-ASECAP countries; cross consultation with other EC funded developments in telematics; input from emerging technologies specialists to ensure relevance -new opportunities opened up by satellite radio-navigation and the Galileo programme, 155 although the Comité Télépéage takes up this role overall.

ASECAP and the EC had asked non-ASECAP countries to participate in CESARE II, but, with the exception of TRL in UK, they declined. The main aim of CESARE III will now be to adapt the results of CESARE II to the requirements of the most advanced non-ASECAP countries, DE and UK.

151 A number of earlier directives and Council resolutions also address, e.g. Directives 93/89 and 10/97. Also see Article 129 of the European Union Treaty.

152 High Level Group on Transport Infrastructure Charging, White Paper on the European Policy for Transport, September 2001.

153 European Commission, Towards Fair and Efficient pricing in Transport - Policy options for internalising the external costs of transport in the European Union, Green paper CON (95) 691.

154 See, for example, High Level Group on Transport Infrastructure Charging, Final Report on Estimating Transport Costs, September 1999; High Level Group on Transport Infrastructure Charging, Final Report on Options for Charging Users Directly for Transport Infrastructure Operating Costs, September 1999; High Level Group on Transport Infrastructure Charging (Working Group 1) Calculating Transport Infrastructure Costs, April 1999.

155 Systems to locate, identify and monitor vehicles and their loads will become increasingly reliable through the use of information and telecommunication technologies, especially satellite navigation systems (Galileo). Tariff schedules can then be more targeted and be drawn up according to infrastructure category (national, international) and use (distance travelled, length of time used). White Paper on the European Policy for Transport, September 2001, page 72.

Further project-specific remarks	None
Overall Rating on Relevance: LOW (safety) HIGH (mobility, interoperability).	

Effectiveness	
Has the project evaluated been effective in addressing its specific objectives?	<p>All the expected deliverables were produced by the contractor for both CESARE I and CESARE II.</p> <p>The general effectiveness of the project was assessed positively by the internal services of the European Commission "<i>Excellent technical work has been undertaken within CESARE and this will be of lasting value.</i>"¹⁵⁶</p> <p>The programme has created the PISTA application platform that has been adopted within many of the participating countries¹⁵⁷, including Spain, Portugal and France. Part of the application description has also been adopted in the Swedish interoperability document 'Basic Requirements for Interoperable EFC DSRC Systems in Sweden – PISTA and CARDME Specification' and in the UK as part of OMISS vol 3. Other countries are also studying the relevance of PISTA to their EFC operations.</p> <p>However, as to the phase-specific objectives, while the text of the MoU has been drafted, it has to date neither been implemented, nor finalised and signed. According to the project documentation, the finalisation of the MoU is still outstanding because "<i>it does not make sense to define specific issues, such as the technology upon which to base the data exchange among operators, when they are strongly affected by the market development and they may change until the MoU is implemented.</i>"¹⁵⁸ Finalisation thus depends on the decision of some operators to set up the first module of an interoperable EFC system.</p> <p>CESARE I and II have been useful in focusing the minds of Member States on the need for a common approach to electronic fee collection, which would otherwise pursue their own more narrow objectives¹⁵⁹.</p>
Have the outputs been effective in addressing the policy goals?	<p>The outputs from CESARE II have been used effectively to advance the overall progress of the programme and the standard definition. As such this must be counted a success.</p> <p>A pilot trial of the CESARE MoU has been completed within the PISTA (Pilot on Interoperable Systems on Tolling Application) project co-funded by the EC's Fifth Framework Programme.¹⁶⁰ One of the tasks of PISTA consisted of studying and revising the CESARE II common service definition. The PISTA results from testing the interoperability of four Spanish operators and one French motorway can be indicative of the project's output effectiveness and will, more generally provide an important input to finalising the CESARE system with the aim of launching an EFC service.</p>
How could the effectiveness of	<p>The effectiveness of the project at the margins could have been improved through more interaction and co-operation with other projects dealing with</p>

¹⁵⁶ EU DGVII, CESARE 1 Final Assessment Form.

¹⁵⁷ Andrew Pickford, Transport Technology Consultants, UK

¹⁵⁸ CESARE II D013.1 Project Synthesis page 39.

¹⁵⁹ Donald Armour, FTA

¹⁶⁰ www.pistaproject.com.

<i>the project be improved / have been improved through adjustments at the margins?</i>	<p>different aspects of road charging, interoperability of electronic road charging systems and other technologies for locate, identify and monitor road vehicles.</p> <p>Also, <i>"in order to increase the effectiveness of the project it is important to have more actors in the play. If we want an interoperable network we cannot have a hole just in the middle of Europe. Germany should enter into the play and the Commission should work into this direction."</i>¹⁶¹ The evaluators believe that in the short term it will prove difficult to bring Germany on board, given the great difficulties that the German national toll operating system is currently experiencing. However Germany has written to the Commission to express its commitment to participate in CESARE III. The same applies for all non ASECAP countries approached.</p>
<i>Further project-specific remarks</i>	<p>Although ASECAP was involved in all aspects of the project, and the ASECAP Board approved all reports, there is no indication of the commitment of ASECAP to the outcome of the project. As a result the MOU is not complete.</p> <p>However, the Comité Télépéage is the forum used to discuss and adopt the results of CESARE II and III so that they can enter into force as a Commission decision.</p>

Overall Rating on Effectiveness: MEDIUM

Sustainability	
<i>Aspects likely to continue / not continue after end of EC involvement</i>	<p>The EC contributes about 40% of the CESARE budget. The balance is contributions from the private sector participants, the toll operators association. In the absence of EC funding it is likely that the investigation of common standards would continue but probably at a lower level than currently and certainly without the discipline of a fixed and relatively firm delivery schedule.</p>
<i>Factors influencing sustainability</i>	<p>The existence of international funding also ensures a common external motivation and highlights the rationale for co-operation. Without such a motivation it is more likely that individual Member States or individual operators would pursue their own system. Also, the EC would not be in a position to be an informed client in this field to the detriment of a common interoperable transport market.</p>
<i>Financing alternatives</i>	<p>Without such a motivation it is more likely that individual Member States or individual operators would pursue their own system. Also, the EC would not be in a position to be an informed client in this field to the detriment of a common interoperable transport market.</p>

Impact	
<i>Impact on policy making</i>	<p>The CESARE project was set up to test the practicality of introducing a common EFC system as a response to an expressed policy aim. The first two phases of the project have established the feasibility of such an approach although there are still many technical, legal and fiscal (VAT) issues outstanding.</p> <p>CESARE has stimulated cooperation between highway operators, to enable pan-European interoperability. The participation of highway operators is, and will remain, critical to ensure the appropriate contractual procedures and</p>

¹⁶¹ Phone interview with Mr Kallistratos Dionelis.

<p>Secondary impacts on other policies</p>	<p>specification are developed¹⁶².</p> <p>As a result the pursuit of the policy aim appears to be feasible. Further support for Phase 3 of the project supports this result. More generally, as the project has demonstrated, if the EC can support private sector operators and manufacturers in agreeing to a common output specification then a significant policy aspiration in the Euro-market can be seen to be deliverable.</p> <p>CESARE strength comes from its increasing focus on contractual and procedural issues, previously neglected in favour of a purely technological approach¹⁶³. However though toll operators are committed to the initiative the same level of commitment needs to be shown by the Member States.</p> <p>Although the main objective is interoperability of road tolling systems, secondary impacts in future might be significant.</p> <p>Through interoperability, it would be possible to introduce new pricing criteria for the use of tolled roads. The most important ones include the imposition of charges to internalise transport environmental costs, pricing to reduce congestion and optimise the use of the infrastructure, and pricing for maintenance purposes or to invest in other transport modes.</p> <p>Other secondary impacts are linked to the reduction of waiting time at the tollbooths that will benefit both the users and the environment. According to the White Paper, an interoperable EFC will ensure that <i>“users have a quick and easy way of paying infrastructure charges, using the same means of payment throughout the network without losing any time at toll stations. At present, for example, a motorist driving from Bologna to Barcelona has to pay tolls at more than six stations without the electronic payments systems being harmonised, even within individual countries.”</i>¹⁶⁴</p>
<p>Communication and media</p>	<p>Information about the project is published on the ASECAP web site, and through ASECAP newsletter. Results of the study were presented in ITS Meetings.</p>
<p>Impact on industry</p>	<p>Current impact is restricted to participants having access to the most up to date research on road pricing technologies. The main future impact is foreseen to be on Road Transport Operators (market incumbents and new entrants) and EFC manufacturers.</p> <p>The development of a common standard if taken to its conclusion could have a significant impact on technological leadership in this field and provide a Europe wide opportunity for equipment manufactures and for toll road operators.</p>
<p>Overall Rating on Impact: MEDIUM</p>	

Efficiency	
<p>Efficiency in the use of resources</p>	<p>Evidence from CESARE I suggests that fee rates are in line with market rates. The project was co-funded by ASECAP with well over 50% of the financing. The resources for the second phase included legal advice on contracts and specialist financial advice on VAT. These areas might have attracted significantly higher fee rates than technically based consultancy services, but</p>

162 Andrew Pickford, Transport Technology Consultants, UK

163 Mauricio Rotundo, Aiscat, Italy

164 White Paper on the European Policy for Transports, September 2001, page 72.

Cost effectiveness in terms of results and impact	<p>there is no information regarding person/ day inputs.</p> <p>Given the incomplete nature of the project and interim results/ outputs produced up to CESARE II, it is difficult to evaluate CESARE's cost effectiveness in a meaningful way. Nevertheless, the production of the draft MoU was clearly a successful output from this stage of the programme.</p> <p>The PISTA project demonstrated that the MoU as defined by CESARE can be put in practice with success and could provide an indication of the cost effectiveness of CESARE. Cost effectiveness of the project in terms of results and impacts through collaboration has to be assessed against these facts as well against the financing sharing among the ASECAP members. In relation to these factors, the cost of defining the new service is not considered in a negative way.</p>
Overall Rating on Efficiency: MEDIUM	

Scope for integration of indicators into the monitoring of current and future interventions
<p>Within the scope of the project to date, the main indicators are the delivery of project outputs on time and to an acceptable standard with a degree of shared acceptance of results and recommendations. The usual indicators relating to use of resources, project delivery and quality can be used (costs, cost/day, attendees at conferences).</p> <p>Outcome indicators are more difficult for two reasons – the project is only half complete, and there is no direct measured performance with and without such a common system. Indicators on the desirability abound on national toll collection systems (usually comparing the cost of these toll collection systems against the free, state-sponsored provision of road infrastructure). However, there are so far no indicators on the cost of lack of interoperability of road tolling. This is all the more necessary to enable public policymakers to judge the cost effectiveness of further financing of interoperability, given the current low interest from private industry to invest in this issue. Further study of the cost of doing business without (delays, multiple billing, equipment costs, lack of euro competitiveness in a fragmented market and market distortions) and with the system would be necessary to generate significant and quantifiable indicators.</p>

Suitability of extension / future recurrence of similar activities
<p>The overall CESARE Program was conceived as a phased effort. Phase I and II have been completed. To fully exploit the work already done, it is important to complete the project by implementing the last two phases on tenders and evaluation as well as system implementation. To underpin this, it is crucial to finalise the MoU and encourage its implementation and overcome the concerns regarding contractual and fiscal issues raised. CESARE III will essentially review the compatibility of the results of CESARE II and PISTA with the constraints of the legal entities, levying taxes and fees in non ASECAP countries. Therefore Most of CESARE III will work on contractual issues¹⁶⁵.</p>

Ways of improving value added from the funding
<p>The project is not complete. The key to improving and capturing value for money is to complete the project if it is considered to be likely to lead to an effective outcome. This can be tested by finalising the MoU through a number of site tests and clarifying the issues related to the capability of the current roadside equipment to operate as foreseen.</p> <p>It is important to have the non-ASECAP countries playing an active role in the next steps of the</p>

¹⁶⁵ Philippe Hamet, CESARE Task Manager.

project. The agreement on an interoperable Electronic Fee Collection system should involve not only the operators that already have an electronic system but also the ones that are planning to have such a system in the near future.

The project will benefit from more attention dedicated to the dissemination of the results to all stakeholders. This should include both national policy advisors and operators and help in appreciating the value of the project. The technical reports are of a high standard, but not really accessible by non-specialists. The publicising of project objectives, problems and results should also raise awareness of EFC and related policy objectives and increase an understanding of their importance by the public.

Conclusions

Relevance: (LOW for road safety and HIGH for mobility, interoperability,) CESARE is highly relevant in its direct support of EU policies on the improvement of transport mobility. It could also have relevance to wider potential for in-vehicle intelligent systems for guidance, safety and environmental charging. Commitment to CESARE III by Germany would be a big step forward in focusing interest of non participating Member States. However its role directly related to road safety is seen as tenuous.

Effectiveness: MEDIUM (to date) The output from CESARE II is the draft MoU and the detailed approach to technical, legal and fiscal issues. While the MoU is being developed through field testing, the achievement of the EFC standard and its utilisation is still some way off. The project cannot be regarded as truly effective until as a standard for the single pan-European tolling system is agreed.

Impact: MEDIUM While the future impact might be significant if the standard is developed; to date the results are limited to the MOU and financial and legal issues. The MoU is being field tested and the operators are continuing to work together through the Association to establish a standard. There are opportunities for manufacturers and operators to reap benefits from a single standard. Similarly there are opportunities for legislators to introduce explicit road charges if legal and VAT issues can be overcome. Nevertheless, the issues raised at the end of Phase II are significant and relate mainly to legal and VAT matters. There are still countries which are pursuing their own approaches. But Germany has expressed a commitment to joining CESARE III.

Efficiency: MEDIUM Given the wide membership from an international association, the discipline of a well defined project with budget and timescale for deliverables has underpinned the efficiency. Leveraging of funding from stakeholders has reduced the need for EC funding over time and illustrates the efficiency of past investments.

Recommendations

It would be desirable to have the **non-ASECAP countries playing an active role in the next steps** of the project especially Germany. The project will also benefit from more attention dedicated to the dissemination of the results to all stakeholders. This might be further affected through the work of the Comité Télépéage.

If the results of the appraisal are positive then **further funding should be continued** with the aim of completing and issuing a standard within a reasonable period. This will include finalisation of the MoU through a number of site tests and clarification of the issues related to the capability of the current roadside equipment to operate as foreseen. If this is not possible then an alternative mechanism should be considered.

7.5 RESPECT

Project title	Regulator simulator-based performance training for professional truck drivers – RESPECT		
Type of fundingⁱⁱⁱ	Subvention	% of financing	50%
Overall EC budget €	Total budget: EUR 1.912.370, EU Contribution: EUR 956.185	Contract: year	SUB-B27020B-E3-NEA-2002-SI2.334643
Budget for fees € (Overall EC budget minus reimbursables and direct costs)	Information not available – requested from EC	N. person/days	2355

Background and genesis

RESPECT consists of setting up a 3-day education programme for truck drivers, with the aim of reducing the accident/damage rate and the fuel consumption of drivers. Its training package includes:

- A theoretical component: Classroom training.
- A practical component: In-vehicle driver training.
- A simulator component: Drivers practice in simulators in order to train in extreme and difficult situations.

The project aims:

Phase 1 (complete):

Defining state of the art and specific requirements for the training programmes, making the training programmes operational; and defining a measurement and evaluation scheme.

Phase 2: (Started in April 2004):

Implementing the training programme measuring the effects of the training programmes; and analysing and evaluating the effects.

Project stakeholders and their tasks ¹⁶⁶:

a) Educational experts (provide the training program and part of the analysis):

- Centraal Bureau Rijvaardigheidsbewijzen/ Contact Commissie Vakbekwaamheid (CBR/CCV), Netherlands
- Bundesamt für Transporttruppen (BALOG), Switzerland
- Teaching Institute of Transport and Logistics (AFT-FC F), France
- DEKRA Akademie GmbH (DEKRA), Germany

b) Simulator manufacturers (convert the training program into concrete simulations and provide part of the data to be analysed):

- Oerlikon Contraves AG (OCAG), Netherlands
- Oerlikon Contraves AG (OCAG), Switzerland
- Thales Training & Simulation S.A. (TT&S), France
- Dornier GmbH, Germany

¹⁶⁶ See e.g. NEA Transport Research and Training: RESPECT Phase 2. July 2003.

c) Various trucking companies (supply drivers for the programme in the four countries and, if possible, some long-term data on accident rates and energy use).

d) Research institutes (set up the measurement and evaluation scheme and perform part of the evaluation of the programme):

- NEA Transport Research and Training (NEA), Netherlands
- Eidgenössisches Departement für Umwelt, Verkehr, Energie und Kommunikation (UVEK), Switzerland
- Institut National de Recherches sur les Transports et leur Sécurité (INRETS), France
- Institute of Applied Transport and Tourism Research (IVT), Germany

The programme is currently being tested with about 800 drivers.

The role of the project in the policymaking process.

The entire project (phases 1 and 2) is designed to be one way of implementing various earlier-defined policies, formulated for economic, safety and environmental goals, and thus aims at supporting industry and / or Members States.¹⁶⁷

Its purpose is to:

- Give an example of how transport safety legislation can be transposed into national legislation;
- Help to shape future policy goals, namely the insertion of simulators in training programmes;
- Serve as an example in the definition of features that are most important for high-end simulators.¹⁶⁸

A key reference point for the role of the project is the: 'European Transport Policy for 2010: time to decide.'

*"A large number of Commission proposals are designed to provide the European Union with full legislation to improve ... Road Safety In particular, they seek ... to develop vocational training; common rules have been proposed on compulsory initial training for all new drivers of goods and passenger vehicles and on ongoing training at regular intervals for all professional drivers."*¹⁶⁹

It is worth noting the explicit targeting, by the White Paper, of driver training, as legislation to be introduced.

A second important reference point for the projects is the European Road Safety Action Programme¹⁷⁰, which mentions the need for "life-long road user training" as well as "the benefits ... of simulators".

A third reference point is the Directive 2003/59/EC of the European Parliament and of the Council of 15 July 2003 on the initial qualification and periodic

¹⁶⁷ Correspondence with Mr. Herald Ruyters, EC, 15 April 2004. In the same context, however, Mr. Ruyters stressed that the preparation and negotiations for the study started already way before the actual start of the project in 2002, and hence quite a few elements have influenced the decision making process of Directive 2003/59/EC (European Directive for Training of professional drivers). In this RESPECT, the reference to high-end simulators within this Directive is a direct result of the preparatory activities for this project.

¹⁶⁸ Interview with Mr. Ruyters, 03/05/04.

¹⁶⁹ The European Commission: European Transport Policy: time to decide (2001), p. 26.

¹⁷⁰ European Commission (2003): European Road Safety Action Programme: Halving the number of road accident victims in the EU by 2010 – a shared responsibility.

training for drivers of certain road vehicles for the carriage of foods or passengers.¹⁷¹ This Directive foresees mandatory initial and continuous training of commercial drivers, since at present no more than 10% of commercial drivers have received training beyond what is required for obtaining their driving licences.

Typology of project

The methodology adopted

There are three components of the project's methodology:

1. Theoretical component: Classroom training

1.1 Objective of the theoretical component:

To improve the knowledge and awareness of the professional driver. This can be done by computer-based training or by other means (e.g. classroom lessons or presentations by experts).

1.2 Aspects addressed in the theoretical components:¹⁷²

- Technical knowledge about the vehicle.
- Rational use of the truck, minimising fuel consumption.
- Factors influencing fuel consumption and road safety.
- Safe driving style and defensive driving (anticipating, traffic participation, weather conditions).
- Braking technique.
- Stress, fatigue, personal care and health of the professional truck driver.
- Safety rules regarding loading and unloading the truck.

1.3 Final evaluation of individual drivers after the theoretical component:

Through tests (for example, with multiple choice assessment), the knowledge level of the drivers can be measured after the theoretical component. The tests focus on knowledge about regulations, technical aspects of trucks, how to deal with risks and special circumstances, defensive driving and fuel efficiency.¹⁷³ Particular gaps in knowledge from the pre-training test are communicated to the trainers, so that the 'gap-issues' can be addressed.

2. Practical component: In-vehicle driver training:

- Traffic participation.
- Manoeuvring.
- Reduced vehicle operating costs (particularly reduced fuel consumption).
- Vehicle handling.
- Vehicle control.

2.1 Objective of the practical component:

To improve the knowledge, awareness and skills of the professional driver.

2.2 Aspects to be addressed in the practical component:

- Demonstrating and instructing safe driving (e.g. speed adaptation, respecting regulations, dealing with other road users, braking technique).
- Demonstrating and instructing fuel-efficient driving style (use of brakes, accelerating, shifting and use of gear box).
- Demonstrating and instructing on driving economically and time

171 OJ L 226, p.4 of 10.9.2003.

172 Inception Report p. 28.

173 RESPECT Phase 2. NEA Transport Research and Training. July 2003.

	<p>efficiently.</p> <ul style="list-style-type: none">• Safe and time efficient manoeuvring (parking for loading/unloading, turning). <p>2.3 Final evaluation of individual drivers after practical component: A standardised instructor report should be made on the drivers' performance and improvements. A standard format is prepared for this and is to be filled in by the instructor (there is a considerable degree of subjectivity here, since various instructors will be used throughout the project).</p> <p>3. Simulator component (truck driving simulators, especially for difficult conditions):</p> <ul style="list-style-type: none">• Braking technique.• Defensive driving, safe driving.• Manoeuvring.• Reduction of fuel consumption.• Special circumstances.• Bad driving conditions. <p>3.1 Objective of the simulator component: To improve the knowledge, awareness and skills of the professional driver. The simulator provides the opportunity to train in driving techniques and improves the performance of the driver under difficult conditions.</p> <p>3.2 Aspects to be addressed in the simulator component:</p> <ul style="list-style-type: none">• Slippery roads (driving in snow and ice)• Narrow roads.• Driving in mountainous areas.• Low visibility (e.g. fog).• Emergency braking / avoiding collision.• Optional: other (e.g. overtaking a truck going through a roundabout). <p>3.3 Final evaluation of individual drivers after the simulator component: An electronic report and data-file is to be made by the simulator. There is also more long-term evaluation to be conducted through analysis of data from transport companies, for example, on possible fuel consumption by drivers who have undergone the training.</p> <p>Geographical coverage Germany, Netherlands, Switzerland and France. The choice of these countries was dictated by the availability of simulators.¹⁷⁴ However, so far the project has only been carried out in Switzerland as a pilot application.</p>
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Specific project objective
<p>Safety objectives:</p> <ul style="list-style-type: none">• Reduce severe road accidents.¹⁷⁵• Reduce economic cost to society arising from death and injury.¹⁷⁶ <p>Environmental objectives:</p> <ul style="list-style-type: none">• Environmental benefits arising from reduced Carbon emissions.¹⁷⁷

¹⁷⁴ Interview with Herald Ruyters, 03/05/04.

¹⁷⁵ Final Technical Report p. 7.

¹⁷⁶ Inception Report p. 25.

- reduced noise emissions
- longer lifetime of truck components.

Economic objectives:

- Reduction of material wear, travel times and manoeuvring damages.¹⁷⁸
- fuel-efficient driving.¹⁷⁹

Possibilities and limits of evaluating the projects

The main, 'implementation' part (Phase 2) of the project only started in April 2004. Hence, no conclusive evaluation is possible at this moment except for the Swiss Pilot stage, and whether the right tools are in place for the project to become successful in the next months and years. There are tight limits to the interpretative power of evaluations done on drivers' performance immediately after training. In particular, driving under difficult and rare circumstances (for example, Dutch drivers in the Austrian Alps) is likely to improve significantly through training, but the long-term effect is unclear, especially if the relevant difficult situation is not encountered by the driver for an extended period of time. However, if trying to measure long-term effects there are limits to the possibility of isolating the 'pure' training effect vis-à-vis changes in drivers' performance induced by other factors in the meantime (e.g. increased experience acquired purely by 'being on the road').

Activities undertaken during the evaluation

- Background research on links between road safety, trucks and training. Material used from various sources, inside and outside the EU.¹⁸⁰
- Analysis of material provided by EC: Inception Report; Final Technical Report.
- Telephone Interview with Mr. Ruyters on 26 March 04; personal interview with Mr. Ruyters on 03/05/2004.
- Interviews and correspondence with various staff at Oerlikon Contraves AG, Zürich, Switzerland; NEA Transport Research, the Netherlands; and with Bruno Zimmermann, in charge of driver training at the Swiss Army who played a key role in the pilot application of RESPECT; in Bern, Switzerland.
- Interview with Ms Karin Mayer, IVT e.v. (Institut für angewandte Verkehrs- und Tourismusforschung), 22/07/04
- Correspondences and Interviews with Thales Electronics Systems (e.g. Mr C. Ziehe; Mr Jean-Pierre Grognet), at various dates.

Relevance to the policy

How is the project evaluated relevant to the policy goals?	RESPECT is clearly relevant to 'European Transport Policy for 2010: time to decide' and the 'European Road Safety Action Programme'. It provides a well-targeted way of addressing the need for truck-driver training, mentioned in the above-quoted policy documents. By providing first experiences with truck driver training, it also paves the way for the introduction of such training (and possibly even of the use of simulators) into legislation.
How could the relevance of the project be improved / have been improved	However, the relevance of the projects could be improved through adjustment of the same project at the margins in several ways. For instance, the safety-environmental-economic objectives' balance could have been shifted for groups of drivers where one of these objectives is particularly important (e.g. the safety component of the training might be improved for drivers transporting hazardous

177 Inception Report p. 26.

178 Final Technical Report p. 7-8.

179 Final Technical Report p. 8.

180 E.g. Asshoff, W.; Pellmann, W.; and Schmidt, W-F: Fahrtraining und Sicherheitstraining. Boorberg, 1996.

through adjustments at the margins?	<p>chemicals). Linked to this is a second idea, namely that the training might need to provide specialised courses for particular groups of drivers. For instance, the drivers transporting hazardous chemicals might require specialised training on particular days. Similarly, one might develop a training component on avoiding accidents with pedestrians for drivers largely operating in built up areas.</p> <p>It should be noted that lengthy discussions have already taken place on further targeting the training, on individual needs or smaller group needs. These were rejected during the discussions by the scientific institutes represented within the consortium. The main reason quoted was that the number of variables is already quite high (4 countries, several companies per country participating). Allowing for different training modules would further increase the number of variables.¹⁸¹</p> <p>Nevertheless, the evaluators are not in full agreement with this line of argument. For instance, the fact that the project is conducted in four countries does not increase the complexity of the training project. On balance, the benefits from more specialised training are considered to outweigh the problems.</p>
Further project-specific remarks	None
Overall Rating on Relevance: HIGH	

Effectiveness	
Has the project evaluated been effective in addressing its specific objectives?	<p>It is currently difficult to measure the effectiveness of the project except for the (very limited) results of the Swiss Pilot stage and whether the right tools are in place for the project to become successful in the next months and years. The reason for this is that by the time of the evaluation only Phase 1 of RESPECT had been completed.</p> <p>Phase 2 only started in April 2004, thus not making a comparable evaluation possible.</p> <p>Hence, this effectiveness evaluation will concentrate on assessing the achievements of Phase 1; and on results from the Swiss training programme.</p> <p>As for “defining and making operational the training programme”, the training programme has been clearly defined. It has so far only been made operational in Switzerland, but this has according to all sources available to the evaluators not been due to the contractors but due to EC-internal procedural changes that delayed the start of Phase 2.¹⁸²</p> <p>The project has now recently started in the Netherlands (April 2004).</p> <p>In defining a measurement and evaluation scheme, the project has built-in effectiveness measurement tools applied by the entities organising the project:</p> <p>Firstly, a number of variables measure the driver characteristics before the training in test knowledge on regulation, road safety, techniques of control, and drivers’ behaviour.¹⁸³</p> <p>At the same time, control information (information from drivers that do not participate) is collected. This information can be collected at the participating companies (but from non-participating drivers), and concerns mostly quantifiable information, such as fuel consumption and damage/ accident information.</p>

181 Interview with Mr. Ruyters, 03 05 04.

182 Ibid.

183 Inception Report p. 67

The same variables are measured for the drivers after the training programme. The control group or control information will measure the “natural” evolution of driver characteristics without training. Taking this into account, the quantitative estimation of training takes place by comparing the data sets of the driver sample before and after training.

Secondly, assessment is done by means of a standardised test session on the simulator (including built-in indicators on the simulator to measure satisfaction of the training objectives).

Thirdly, RESPECT also directs questionnaires at participating transport companies which are mainly of a qualitative nature:

Finally, the qualitative analysis of the training programme takes place through estimating the behaviour of trained drivers in real traffic. The method for this assessment is still under review in the consortium.

The evaluators believe the above measures to be appropriate to evaluate the effectiveness of the project's outcomes: the evaluation correctly uses the methodological principles¹⁸⁴ of using control information or random sampling. Potential biasing factors are to be considered very carefully as firms or drivers who participate in the experiment may be structurally different from the ‘population’ of all firms and drivers.

However, so far these effectiveness measurements have not been applied to the project, as the project is still at too early a stage. Hence, while the built-in evaluation tools of the project are sophisticated, no actual results were available. It should also be mentioned that there is still disagreement in the consortium on the assessment stage; not all partners see it as feasible to get reliable data.

As for the Swiss Pilot project, no detailed analysis of the data of this training has been made. Some preliminary results include

- For the practical driving test (test with driving examiner):
Test result before training 2.4, test result after training 1.7 (scale: 1 = excellent, 2 = very good, 3 = good, 4 = sufficient).
- For the category ‘Economical driving’: Fuel reduction of 9.5%.¹⁸⁵

Have the outputs been effective in addressing the policy goals?

From the very limited early results available it appears that the outputs have been effective in addressing the policy goals. However, more conclusive evidence from the planned broader ‘in-project’-evaluation activities (described above) must be collected.

How could the effectiveness of the project be improved / have been improved through adjustments at the margins?

Clearly, additional training might help here (e.g. on first aid); as might the training of a higher number of truck drivers, if a higher budget was available¹⁸⁶ (with the latter measures also leading to greater statistical validity of any future evaluation through a greater number of observation).

The statistical accuracy of the test could be improved through stratification by company size, driver age or experience.

An option to be considered is one- or two-day refresher training sessions. There is evidence that this increases the long-term usefulness of driver training. This is shown by the French experience, where refresher sessions have for years been applied in truck driver training; in the airline industry, where simulators are widely

184 RESPECT-Workplan. Submitted by NEA Transport research and training to the EC, DG TREN, October 2001.

185 Results provided in a personal correspondence by Mr J. Jetten of the NEA, the Netherlands, 17 May 2004.

186 Results provided in a personal correspondence by Mr J. Jetten of the NEA, the Netherlands, 17 May 2004.

<p>applied for pilots and refresher sessions are considered indispensable; and finally, from relevant psychological research looking at the relative benefits of different driver training 'strategies' with or without refresher sessions.¹⁸⁷</p> <p>There might also be use in monitoring the effectiveness of the project through investigating the data structures of insurance companies, thus benefiting from private sector knowledge: if insurance firms experience a lower accident risk among drivers who have undergone RESPECT-training and choose to impose lower premiums on the companies employing these drivers, then this is a good indicator for the effectiveness of RESPECT.</p>	
Further project-specific remarks	None
Overall Rating on Effectiveness: HIGH (based on early indications)	

Sustainability	
Is the initiative sustainable in the longer term?	<p>A key factor in the sustainability of RESPECT is its ability to attract demand for the training among companies. Should the training not be seen as beneficial for the concerns of the companies, it is unlikely that their participation would be sustainable.</p> <p>In the training so far conducted, RESPECT has been very successful at attracting the participation of truck companies. For example, in Switzerland, strong publicity led to more applications than could be accepted; the same is already happening in the Netherlands, where the project is currently starting.¹⁸⁸ In terms of the sustainability of demand, however, there is a need to ensure that the training is tailored to be beneficial to companies, and that this message is adequately conveyed.</p> <p>The visibility of the project could be increased by the introduction of driver certificates, and this would be closely tied to the Commissions intentions of making this type of driver training mandatory. This, in turn, could open the way for considerable outside funding.</p>

Impact

187 Interview with Ms Karin Meyer, Institute für Angewandte Verkehrs- und Tourismusforschung, Mannheim, Germany, 22/07/04/

188 Mr Herald Ruyters, telephone interview, 26th March.

Impact on policy making or on broader policy objectives

The entire project (phases 1 and 2) is designed to be one way of implementing various earlier-defined policies, formulated for economic, safety and environmental goals, and thus aimed at supporting industry and/ or Members States.¹⁸⁹

Its purpose is to:

- Give an example of how transport safety legislation can be transposed into national legislation;
- Help to shape future policy goals, namely the insertion of simulators in training programmes;
- Serve as an example in defining what features are most important for high-end simulators.¹⁹⁰

Impacts relating to these areas could not be observed at the European or national level due to the early stage at which the project is in, with one of the few exceptions being the reference to high-end simulators in the Directive 2003/59/EC.

Indeed, this Directive makes many references to the need for aspects of truck driver training that are already being applied through RESPECT. Nevertheless, while direct evidence of the policy impact of RESPECT is scarce, the evaluators believe that RESPECT Phase 1 has, as outlined above, set a strong framework on the basis of which Phase 2 is likely to succeed, with impact (especially in the form of enabling governments to formulate national legislation) likely to eventually be high.

Secondary impacts on other Policies

Secondary impacts on other policies include:

- Impact / Outcomes relevant to health policy, mainly through reductions in vehicle-emissions-related health problems.
- Impact / Outcomes relevant to 'global' environmental policy. The project documents discuss benefits from emissions reduction in relatively broad terms. Implicitly, this seems to mean on local and regional benefits from emissions, i.e. a reduction in the emissions causing local and regional public health (respiratory diseases) and environmental (destruction of forests and buildings) problems, (for example through SO₂ or small particulate matter). A broader perspective would also take into account reduced carbon emissions with a moderating effect on climate change and important implications for countries that have committed to limiting their carbon emissions under the United Nations Framework Convention on Climate Change and the Kyoto Protocol (including public revenue generation – see next bullet).
- Impact / Outcomes relevant to fiscal policy. These mainly relate to savings to the public purse through reduced number of injuries and decreased wear on roads. Moreover, in an emerging global carbon market / carbon trading scheme, projects such as RESPECT could, if they could prove to lead to sizeable carbon emissions reductions, provide a net income to the public purse.

None of these effects have been measured. However, given what the evaluators consider to be an effective project design (as laid out in the section on effectiveness above) these positive secondary effects are almost certain to

¹⁸⁹ Correspondence with Mr. Herald Ruyters, EC, 15 April 2004. In the same context, however, Mr. Ruyters stressed that the preparation and negotiations for the study started already way before the actual start of the project in 2002, and hence quite a few elements have influenced the decision making process of Directive 2003/59/EC (European Directive for Training of professional drivers). In this RESPECT, the reference to high-end simulators within this Directive is a direct result of the preparatory activities for this project.

¹⁹⁰ Interview with Mr. Ruyters, 03/05/04.

Communication and media	<p>occur.</p> <p>Publicity and the level of communication differ from country to country. Switzerland has had much of the training, and most press coverage. A meeting of all stakeholders in February 2003 was used to publicise the project in Switzerland. It was so well received that there were too many candidates – the opposite of what had been expected, because transport companies make losses in the short term while their drivers are on training. In Germany, the Netherlands and France, there was less publicity (e.g. through the institute CCV in the Netherlands or the institute AST in France). One key reason for this were the delays experienced in the project, which made earlier publicity obsolete.¹⁹¹</p> <p>Within the consortium, plans exist to establish a website and to disseminate results at conferences and seminars.¹⁹²</p>
Impact on industry	<p>There has been considerable impact on industry, with industry participating eagerly in the stages of the project so far undertaken. Moreover, research indicates that industry is gaining considerably from RESPECT¹⁹³. As shown below under ‘efficiency’, there is evidence that the economic profit from this training amounted to about 1,000 euros per driver per annum. Since RESPECT offers a 3-day training programme, the economic profit should at least be 1,000 euros per driver per annum. This means that the benefit for the transport companies involved in the project would amount to 800,000 euros per annum. It is therefore likely that the project will be an attractive one to industry in the future, and engage the transport industry on a sustained basis. Of course, this relies on successful implementation of phase II, and that the economic benefits to industry are communicated widely.</p>
Overall Rating on Impact: HIGH	

Efficiency	
Efficiency in the use of resources	<p>As with the other areas of evaluation presented above, an analysis of the efficiency of RESPECT can currently only be carried out in a preliminary fashion due to the early stage at which the project found itself at the time of evaluation. The evaluators nevertheless consulted various sources to be able to assess the efficiency of resource use; the degree of efficiency with which the program was run so far; and finally took some basic figures provided by researchers on the likely savings to firms and society at large, and on this basis quantified the potential financial benefits from RESPECT to compare them against the costs (as well as against the EC contribution to RESPECT).</p> <p>The evaluators consulted several sources and stakeholders to assess the efficiency of resources use; several different issues were found or raised. These included the opinion of the project manager, that there was not enough effort made to find the cheapest possible consortium due to time constraints.¹⁹⁴ Contractors, on the other hand, mainly raised the point that delayed payments led to considerable losses in this project since the running costs for the simulators are very high, and the publicity for the training was at times obsolete by the time the training got underway. Given the size of the EC share</p>

191 Telephone interview with Herald Ruyters, 26th March

192 NEA: RESPECT phase II. July 2003.

193 As mentioned in the section on efficiency, there is evidence that the benefits to transport companies involved in the project amounts to 800,000 euros per annum.

194 Face-to-face interview with Herald Ruyters, 03/05/04.

Cost effectiveness in terms of results and impact

in the project's funding, the late payments considerably affected the project's efficiency.¹⁹⁵

Thus, a key measure to increase the efficiency of the project would be, in the opinion of the evaluators, not to split the project into two phases. In fact, the project suffered from delays between Phase I and II (with phase II only starting in April 2004). Originally conceived to yield more control on the part of the EC over the funds allocated, new financial regulations in 2003 led to a delay in the start of Phase II, with switches in contractors leading to further delays.

One way to judge the cost effectiveness is to calculate the benefits for the 800 drivers that will be trained in the Netherlands. A Dutch transport company (its name being known to the Research Institute NEA but not provided to the evaluators for confidentiality reasons) started a 1-day training for their drivers several years ago. Their finding was that the economic profit from this training amounted to about 1,000 euros per driver per annum. Since RESPECT offers a 3-day training it is reasonable to assume that the economic profit will be at least 1,000 euros per driver per annum. This means that the benefit for the transport companies involved in the project would amount to 800,000 euros per annum.

A second way to judge the cost effectiveness is to calculate the estimated benefits in social cost. One driver will cover approximately 100,000 km per annum, hence for the 800 foreseen in the Netherlands drivers, this means 80 million km. In the Netherlands the monetary value of mortal victims is estimated to be on average 0,06 euros/ truck km and of hospitalised victims 0,015 euros / truck km.¹⁹⁶

Then we can make the following calculation:

- 80 million km p.a. leads to a monetary loss of 4,800,000 euros p.a. through loss of life (80,000,000 km times 0.06 euros).
- 80 million km p.a. leads to a monetary loss of 1,200,000 euros p.a. through loss of injuries (80,000,000 km times 0.015 euros).

If we reasonably assume a 10% reduction in accidents¹⁹⁷, we obtain:

- Savings of 480,000 euros p.a. for reduced loss of life.
- Savings of 120,000 euros p.a. for reduced injuries.

This yields a benefit of 600,000 euros p.a. for the Netherlands alone, i.e. 750 euros per driver for 800 drivers.

Given all of the above calculations and comparing this to the total budget of the project (1,912,370 euros), we can conclude that:

- There is efficiency at the company level as soon as four companies are involved (which is currently the case).
- Efficiency at the public level as soon as 2550 drivers are trained (1,912,370: 750) under current costs.

Applying the same numbers to the EC contribution of 50% (i.e. 1,912,370 Euros : 2 = 956,185 Euros) yields:

- Efficiency at the company level as soon as two companies are involved.

195 Interview with Mr. Bruno Zimmermann, Bern, Switzerland, 21/04/05.

196 Personal correspondence by Mr. J. Jetten of the NEA, the Netherlands, 17 May 2004.

197 As provided by Mr Herald Ruyters during interview at the EC, Monday 3 April.

- Efficiency at the public level as soon as 1275 drivers are trained (956,185: 750) under current costs.

However, it has to be borne in mind that taking only 50% of the total sum actually used for RESPECT distorts the picture – e.g., the above Dutch transport company might have concluded a different savings figure if training had only be administered with half the amount actually provided. The efficiency calculations at the EC contribution level therefore have to be taken as an approximation.

Overall Rating on Efficiency: HIGH

Scope for integration of indicators into the monitoring of current and future interventions

Assessment of the theory

The assessment of the theory component can be done by tests on computers or by multiple-choice questionnaires. Advanced testing procedures (e.g. computer-based tests that adapt to candidates' knowledge levels) can provide relatively reliable assessments' of the development of a group's skill level over time.

Until a few years ago, the fact that every group of examinees had to be asked different questions in 'their' test, led to a lack of comparability of test results between different groups or of the same group over time (e.g. because the level of overall difficulty in any given test was to a degree a matter of subjective judgement). However, during the last few years, standardised testing procedures have advanced considerably. It is now possible to develop tests in which a candidate has to answer a sequence of computer-based questions, and is only able to proceed to the next question once the current question is answered. Based on the record of answers at any given point in time, the computer program adapts the level of difficulty as the test goes along, using a vast pool of thousands of possible questions of different levels of difficulty.

This has vastly increased the comparability of test results between several groups of examinees at the same point in time or the same examinees at different points in time. These new testing techniques hence lend themselves much better for replicable indicators. It might be used to assess the theory part of RESPECT, because subjecting the same group of examinees to the same standardised test, immediately following their theory training and once a few weeks later, will allow a judgement to be made on how much of a long-term learning effect on safety theory knowledge RESPECT has.

An additional advantage is that these tests can be administered anywhere in the world as long as standardisation (through common software) is ensured. This means that examinees may not need to travel back to the point of training for their second testing.

Assessment of the practice

In comparing the practical and theoretical components, establishing reliable indicators for the practical component is much more complex task than that for the theoretical aspect. In fact, establishing indicators for the practical part of RESPECT will be possible only for quantifiable and comparable types of tests. These include, for example, the distance needed to bring vehicle to a halt at a specific speed, goods load and type of weather condition. Other aspects of the training for which quantifiable and comparable indicators might be developed are fuel consumption statistics; statistics on adherence to driving and resting times (keeping in mind that failure to adhere to laws on resting times is one of the most frequent causes of road accidents involving trucks).

For some parts of the training it may be impossible to establish indicators – in particular the 'psychological' part, which attempts to influence drivers' behaviour. However, provided that the costs (high in both resources and time) were acceptable, it would be possible to undertake a survey of drivers' attitudes and self-reported behaviour, both at the baseline (zero) and some time after the training was completed. This type of survey would capture quantifiable information on the drivers' attitudes and behaviour, by using a closed questionnaire. Information would be collected via a series of leading questions (i.e. in the last month have you had to use an emergency break? Why? In the last 6-months, how many times have you not had an adequate rest period? Why?). Providing driver confidentiality is ensured, this type of survey could provide sufficient information to extrapolate the findings in terms of national level impact. It could also assist project managers in attributing impact to the programme by surveying the control group at the same time.

Suitability of extension / future recurrence of similar activities

In terms of an extension of evaluation methodologies, there is a method being developed in France. It includes an assessment of the drivers on a truck before and after the training with the help of on-board tools plus sensors.¹⁹⁸ This will allow for the use of indicators for measurement of effectiveness, as stipulated in the previous section of this evaluation grid, and it is recommended that this methodology be adopted.

In terms of an extension of the programme, whilst it has provisionally scored 'high' on all evaluative areas, there are possibilities for improving the performance of the project. Options for this include extending it to other vehicles / vehicle drivers. For example, there is increasing concern about coach accidents in Europe.¹⁹⁹ Current knowledge on safety in the coach context is still limited.²⁰⁰ This is also highlighted in the White Paper on Transport.²⁰¹

Other possibilities are to extend the geographical scope by extending to additional European countries; the development of driver certificates; follow-up training schemes (e.g. on specialised areas like urban driving); and training on how to deal with the negative effects of fatigue and monotony on driver concentration.²⁰²

The Final Technical Report includes further suggestions on project extension activities, including driving with dangerous goods, first aid, use of fire extinguisher, how to handle stress, maintenance of the vehicle, international laws / regulations. The Final Technical Report also argues that motivational aspects should be given more emphasis in driver education than it is done at present. Second, active learning methods should be widely applied also in driver education.²⁰³

Extensive evaluation of the trade-off between the objective of reducing accidents and other objectives, e.g. reduction of fuel consumption (the trade-off here existing in the fact that fuel-efficient driving is, for inexperienced drivers, at first more difficult, leading to less safety for all road users): *"It is to be noted that training aiming at the reduction of fuel consumption can be counter productive to training aiming at the reduction of accidents."*²⁰⁴

As the project started in April / May 2002, it is necessary to evaluate the long-term effects at a later point in time. However, as mentioned above, if trying to measure long-term effects, there are limits to the possibility of isolating the 'pure' training effect vis-à-vis changes in drivers' performance induced by other factors in the meantime.

Ways of improving value added from the funding

There are considerable possible secondary effects on policies that were hardly considered in the project planning. Hence, introducing training components to ensure the project has maximum effects on these policies could increase value added from funding. In particular, so far emissions-related health problems were not a major component of the theoretical training. If this was integrated into the training, i.e. through training on emissions-reduced driving, drivers might particularly be taught to apply these techniques near urban agglomerations to avoid the negative effects from local air pollution.

198 Inception report p. 7.

199 This was especially the case in 2003, which saw a very high number of fatal accidents involving coaches. E.g., during the period of May and June 2003 and for German tourist coaches alone, there were three serious accidents, causing six, 28 and 33 deaths respectively (Source: Electronic Archives of the 'West German Broadcasting Corporation', Cologne, Germany).

200 EC (2001): Road Safety – Results from the transport research programme.

201 The European Commission: European Transport Policy: time to decide (2001), p. 26.

202 Face-to-face interview with Bruno Zimmermann, Bern / Switzerland, 23/05/2004.

203 RESPECT: Final Technical Report.

204 Inception Report, p.6.

Additionally, the effects on the wear on roads by the project were not assessed closely. If it is quantifiable and high, then savings on road repair might make the project financially more viable. This might also make negotiations with local or regional administrations more fruitful, in case these can reap financial benefits in terms of fewer road repairs through RESPECT.

Further funding possibilities might be had from institutions that benefit from the multiplier effect of RESPECT: Scientific research reports will eventually be made publicly available, once accepted by EC. There will also be dissemination (through seminars etc) by the research institutes involved. Hence the EC, but also National Governments, are to use training initiatives in the transport sector, possibly even in vehicles other than trucks.

Training institutes may also benefit from findings, as may simulator manufacturers. Finally, transport research institutes may benefit from the learning experience. If there are indeed quantifiable long-term benefits for all these institutions, they will be hard pushed to refuse co-funding.

Most importantly, the truck companies have so far not been involved to the maximum possible extent, given the sizeable benefits arising to them from the training (e.g. through reduced involvement of the firm's trucks in accidents; reduced wear of the firms' trucks, etc).²⁰⁵ The high savings to companies shown in the efficiency section above suggest that companies should be encouraged to carry a considerable part of the costs.

Conclusions

Relevance: HIGH The project has a very straightforward link to reductions in truck-related accidents on European roads. It provides a well-targeted and nevertheless comprehensive way of addressing the need for truck-driver training mentioned in the EC Transport Safety Policy documents. By providing first experiences with truck driver training, it also paves the way for the introduction of such training (and possibly even of the use of simulators) into legislation. However, RESPECT is so far only provided in general terms; the evaluators would suggest at least a degree of more specialised training modules (e.g. for drivers of dangerous goods). Improvements on this aspect would very likely move the project towards very high relevance.

Effectiveness: HIGH However, the possibility of conclusive assessment is limited to date due to the project still being at too early a stage. Hence, the evaluation of effectiveness concentrates on assessing the achievements of Phase 1 ("defining and making operational the training programmes; defining a measurement and evaluation scheme."); and on whatever results there are from the Swiss training programme.

- The training programme has been clearly defined and has successfully been made operational in Switzerland.
- The project has convincing built-in effectiveness measurement tools that take into account the complex aims of the project, and are sophisticated from a statistical viewpoint. Clearly, however, the success of these effectiveness tools in practice remains to be seen.
- As for initial results from the Swiss training programme, these have been positive.

Test results before training were 2.4, after training 1.7 on scale from 1 (excellent) to 4 (sufficient). Fuel reduction effects amounted to 9.5% after the training compared to before the training.

However, the evaluators point out that the project has so far only been taking place in Switzerland and measurable results have been scarce.

The effectiveness of the project could still be improved by numerous means, including by increasing the statistical accuracy of results through stratification by company size or driver age or experience; refresher-training sessions (which have been shown to increase the effectiveness of RESPECT-

²⁰⁵ The NEA Transport Research Institute calculates that benefits are approx. 800,000 euros per company, which so far leads to a large net benefit to companies (which in turn explains the strong interest currently shown by companies in participating). NEA: RESPECT Phase II, July 2003. Correspondence with Mr. J. Jetten of NEA, 17 May 2004. However, it should be noted that some stakeholders do believe that the limits to firms' contributions to the project will soon be reached (e.g. Mr Bruno Zimmermann during interview in Bern, Switzerland, on 21/05/04).

type measures); or investigating the data structures of insurance companies on whether these give lower premiums to companies whose drivers have completed a 'RESPECT'-training.

Impact: HIGH The entire project (phases 1 and 2) is designed to be one way of implementing various earlier-defined policies, formulated for economic, safety and environmental goals, and thus aims at supporting industry and / or Members States.²⁰⁶

Due to the early stage at which the project finds itself, little impact could so far be observed at the European or national level, with one of the few exceptions being the reference to high-end simulators in the Directive 2003/59/EC. Nevertheless, the evaluators believe that RESPECT Phase 1 has set a strong framework on the basis of which Phase 2 is likely to succeed, with impact (especially in the form of helping governments to formulate national legislation) likely to eventually be high or very high.

Industry is participating eagerly in the stages of the project so far undertaken and research indicating that industry is gaining considerably from RESPECT (which will in turn ensure industry participation in the future).

The particularly high level of highly likely secondary impacts, especially on health and the environment should be noted.

Efficiency: HIGH The total budget of the project was 1,912,370 euros. An assumed 10% accident reduction leads to savings of 600 000 euros per annum with training for 800 drivers, i.e. 750 euros of savings per driver. Benefits to companies in the Netherlands (800,000 euros per company p.a.) suggest that:

- There is efficiency at the company level as soon as four companies are involved (which is currently the case).
- There will be efficiency at the public level as soon as 2550 drivers are trained (1,912,370: 750) under current costs.

Recommendations

Future funding: Further funding at previous levels. This is currently still necessary at the very least until the completion of Phase 2 to obtain tangible results (on the basis of which a decision for any further funding for extension and / or similar activities should be taken). However, the project management should be encouraged to seek considerable financial contributions from firms for future activities, since the above efficiency calculations suggest that the benefits to companies are currently high.

Improve value added of the funding: This should focus on taking secondary effects on wear on roads or on environmental benefits into account more explicitly in assessment of project benefits. This may also open avenues for other funding sources (i.e., public entities interested in these secondary effects, such as regional administrations interested in decreasing the wear on their roads).

²⁰⁶ Correspondence with Mr. Herald Ruyters, EC, 15 April 2004. In the same context, however, Mr. Ruyters stressed that the preparation and negotiations for the study started already way before the actual start of the project in 2002, and hence quite a few elements have influenced the decision making process of Directive 2003/59/EC (European Directive for Training of professional drivers). In this RESPECT, the reference to high-end simulators within this Directive is a direct result of the preparatory activities for this project.

7.6 CARE

There have been several contracts related to the CARE Database since its feasibility study in 1989. The Care Database programme has benefited from 12 separate commitments since inception which include; information management and technical support to; strategic projects and research and development projects. Three were outside the CARE budget (STAIRS, CRASH and PENDANT). All 12 have been included for completeness.

Project title, number and type	CARE Plus Phase I and II (B96-B2 7020-SIN 2624-SUB and B97-B2 7020-SIN 5934-SUB) – Strategic project		
Type of funding	Subvention	<i>% of financing</i>	50%
Overall EC budget €	€ 689.680	<i>Contract: year</i>	1996-2000
Budget for fees €	No information available	<i>N. person/days</i>	CARE Plus II: 1332 person/days

Project title, number and type	Asteryx project (B2000-B2 7020B SIN2.273205-SUB) – Strategic project		
Type of funding	Subvention	<i>% of financing</i>	50%
Overall EC budget €	€ 109.115	<i>Contract: year</i>	2000-2003
Budget for fees €	No information available	<i>N. person/days</i>	No information available

Project title, number and type	Standardisation of accident and injury registration systems STAIRS (SIN9896000754) – Research and development project		
Type of funding	Subvention	<i>% of financing</i>	No information available ²⁰⁷
Overall EC budget €	€ 294.479	<i>Contract: year</i>	No information available
Budget for fees €	No information available	<i>N. person/days</i>	No information available

Project title, number and type	European Road Safety information system (CRASH) – Research and development project		
Type of funding	Subvention	<i>% of financing</i>	No information available
Overall EC budget €	€ 63.100	<i>Contract: year</i>	No information available
Budget for fees €	No information available	<i>N. person/days</i>	No information available

Project title,	PENDANT – Research and development project²⁰⁸
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²⁰⁷ The information received on these projects is (“CARE Related projects”) Project name – Number- Type and Overall EC Budget. (Information sent by Jean Paul REPUSSARD on May 18th, 2004).

number and type			
Type of funding	Subvention	% of financing	No information available
Overall EC budget €	€ 3.000.000	Contract: year	2003-2004-2005
Budget for fees €	No information available	N. person/days	No information available

Project title, numbers and type	Development and maintenance of CARE Database (B96-B2 7020-SIN 001487, B97-B2 7020-SIN 3160-SER-CARE and SINB9897007969)²⁰⁹ - IT and management project		
Type of funding	Service Contract	% of financing	100% ²¹⁰
Overall EC budget €	€ 852.735 ²¹¹	Contract: year	1996/1997
Budget for fees €	No information available	N. person/days	Approx. 300.

Project title, number and type	Development and maintenance of CARE Database (B98-B2 7020 SIN 6464-SER-Anite) - IT and management project		
Type of funding	Service Contract	% of financing	100%
Overall EC budget €	€ 693.740 ²	Contract: year	1997
Budget for fees €	No information available	N. person/days	Approx 300

Project title, number and type	Développement Base de Données CARE (SI2 137940) - IT and management project		
Type of funding	Service Contract	% of financing	100%
Overall EC budget €	€ 30.594	Contract: year	1999
Budget for fees €	No information available	N. person/days	No information available

Project title, number and type	CARE Maintenance and Development (B2000-B2 7020A SIN2 17176-SER, SI2 317956 and SI2.322640) - IT and management project		
Type of funding	Service Contract	% of financing	100%
Overall EC budget €	€ 75.613	Contract: year	2000-2001

208 This CARE-related project started in February 2003 and will finish in year 2005.

209 Information provided by Jean-Paul Repussard, DG TREN by correspondence during April 2004.

210 Information provided by Jean-Paul Repussard by email on May 14th.

211 Total amount paid based on hand written notes on the contract.

Budget for fees €	No information available	<i>N. person/days</i>	No information available
Project title, number and type	Development and maintenance of CARE Database (B2000 B2 7020 A SIN 2.249261-SER) - IT and management project		
Type of funding	Service Contract	<i>% of financing</i>	100%
Overall EC budget €	€ 48.278	<i>Contract: year</i>	2000
Budget for fees €	No information available	<i>N. person/days</i>	No information available

Project title, number and type	Projects which provide technical manpower to DG TREN 212 - IT and management project		
Type of funding	Service Contract	<i>% of financing</i>	100%
Overall EC budget €	€ 284.779	<i>Contract: year</i>	2002-2003
Budget for fees €	No information available	<i>N. person/days</i>	Approx 300

Project title, number and type	CARE Thematic Expertise (B2000-B2 7020A SIN2.290644-SER) - IT and management project		
Type of funding	Service Contract	<i>% of financing</i>	100%
Overall EC budget €	€ 29.850	<i>Contract: year</i>	2000
Budget for fees €	No information available	<i>N. person/days</i>	No information available

Background and genesis

In 1984 the European Parliament requested the creation of a Community road accident database in connection with its resolution in 1986 on Community measures for the reduction of road accidents²¹³.

In 1988 an expert group of the OECD outlined the way towards a "Framework for consistent traffic and accident statistical database". In 1989 the Commission announced the creation of an accident database.²¹⁴ Based on a feasibility study conducted by the Commission, the High-Level-Group on Road Safety in its meeting October 1992 confirmed the necessity of the creation of such a database.

In 1993, the Commission presented both its White Paper on the Future Development of the Common Transport Policy and its communication for an action programme on road safety, where the matter was again considered a priority. A proposal was presented to the Council and the European Parliament in July 1993, which states "*The creation of a Community database on road accidents is one of the priorities selected by the high-level group of representatives of the Governments of the Member States*"²¹⁵. This proposition was adopted on 30 November 1993.

The initial phase of CARE formally commenced on April 1st 1994. CARE is a database on road accidents that result in death or injury. Due to its complexity, long lifetime, diversity of providers and several administrative issues,²¹⁶ the CARE programme has been developed under 12 project funding streams since its inception.

²¹² Includes contracts with Bureau Van Dijk, Ariane II and Trasys.

Typology of project	
<i>The role of the project in the policymaking process</i>	<p>Road traffic accidents in the European Union claim more than 40,000 lives annually and leave more than 1.7 million people injured, representing estimated costs, both direct and indirect of Euro 160 billion²¹⁷.</p> <p>The Commission has proposed an ambitious target of reducing by 50% the number of road fatalities by the year 2010.²¹⁸</p> <p>Within this framework, the specific role of CARE is as follows:</p> <p><i>“A database created and managed at Community level would make it possible to identify and quantify the problems, evaluate the efficiency of any measures taken and determine the relevance of any Community action”²¹⁹.</i></p> <p>The creation of the CARE database constituted a major step towards facilitating comparative road safety work on a European scale as well as towards sound decision-making regarding road safety in European Transport politics.</p>
<i>The methodology adopted</i>	<p>The first phase of the database development (1988 - 1993) consisted of a feasibility study for the creation of the CARE database. The feasibility study led to a positive result.²²⁰</p> <p>The second phase of the development (1993 - 1996) concerned the pilot operation of the CARE database, during which CARE had to deal with all operational problems and be ready for an overall evaluation. The positive results of this evaluation opened the way for the further development of CARE into an integrated information system.</p> <p>The third phase of the development (1996 -1999) concerned the harmonisation of the data contained in the database allowing data to be compared between Community Members. Some of the projects of this phase are: “Development and Maintenance of CARE Database” and “Développement Base de Données CARE”.</p> <p>The fourth phase of the project (1999 - 2003) concerned the full operation of the system and the improvement in the comparability of the data. Two projects were especially important in this phase: “Asteryx” and “CARE Plus (phase I and II)”. The work on the fourth phase included the creation of the information structure for hosting the “CARE plus II” data.</p>
<i>Geographical</i>	<p>The CARE Database covers the 15 EC Member States pre enlargement.</p>

213 Asteryx Final Report, October 2003, p.13.

214 European Commission communication: “Road Safety: a priority for the community”, March 1989.

215 Council Decision 93/704/EC.

216 “I can presume that for various administrative reasons- some contracts were split” Jean Paul Repussard email on May 14th.

217 CARE database website (<http://europa.eu.int/comm/transport/care>).

218 White Paper on the European Policy for Transports, September 2001.

219 Council Decision 93/704/EC.

220 CARE database website (<http://europa.eu.int/comm/transport/care>).

coverage

Germany is the only EC Country that has not provided data to the database. German data -including confidential details- are sent to E-Stat but E-Stat is not allowed to pass them to DG TREN. A “cleaning” of confidential data by E-Stat is currently in preparation but is still unavailable at July 2004.

The enlargement of the EU is a new challenge for CARE, in terms of data availability and comparability from the new members.

The latter two points are addressed by the Asteryx project: “*The Commission is asked to encourage Germany to provide accident data to CARE at the earliest convenience possible*” and “*The Commission should start the introduction process of the 10 new Member States’ accident database at the earliest convenience possible.*”²²¹

Specific project objectives

The aim of the CARE database is to provide an objective record of road accidents on a consistent basis in a readily accessible database.

The CARE database was constituted with the following specific objectives:

1. Constitution of a database which focuses on road accidents which result in death or injury.
2. Hosting of data on road accidents from the Member States with a high level of disaggregation, allowing maximum flexibility and potential for data analysis.
3. Comparison and evaluation of the efficiency of road safety measures.
4. Promotion of the exchange of information and experience²²².
5. Serve as a basis to develop new road safety measures.

Two strategic projects are of special relevance to CARE Database.

- **CARE Plus I and II:** road safety data from different countries are not comparable because of different definitions, terminology, etc. An important step towards the improvement of the comparability of national road accident statistics held in CARE is achieved by restructuring existing national road accident files within the CARE system.²²³
- **Asteryx Project:** assessment of the value of CARE to the research community and identify future directions of development through a process of problem identification as experienced by ‘users’. The implementations of these initiatives will help CARE maximise its value.²²⁴

Possibilities and limits of evaluating the project

The detailed database is restricted to authorised users. No thorough survey of user’s opinion on the utility and functionality of the database is available. The Evaluation has contacted users and practitioners in the field of transport safety in order to ascertain their views on the programme and the database itself. It has not proved possible to gather information on the number of man days input under the work stream so as to be able to calculate fee rates.

Activities undertaken during the evaluation

- Background research into the policy context and the project.
- Analysis of the background documentation including contract documents and CARE website.

221 Asteryx Final Report, October 2003, “Recommendations and Conclusions”, recommendations 6.1.7 and 6.1.9, p. 51-52.

222 Council Decision 93/704/EC.

223 CARE Plus 2 Final Report, March 2000, p.6.

224 Asteryx Final Report, October 2003, p.12.

- Interview with Jean Paul Repussard, EC Contact.
 - Contacts with Mr Evangelitis, TRASYs, Belgium.
 - Contact with Mr Stefan Hoglinger, Austrian Road Safety Board.
 - Interview with Valerie Davis, Principal Statistician, UK Department for Transport.
 - Contact with Oliver Carsten, ITS, University of Leeds, UK
 - Contact with Henk Pongers, Rvtv.
 - Contact with Philippe Lejeune, Ministere de l'equipment des transports et du logement, France.
 - Contact with Ingrid Van Schagen, SWOV, Netherlands.
- Contact with Benjamin Rowland Huguenin ICRC.

Relevance to the Policy

Is the project evaluated relevant to the Policy goals?

The key question to assess the relevance of the project is:
 Has the CARE database been relevant to the Commission objective of reducing by 50% the number of road fatalities by the year 2010²²⁵ via the implementation of new road safety measures?

Looking at the objectives set for CARE, we find that its objectives are highly relevant to this policy goal:

Objective 1: Constitution of a database which focuses on road accidents which result in death or injury.

The database defines the relative volume of different kinds of road accidents (and the different degrees of 'seriousness' of these road accidents). Reliable road traffic accident information allows the identification and monitoring of the effectiveness of road safety related projects across Member States.

Objective 2: Hosting of data on road accidents from the Member States with a high level of disaggregation, allowing maximum flexibility and potential for data analysis.

Collating data in this form allows for consistent comparisons between countries, thus enabling policymakers to compare the specific problems of different countries. Significant differences in accident trends between countries can be identified, allowing one country to benefit from experience of others that have been successful in implementing measures to tackle such problems. For example, if the disaggregated database reveals a predominant pattern in the nature of accidents where speeding is identified, as the main cause, comparisons could then be made with data from other countries with similar speed limit policies for a corresponding accident trend. Disaggregated data will allow the cause of accidents to be identified more accurately.

Objective 3: Comparison and evaluation of the efficiency of road safety measures.

This will allow policymakers to judge the relative efficiency of different road safety measures, thus enabling them to allocate resources between different measures in the most cost effective way.

Objective 4: Promotion of the exchange of information and experience. Exchange of information provides a data source for bench marking and thus allowing best practice in road safety measures and policies to be identified in Europe.

Objective 5: Serve as a basis to develop new road safety measures.

There are ongoing efforts in Member States to identify innovative measures of reducing road traffic accident without having a detrimental effect on the local environment or economy. The monitoring of new road safety measures, such as the 20mph zones in the UK, will be useful in monitoring the performance of such measures.

²²⁵ White Paper on the European Policy for Transports, September 2001.

How could the relevance of the project be improved / have been improved through adjustments at the margins?	The project is central to the effective understanding of policy through a single set of consistent and coherent data. The principal way to enhance relevance was to complete the database so that it fully reflects EU-15 attributes.
Further project-specific remarks	None
Overall Rating on Relevance: HIGH	

Effectiveness	
Has the project evaluated been effective in addressing its specific objectives?	<p>The effectiveness of CARE database in achieving the specific objectives is as follows:</p> <p>Technical Operation and Constitution of the CARE database and website. The CARE database was founded in 1993. Several projects were implemented to ensure the technological operation of the database, namely "CARE Maintenance and Development", "Development and maintenance of CARE database" and Développement Base de Données CARE". The CARE database was successfully implemented, but certain technical problems were highlighted in the Asteryx project.²²⁶ Training courses were held to overcome these problems. While access to the general CARE data provided on the DG TREN website is unrestricted, access to detailed data is very restricted.</p> <p>Full disaggregated data on road traffic accidents from the Member states, flexibility and potential for data analysis. One of the main problems in obtaining a full set of disaggregated data from Member States is the lack of data from Germany, which contributes with a significant share to the EU accident rates. Their strict privacy laws coupled by the reciprocal agreements on the use of data between Member States have prevented some countries from fully participating in the development of the database.</p> <p>Another issue, addressed by the Asteryx Program²²⁷, is the accession to the European Union of the 10 New Member States. Regarding these countries <i>"The whole process of identifying the available data, establishing the transformation rules and testing the results is now addressed within the framework of the "Safety Net" project"</i>²²⁸.</p> <p>Comparison and evaluation of the effectiveness of road safety measures. During recent years, not all Member State's accident data has been made available as expected²²⁹, either due to delays in data delivery or data</p>

226 For example, the totals of some queries are erroneous; no information on how long a query will last (Asteryx Final Report, October 2003, p.23).

227 "The Commission should start the introduction process of the 10 New Member States' accident databases at the earliest convenience possible" Recommendation from Asteryx Final Report, October 2003, p.52.

228 Jean Paul Repussard email on May 14th.

229 Italy's and Holland's data are missing from 1999 and 2000.

integration. Therefore, comparative research is restricted to a limited number of years.

The CARE Plus I and II projects have contributed to the comparability of data among different countries by setting a list of common variables. Within CARE specific definitions have been provided, but compatibility issues still exist with even with the same definitions between member states.

Promotion of the exchange of information and experience.

At present, a very minor part of the research community in the road safety field has access to CARE.²³⁰ The enlargement of the CARE user community is important to maximise the exchange of information and increase the level or resource available to obtain full benefit of the database at the national level.

CARE is regarded as a very useful free tool which is very well received by users in the Commission and EU national experts²³¹. However, there is a perceived lack of recognition of the database even among researchers because of the difficulties of access to the detailed CARE data²³².

Serve as a basis to develop new road safety measures.

The CARE database is important in assessing effectiveness of new road safety measures. For example, CARE was important in helping identify failure to wear seat belts as one of the main causes of worsening effects of road accidents²³³. This led to the implementation of new road safety measures regarding the issue.²³⁴ CARE has been cited by the International Committee of the Red Cross (ICRC) as providing the statistics which inspired its child road safety campaign.

The database is reported by users²³⁵ to be well known but relatively inaccessible – mainly arising from data exchange and privacy laws. This restricts its effective use more widely and dissuades practitioners from using EU data.

Administratively, the CARE database consists of many projects which must add to complexity of project delivery and possibly increased transaction costs for the Commission.

Have the outputs been effective in addressing the Policy goals?

Yes. While it is difficult to be precise as to cause and effect, the ability to provide directly comparable data across the Member States and thus expose marked differences in accident incidence are likely to have had a shaming effect on those with highest accident rates. Additionally the analysis carried out on the data has informed and guided policy in key safety areas such as seat belt legislation.

How could the effectiveness of the project be improved / have

The effectiveness of the database could be improved as follows.

- Make a CARE helpdesk available for database users during working hours to respond in real time to users.
- Improve the web site functionality by:

230 Asteryx Final Report, October 2003, p.50. No further quantified data are available.

231 Philippe Lejeune, Ministere de l'equiment des transports et du logement, France

232 Oliver Carsten, ITS.

233 European Road Safety Action Program – June 2003, p.8.

234 European Road Safety Action Program – June 2003, p.12.

235 UK DfT; Institute for Transport Studies, Leeds

been improved through adjustments at the margins?	<ul style="list-style-type: none"> - Publicising the website to different stakeholders (authorities at a national and regional and local level, private sector) for example by targeted emails. - Improve data available on web site to include aggregated data as provided by the UN's IRTAD database - Creating an on line forum to facilitate the exchange of experience among members. • Explore with Germany how their data on road accidents can be made available on database without compromising their privacy laws. • Continue with the analysis and incorporation to CARE of the new Member State accident database. • Encourage Member States to send data on time. Most delays are due to internal problems between the road administration and the national statistical office. Therefore, this relationship should be improved. • Explore ways to enlarge the user base while preserving concerns over data privacy.
Further project-specific remarks	None
Overall Rating on Effectiveness: MEDIUM	

Sustainability	
Aspects likely to continue / not continue after end of EC involvement	<p>The CARE database is a cross Community initiative, addressing European Commission policy objectives, it is unlikely that it would continue without EC involvement.</p> <p>The Commission involvement is currently still necessary to:</p> <ul style="list-style-type: none"> • Continue with the technological development of the database. • Develop the commonality of variables. • Publicise CARE database and website. • Engage the authorities of the different countries to send the accident data and to improve the arrangement with regard to making database accessible to a wider user-base. • Convince the authorities to send the missing data and develop policies in line with EC general transport policy.
Factors influencing sustainability	<p>The long term sustainability of the database will be ensured by :</p> <ul style="list-style-type: none"> • Effectively publicising and updating the website. • Continuous effort to harmonise and homogenise the variables (CARE Plus is an example of this effort). • Making sure that the database is accurate and up to date. • Encouraging Germany to allow incorporation of its accident data. • Improving access of the database to a wider user base particularly the transport research community. • Underline the need to incorporate and analyse the data from new member States.
Financing alternatives	<p>Financing alternatives are hard to find. The database is an EC requirement with little apparent national advantage when viewed exclusively from that perspective.</p> <p>It might be possible that the major CARE stakeholders (mainly the participants in Asteryx Project) group together to finance the database. These stakeholders are the KFV (Austrian Road Safety Board), SWOV (Institute for Road Safety Research - The Netherlands), CETE (Centre d'Etudes Techniques de l'Equipement du Sud-Ouest - France) and DfT (Department</p>

For Transport – UK).

However, funding is only part of the problem. Without the cooperation of the Member States through the influence of the EC involvement it is very unlikely that a comprehensive set of free data would be made available allowing cross country comparison. This would undermine the rationale and benefit from the database.

Impact

Impact on Policy making

The impact of CARE database on policy making is very difficult to measure and even more difficult to quantify.²³⁶ CARE provides disaggregated data on traffic accidents. It should however be noted that in the absence of the CARE database, Community-wide information on Road Traffic Accidents will not be available for policy formulation or monitoring.

There exists some difficulties in determining the tangible impact of CARE:

- Drawing a clear link between the database and effects of new road safety policies in Europe.
- Even if there is proof for such a link, the quantification of any impact from CARE will be impossible, in particular if evaluators are interested in the relative contribution from CARE on the new Road Safety Policy.
- CARE represents a 'soft' way of influencing policy and hence its contribution to new policies could be overlooked. even though it may have had a significant contribution in identifying road safety measures.

Some examples where CARE has explicitly been mentioned for being at the source of policy are

- The European Road Safety Action Program's recommendations are based on CARE database.²³⁷
- The identification that failure to wear seat belts was one of the main causes of worsening effects of road accidents²³⁸. This led to the implementation of new road safety measures regarding the wearing of seat belts. There was also support from EU for the campaign to wear seat belt use at national level.²³⁹
- CARE has explicitly been mentioned as being at the source of a policy such as the European Road Safety Action Program's recommendations. Additionally CARE has been cited by the ICRC as a source for its safe child campaign.

The evaluation indicates that given the difficulty of direct measurement, it can only be through conjecture that the availability and publication of comparative data has been influential in supporting policy development in road safety throughout Europe and keeping the issue high on the agenda.

236 The quantification of the contribution of the CARE database on the reduction of the number of accidents could be made on accidents before and after the implementation of CARE database were available. However, there remains of course the problem of isolation of the CARE effect versus e.g. improvements in road infrastructure or vehicle safety.

237 Communication from the Commission – European Road Safety Action Program – June 2003. The objective of the document is to give a set of recommendations to achieve the objective of halving the number of road accidents by 2010.

238 European Road Safety Action Program – June 2003, p.8.

239 European Road Safety Action Program – June 2003, p.12.

Secondary impacts on other policies	None discernable
Communication and media	<p>The CARE information system is communicated on the DG TREN web site and systematically at numerous conferences.²⁴⁰ Nevertheless, publicity is not developed sufficiently around the CARE database. The Asteryx Project pointed out the importance of the development of a newsletter to further promote awareness of CARE and its objectives.²⁴¹</p> <p>CARE data has been used in the following studies (completed in October 2003) as highlighted on the DG TREN website:</p> <ul style="list-style-type: none"> • Number of fatalities in CARE-countries for the accident features concerning a. mopeds and b. speed limit motorways (SWOV, Netherlands) • Heavy goods vehicle accidents (KfV, Austria) • Rear-end or chain accidents (SWOV, Netherlands) • Motorcycle accidents (KfV, Austria) • Evolution and Typology of Accidents and Severity (CETE, France) • Investigating explanatory factors in fatality trends and rates between EU countries Investigating differences in definitions and collection procedures (DfT, United Kingdom) • Cost benefit analysis of retrofitting of blind spot mirrors to trucks and buses (Jacobs Consultancy, UK)
Impact on industry	Little observed or recorded. No proactive involvement of industry.
Overall Rating on Impact: MEDIUM	

Efficiency	
Efficiency in the use of resources	<p>About Euro 5.7 million has been invested by the EC into the development and maintenance of the CARE database to date. Currently, the annual maintenance and update costs are fully met by EC funding. This appears to be running at the level of about Euro 100,000 per annum. If we assume that the average fee rate is Euro 500 per day, this is equivalent to approximately one full time equivalent; it would suggest that maintenance and update resources are being used efficiently.</p> <p>However, the CARE programme, overall has had a large number of individual contracts and support funded irregularly. This is likely to have had a <u>high transaction coordination cost</u>. A more streamlined approach to funding and programme management should be targeted in the future. A move to longer term funding commitments, if not specific budgets, might enable more efficiency to be gained, while accepting that the recent and potential future EU expansion can make long term planning difficult.</p>
Cost effectiveness in terms of results and impact	<p>No cost-benefit analysis has ever been carried out within the CARE project. Since CARE does not produce the same kind of easily identifiable outputs that other projects produce, therefore a classic input/ output analysis is difficult. Benefits from a reduction in accident rates cannot be directly related to a reduction in accidents. Nevertheless, information on over Euro 160 billion worth of accidents through a single database costing about Euro 100,000 per</p>

240 Correspondence with Jean Paul Repussard on 14 May.

241 Asteryx Final Report, October 2003, p.52.

annum, suggests that the cost per item of information provided relative to the overall cost of accidents is low.

In terms of the cost-effectiveness of outcomes from the use of the database, it is likely that constant exposure to comparable data across the Member States must have been partly the reason for improved efforts all-round in implementing accident reduction measures.

Overall Rating on Efficiency: MEDIUM

Scope for integration of indicators into the monitoring of current and future interventions

Indicators for the development and use of CARE are not collected. There is currently no plan for identifying suitable indicators within the CARE Organisation.

The objective indicators in the CARE project would relate to the delivery and availability of up-to-date, comparable and accurate accident statistics. There are no specific indicators to measure this quality aspect.

To assess the efficiency of CARE database in achieving its specific goals, several indicators could be implemented, these include:

- User group satisfaction with technical operation of database e.g. ease of access and flexibility in undertaking analysis.
- User group appreciation of CARE as a tool in monitoring national policies.
- Number of hits on the CARE website and accesses to the database.²⁴²
- The number of mentions of CARE database in the road safety press indicated recognition within the professional bodies.
- Rating of the availability of the CARE website and 'sub-sites'.
- Indicator on full data availability.

Suitability of extension / future recurrence of similar activities

Possible extension / complementary activities for CARE include:

- Continued update and widening of access to the database.
- Research into specific aspects of accident causation. The recent Asteryx project to define directions for research is indicative of the way forward.
- Continued exploration of different accident definitions and the impact on statistics.
- Possible extension to compare with hospital data in Member States as a logic check.

Ways of increasing value added from the funding

Funding under a single series long term contract may reduce administrative burden and provide for a more stable working arrangement.

A Communication plan around the CARE database and web site could be set up to publicise the database and its outputs.

Conclusions

²⁴² DG Press is supposed to provide that information, but is, according to DG TREN Contact Mr Repussard, currently unable to do it.

Relevance: HIGH CARE is highly relevant to achieving EC policy goals. It is the only pan-European source of comparative statistics and as such provides the only means of monitoring the progress, or otherwise, of overall improvements in road safety and particular safety initiatives.

Effectiveness: MEDIUM While CARE has been cited in the development of EC policy and in the continued quantification of its progress in achieving policy goals, the overall effectiveness of the programme is held back through incomplete data and lack of access to the detailed data in the database.

Impact: MEDIUM CARE data is routinely used in EC documents and publicity relating to road accident statistics. The direct impact of CARE database on policy making is, however, very difficult to measure or quantify. Key to this difficulty is the establishment of a clear link between the database and new road safety policies in Europe; the quantification of such links. Nevertheless there are examples where CARE has explicitly been mentioned as being at the source of a policy such as the European Road Safety Action Program's recommendations. Additionally CARE has been cited by ICRC as a source for its safe child campaign.

Efficiency: MEDIUM Most aspects of the evaluation carried out to date by the evaluators lead to the conclusion that resources are being used efficiently in producing data on Euro 160 billion worth of accidents for a contribution of around Euro 100,000. However, there are opportunities to reduce administration transaction / coordination costs.

Concerning cost effectiveness in terms of results and impact, no cost-benefit analysis has ever been carried out by CARE.

Recommendations

Future funding: Funding for the database will have to continue from EC funds if the benefits of the system are to be retained. Additional funding will be required to extend the database to the enlargement countries.

Improve value added of the funding: It will be beneficial to consider separately the maintenance function and the development functions of the database. There is a considerable value in just updating and recording the evolving situation including extension to the new Member States. Development of the database and the use of its data for comparative purposes should be put on a firmer long term basis.

Funding for wider publicity, research of specific accident types or causation or other detailed investigations could be funded as projects on a case by case basis.

7.7 SARTRE

Project title	Social Attitudes to Road Traffic Risk in Europe SARTRE III		
Type of funding^{iv}	Research Study	% of financing	50%
Overall EC budget allocated for this project in €	SARTRE III € 2,366,825 of which the EC contribution is €1,183.100	Contract: year	The project began in 2002 and is still ongoing.
Budget for fees allocated for this project €	€ 661 750	No of person/days	No detailed information available.

Background and genesis

The aim of SARTRE is to gather data on social attitudes and behaviour from a cross section of car drivers in Europe. The results of the survey are to be used to provide, across countries and over time, a comparative analysis of attitudes and behaviour which might be an influence on the causes of accidents and how they might be addressed.

SARTRE III is the third phase of the project that began in 1991 with SARTRE I. The SARTRE I survey (1991 – 1994) was carried out in 15 European countries (10 European Union Member States and 5 non European Union Countries), interviewing 1000 licence holders in each country. A single questionnaire with approximately 200 questions, translated into the relevant language, was used by interviewers visiting people in their homes. The questionnaire was divided into several sections: assessment of risks in general and road risks in particular; the rating of one's own and the behaviour of others on the road; attitudes to speed limits and speeding behaviour as well as regarding alcohol, safety belts and related road safety measures. Following the presentation of SARTRE I conclusions and recommendations to the European Union Road Safety High Level Group in 1994, it was decided to repeat the survey every 5 years.

Accordingly, for SARTRE II (1996 – 2000), a second survey was carried out in 1996-1997 in 19 European countries, of which thirteen were EU Member States. The questionnaire was very similar to SARTRE I, but some new items were added relating to efforts aimed at preserving air quality.

SARTRE III covers 23 countries, including several former applicant countries (recent members since May 2004), members of FERSI (Forum of European Research Institute) and other countries. *"Considering on the one hand the increasing level of mobility between EU and its various neighbours and the consequences for traffic safety, and on the other hand the imminent enlargement of the Union, it has been considered very important to integrate in the same observations and analyses Union countries with the next members and neighbours."*²⁴³

Project stakeholders:

Various European road safety authorities participated as national sponsors, co-funding the project:

- Kuratorium für Verkehrsicherheit & Österreichischer Verkehrssicherheitsfonds, AUSTRIA
- IBSR/ BIVV, Belgian Institute for Road Safety, BELGIUM
- HAK, Hrvatski AutoKlub, CROATIA
- ETEK, Cyprus Science and Technical Chamber, CYPRUS
- Ministry of Transport, CZECH REP
- DTF, Danmarks TransportForskning, DENMARK

²⁴³ Contract n° SUBV-B2702B-E3-SARTRE III-2002- S0715410- Annex I - Detailed Project Description, Social Attitudes to road traffic risk in Europe, phase 3, SARTRE III.

- STRATUM, ESTONIA
- Ministry of Transport and Communications, FINLAND
- Direction de la Sécurité et de la Circulation Routière, FRANCE
- BAST, Bundesanstalt für Strassenwesen, GERMANY
- Certh/ HIT, GREECE
- Technical and Information Services on National Roads (ÁKMI Kht), HUNGARY
- NRA, National Road Authority, Ministry of Environment, IRELAND
- Ministry of Public Works, ITALY
- SWOV, Stichting Wetenschappelijk Onderzoek Verkeersveiligheid and Directoraat-Generaal Personenvervoer (DGP) van het Ministerie van Verkeer en Waterstaat, NETHERLANDS
- ITS, Instytut Transportu Samochodowego, POLAND
- Prevenção Rodoviária Portuguesa, PORTUGAL
- ASSp, Asociácia supervízorov a sociálnych poradcov, SLOVAKIA
- Slovene Road Safety Council, SLOVENIA
- DGT, Direccion General de Trafico, SPAIN
- SNRA, Swedish National Road Administration, SWEDEN
- BPA/BFU/UPI, Swiss Council for Accident Prevention, SWITZERLAND
- Road Safety Division, Department of Transport Environment and Regions, UK

Typology of project

The role of the project in the policy making process.

The SARTRE projects provide political authorities, the European Commission and the High Level Group on Road Safety with feedback and recommendations on driver attitudes and opinions and their acceptability of road safety measures. They are, by their nature, research projects that seek to evaluate the attitudes of European road users and look for socio-cultural factors that could help to explain such attitudes. It provides the only pan-European, continuous, objective analysis of driver attitudes.

The in-depth analysis of road user attitudes toward road safety measures and their risk, as well as their variation across countries, provides the scientific basis for future legislative and policy measures in this area. In particular, the collected data can help to identify best practices across countries, assist in the prioritisation of measures, and ultimately lead to the harmonisation of some practices at the European level.

The methodology adopted

Using a survey approach, extensive data on attitudes and self-reported behaviour of car drivers was gathered and analysed. Representative surveys were carried out in each country on the basis of an identical questionnaire (translated into the respective languages of each country) with the same methodological criteria. Initially designed by SARTRE I and refined by SARTRE II, the SARTRE III version has kept to the 100 core questions for SARTRE I to allow for comparisons over time. Another 30 questions were added to cover new developments and to reflect more recent concerns of road safety authorities.

The sample consisted of 1000 car drivers per country and the fieldwork was carried out by local poll agencies. Survey guidelines, produced by the project, helped in both the sampling and the fieldwork to guarantee comparability across the country's results. To facilitate the interpretation of results, a contextual analysis was conducted for each country to highlight specific factors with a bearing on driver behaviour, such as existing legislation, seat

belt regulations, speeding and drinking-driving restrictions, accident information, and campaigns being conducted.

Two levels of data analysis were defined:

- The first level considers the main results directly obtained from the survey. Specific behaviour discussed includes driving under the influence of alcohol, speeding, and seat belt installation and use, taking also into account demographic variables (age, gender, income, etc.) and contextual variables (enforcement, legislation, technology).
- At the second level, an in-depth analysis considers the importance of the results and their interlinkages. For example, can the age or nationality of the driver explain different attitudes to road safety measures? Changes in behaviour or attitudes between SARTRE II and SARTRE III in areas investigated in both surveys will also be addressed.

Data analysis is conducted using qualitative and quantitative methods. Quantitative methods include descriptive and inference statistical methods.

Geographical coverage

Austria, Belgium, Cyprus, Croatia, Czech, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom.

Specific project objectives

In line with the objectives of SARTRE II, the main goals of the study/ies are:

- To evaluate the attitudes of European road users toward traffic regulations.
- To look for socio-cultural factors that lead to risky behaviour.
- To compare the efficiency of measures put into force by studied countries to find best practices.
- To point out evolutions from one phase to the next.²⁴⁴

As to SARTRE III, these objectives are pursued with the aim to "*provide a follow up of the first and second phases of SARTRE project. An up to date survey of actual car drivers' attitudes and reported behaviour will be established. Beyond this primary objective, the work will allow any changes occurring between the 3 phases in the original countries to be identified, and to position new participants among the previous one.*"²⁴⁵

The ultimate, although rather loose objective is "*to contribute to Road Safety improvement in giving to each country some tools to learn from its neighbours and perhaps to harmonise some practices at European scale...*"

Finally, the dissemination of the results is considered a key aspect for the project. Although the ultimate aim is to influence driver attitudes and behaviour, the first aim is to inform and educate legislators and enforcement organisations.

Possibilities and limits of evaluating the projects

While all the basic information required for the evaluation was available, it is important to stress that SARTRE III has not yet been completed. So far, only the first level of analysis has been completed so that any evaluation cannot assess the overall effectiveness, impact and efficiency of the completed project and only draws partial conclusions.²⁴⁶ Nevertheless, the evaluation can be

244 See <http://SARTRE.inrets.fr/english/SARTRE2E/objectS2-en.htm> - SARTRE 2 objectives.

245 SARTRE III Detailed project description page 4.

246 SARTRE III, European Drivers and Road Risk, Part 1, Report on Principal Findings, May 2004.

considered within the context of the overall SARTRE programme.

As a research project, SARTRE III is aimed at generating broadly comparable data on road user behaviour and attitudes. Policy relevance, impact, and effectiveness with regard to the policy goals can therefore not always be directly established. Nevertheless, the results provide a unique source of cross-Member State comparable data.

Activities undertaken during the evaluation

- Background research on road safety inside and outside the EU.
- Analysis of material provided by EC.
- SARTRE III, European Drivers and Road Risk, Part 1 Report on principal findings, May 2004.
- SARTRE II, The attitude and behaviour of European car drivers to road safety, Part 1 Report on principal results, April 1998; Part 2 Report on in depth analysis, April 1998 and Part 4 Report on Central European countries, November 1998.
- SARTRE I European Drivers and Traffic Safety, in depth analysis, Presses de Ponts Chaussées, Paris 1994.
- Internet research (especially <http://SARTRE.inrets.fr> and related sites, search engines).
- Telephone/contact with Mr. Norroy, EC; Mr. Cauzard, Inrets; and Mr. SARDI, SIPSiVi, Charles Goldenbled, SWOV; John Fitzsimons, NRA, Ireland, Allan Quimby, TRL UK.

Relevance to the policy

How is the project evaluated relevant to the policy goals?

The project is highly relevant to the EC policy goal of improving road safety.²⁴⁷ An understanding of the attitude of drivers with regard to road traffic risk is a prerequisite for increasing the effectiveness and the acceptability of safety policies throughout Europe. The results are used to focus work on the most relevant ways to encourage improved behaviour and enforcement and help to avoid waste through misguided initiatives.

In all countries participating in the SARTRE surveys, speeding, driving under the influence of alcohol and the wearing of seatbelts are regulated, and while regulations are often similar, they are applied with different degrees of rigour. Comparative studies like SARTRE can help countries learn from best practice and understand how human factors and "local" laws and enforcement activities influence road safety. The results assist in targeting measures locally to implement pan-European legislation or best practice.

Monitoring the attitudes and behaviour of drivers is also an important input for the evaluation of the effectiveness of regulations and countermeasures as well as their degree of acceptance among the public. The results assist policy makers to judge the acceptability and efficacy of their policy aspirations.

Survey results show that drivers recognise the need for EU-wide harmonisation of road safety regulations, standards, enforcement and sanctions, which might encourage legislators to seek to attain a higher standard in their Member States in the area of road safety.

The results provide evidence on driver attitudes toward new technologies in the field of road safety. This can be used to support EC aspirations in using modern technologies more effectively across the transport sector

²⁴⁷ The 2001 White Paper "European Transport Policy for 2010: time to decide" sets out 60 practical measures to improve the quality and efficiency of transport in Europe by 2010. Up until 2005, the EC priority in the field of road safety measures will be on the exchange of best practices.

<p>How could the relevance of the project be improved / have been improved through adjustments at the margins?</p>	<p>The key for such a survey is the balance between continuity and relevance. This was at the heart of the SARTRE III preparations and is the best way of ensuring continued relevance.</p> <p>A substantial part of the preparation for SARTRE III was dedicated to reviewing the questionnaire by dropping irrelevant questions and introducing new ones concerning the development of new technologies or the harmonisation of traffic laws in Europe. A number of meetings took place to evaluate the modification of the questionnaire and to agree upon a new version. The results of this review were presented to the High Level Group for fine-tuning.</p>
<p>Further project-specific remarks</p>	<p>No further remarks.</p>
<p align="center">Overall Rating on Relevance: HIGH</p>	

<p align="center">Effectiveness</p>	
<p>Has the project evaluated been effective in addressing its specific objectives?</p>	<p>The effectiveness has to be considered against the objectives.</p> <p>Objective 1 To undertake the survey. This has been effectively carried out and the information collected is usable for the purposes intended.</p> <p>Objective 2 To analyse and draw conclusions from the survey data. The initial report (European Drivers and Road Risk, SARTRE 3, June 2004) provides clear evidence that this work is being undertaken.</p> <p>Objective 3 To disseminate the results. This work is currently underway with the publication of the June 2004 report and future events being planned include a conference in Paris in November 2004.</p> <p>In regard to objectives 1 and 2 SARTRE has been fully successful. In regard to objective 3 it is still work in progress but initial results are encouraging.</p> <p>The size of the sample (more than 1,000 drivers interviewed in each country) and the information gathered (more than 100 core questions) establish to date a unique database for EU-wide, comparative analysis of driver attitudes and behaviour related to road safety issues. The contextual data collected during the study provides indispensable background information to the understanding of similarities and differences in driver attitudes and behaviour across countries. Information gathered by the survey in the area of new technologies, such as speed warning, permitted alcohol levels and fatigue warning devices and black-box systems yield information on driver attitudes, facilitating that same task.</p> <p>To provide for a wide dissemination, the results are presented on the ad hoc website (http://SARTRE.inrets.fr/). Summaries of the results for both SARTRE I and II designed for the general public can be consulted in English and French, and some of the printed publications may be downloaded. Given the initial stages of SARTRE III, there is however no information of substance available on this project on the website.</p> <p>More generally, the availability of a semi-permanent observatory of attitudes and behaviour of car drivers, something similar to a Eurobarometer on road safety, is an invaluable tool to check the evolving opinion of European citizens about road safety and assess public acceptance of possible future legislative and policy measures. With regard to monitoring the road safety situation, they compare the current situation with the results of earlier surveys, trace changes over time, and to identify past successes and upcoming problems and issues of concern.</p>

<i>Have the outputs been effective in addressing the policy goals?</i>	Clearly yes. The goal of SARTRE is to inform and support policy making and the spread of best practice. It is fundamental in overcoming Member States' objections to apparently insurmountable differences which make the safety issue unsolvable.
<i>How could the effectiveness of the project be improved / have been improved through adjustments at the margins?</i>	<p>SARTRE is well known to national safety authorities and researchers. They participate in the setting up of the questionnaire and have access to the results. There might be scope for further communication and use of the results through an overall safety attitudes campaign. This could be directed at a number of different levels:</p> <p>At the research community – through detailed dissemination of results to interested and known research organisations. This is being pursued through the project at present but there might be scope for further access to the details of the survey for analysis of particular problems.</p> <p>At the level of legislators – the results of SARTRE are presented in a rigorous academic manner. There is scope for a more public/ non technical report of findings. This might be included within the project but specifically required for assembly and delivery by a marketing/PR specialist rather than a safety research organisation.</p> <p>At the cross project level – where details of the results from SARTRE can be explicitly required reading (through the terms of reference) for any project funded through the budget line.</p>
<i>Further project-specific remarks</i>	None
<p>Overall Rating on Effectiveness: HIGH (The overall rating for the SARTRE programme is judged HIGH while that for SARTRE 3 has to be considered MEDIUM as the project is incomplete and the effectiveness through dissemination of results can not be assessed yet).</p>	

Sustainability	
<i>Is the initiative sustainable in the longer term?</i>	<p>There are always competing demands for national funds for road safety analysis. It is likely that without EC involvement the individual partners would not be able to sustain their level of commitment to the programme.</p> <p>The extensive survey and fieldwork is resource-intensive and time-consuming. Approximately 50% of the project budget was devoted to subcontracting poll agencies in the respective countries. The other 50% of the budget was used on project management and technical expert liaison in each of the participating countries.</p> <p>Given the need to follow the same approach in designing the questionnaire, sampling, and analysing the data collected, strong co-ordination between national partners is essential. External support facilitates this co-ordination.</p> <p>To date the project costs have been split between the EC and national governments (support for research institutes). Increased support from either of these sides is unlikely to be forthcoming. While other sources of finance are conceivable, e.g. car or safety support manufacturers or (national) automobile clubs, the absence of a clear policy objective and a direct legislative impact promising more tangible benefits to these agents renders their involvement unlikely.</p>

<p>Factors influencing sustainability</p>	<p>Key factors affecting sustainability are:</p> <ul style="list-style-type: none"> • Keeping to the original spirit of the project – a standard core of the same questions which provides a unique time trend, together with a varied section which is updated to reflect relevant topics. The survey should avoid trying to do too much. • Make sure that the results of the project are widely used and are available to decision makers in the EC and in Member States (including police, driver organisations, safety agencies, the public through general news media). This should be as part of a coordinated PR/ communications strategy not just an add-on to the research project. • Try and get industry involved through possible (part) sponsorship of the questionnaire or through linking their product improvements specifically to results from SARTRE. This could be achieved without prejudice to the independence of the survey and results (the donations are included in the general fund for the survey, the firm gets the right, for example, to be included in publicity as a sponsor). The direct reference to SARTRE in post survey developments by sponsors should help to boost the overall awareness of the work undertaken.
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<p style="text-align: center;">Impact</p>	
<p>Impact on policy making or on broader policy objectives</p>	<p>The results from SARTRE underscore the “transport with a human face” theme that permeates the White Paper. The central view of “Brussels” from the individuals in the Member States can be carefully balanced with the country specific results and techniques and approaches adapted to the different cultural and emotional responses to achieve the desired result. Consequently the impact of SARTRE on broader policy objectives could be high as it provides a benchmark of objective feedback from those who are at the receiving end of good intentioned regulation.</p> <p>As already noted, the SARTRE surveys provide an invaluable tool to check the evolving opinion of European citizens about road safety and assess public acceptance of possible future legislative and policy measures. In particular, SARTRE has played a certain role in the decision to reduce speed in urban areas²⁴⁸ and in informing the debate on acceptability of low or zero tolerance for alcohol levels while driving.²⁴⁹</p> <p>More generally and in view of the fact that SARTRE III is still ongoing, the project results have shown that there are frequently very marked differences between countries that might have been considered, or expected, to be similar. These major differences between similar countries have to be carefully taken into account when designing safety interventions. For example, results from SARTRE 3 indicate that while 10% of UK drivers might be expected to drive without a seat belt 67% of Italian drivers would do so. Similarly, while 80% of UK drivers accept rigorous enforcement, only 45% of Danish drivers do. Danes are twice as likely to exceed speed limits as the Swiss.</p> <p>Psycho-social factors recorded, such as driver attitudes, opinions, reported behaviours and perceptions and the prevailing context, e.g. economic circumstances and enforcement activities under way, also play a significant role in determining the degree of success of individual measures.</p>

248 See footnote 192.

249 Telephone conversation, SWOV, Netherlands.

Cost effectiveness in terms of results and impact	<p>leave over such a period and methods of data collection and analysis will evolve – Individual polling companies might not have a significant presence in each country. There might be some scope for considering contracting the project management of the survey to a single body to ensure compatibility.</p> <p>No cost-benefit analysis of the SARTRE project is required to be carried out as part of the project. Given that there is a need to collect comparative data from face to face interviews with drivers then there is really no alternative to a large scale interview/ survey programme of the sort undertaken through SARTRE. To this extent the question at the immediate level of efficiency is was the cost of the survey reasonable? As set out in the section above, this appears to be the case against experience with other known surveys. It might be possible to consider the cost effectiveness of the results through, for example, assessing the impact of a particular accident cause which was identified through SARTRE (e.g. low speeds in residential areas) and considering what might have been the cost if a blanket untargeted approach had been adopted. Given that the cost of prevention/ enforcement can run into millions on any particular action with no certainty that action is likely to succeed, the spending of the equivalent of Euro 200,000 per annum to gain better information as to the target market and the effect is likely to be a most cost-effective use of funds.</p>
Overall Rating on Efficiency: HIGH	

Scope for integration of indicators into the monitoring of current and future interventions
<p>The principal indicators incorporated into the project at present relate exclusively to the delivery of identified outputs within the project budget and timescale, that is the survey (completed), the analysis (part complete) and the dissemination (underway).</p> <p>There might be some scope for the use of Euro/interview costs as a control measure on efficiency particularly if the EC element of the work can be isolated from the participants' requirement for interchange over and above the direct needs of the project.</p> <p>Nevertheless the key monitoring indicators should relate to the effectiveness of the outputs from SARTRE in influencing driver behaviour and ultimately accidents. This might be achieved by counting citations, explicit uses in policy making, use in PR campaigns, direct citation in product developments or enforcement campaigns.</p> <p>A measurement of the impact of the SARTRE can be obtained by crosschecking the changes in attitudes and self-reported behaviour of car drivers with the CARE database.²⁵⁰</p>

Suitability of extension / future recurrence of similar activities
<p>SARTRE provides the only pan-European assessment of drivers' attitudes and reported behaviour. It provides key inputs into policymaking and the assessment of the effectiveness of policy measures in the field of road safety.</p> <p>Collection of these data should continue to be undertaken on a regular basis. A five-year period is broadly adequate when combined with annual safety/ accident statistics which are collected in each Member State and collated through the CARE database.</p> <p>To obtain broadly comparable data, to carry out fieldwork across Europe, to maintain a common reference point and to disseminate results, as widely as possible, continued support by the EC will almost certainly be required.</p>

250 CARE database website (<http://europa.eu.int/comm/transport/care>)

Ways of improving value added from the funding

Now that the sampling procedures and the questionnaires have been widely tested and the SARTRE results are generally considered useful, improving value added from the funding has to be aspired to next. Potential includes:

- It might be possible to undertake the surveys more cost effectively through regional sourcing of surveys or through the use of panels and Internet surveys. However, this might jeopardise the beneficial effect of cross-fertilisation of research communities throughout the EU.

Ensure that the results of the survey are widely and expertly disseminated to decision makers (politicians, legislators, interested organisations/ agencies/ NGOs, the general public through newspapers, magazines TV) in a coordinated and professional manner. This is most likely to be effected through a specialist PR firm and a separate PR/ media campaign.

Conclusions

Relevance: HIGH SARTRE is highly relevant to achieving EC policy goals. It is the only pan-European source of comparative driver attitudes and as such provides the only means of monitoring the progress, or otherwise, of overall reaction to road safety legislation, enforcement and particular safety initiatives.

Effectiveness: HIGH SARTRE has successfully delivered a series of consistent and comparable attitudinal surveys of drivers across Europe. It has informed the development of EC safety policy through encouragement of specific targeted approaches and concentration on key factors. Nevertheless its results have not been as widely used as they have been presented mainly in an academic manner.

Impact: MEDIUM Overall impact is difficult to determine. While results from the research appear to be used throughout EC documents there is often no specific mention made of SARTRE. For example in the EC Communication European Road Safety Action Programme, while the need for socio-economic studies and behavioural research are mentioned, SARTRE as such is not named at all. There needs to be a concerted effort to present the information in an accessible manner.

Efficiency: HIGH The cost of data acquisition appears to be well in line with commercial experience. The ability to target expensive accident reduction measures more effectively is likely to more than repay the annual cost of the survey.

Recommendations

Complete current efforts under the framework of SARTRE III. The SARTRE programme provides a unique basis, for policy or legislative initiatives in the area of road safety and driver behaviour, through an evolving understanding of attitudes and acceptance of enforcement.

Improve the communication strategy and exploit synergies, e.g. by assessing, establishing and expanding collaboration with relevant awareness campaigns and databases. The wider spread the use of the SARTRE information in an accredited form the more useful it will be seen to be by both legislators/enforcers and by the driving public.

Explore more cost-effective ways of conducting Europe-wide fieldwork, by making more extensive use of the internet/communication or by contracting a limited number of companies to conduct the fieldwork regionally.

7.8 TISPOL

Project title, numbers and type	TISPOL Operations Project SUB-B27020B-E3-TISPOL-2002-SO7.13046		
Type of funding	Subvention	% of financing	40%
Overall EC budget €	Total Budget: €2.139 391 ²⁵¹ EC contribution €800,000	Contract: year	2002/2005
Budget for fees € ((Overall EC budget minus reimbursables and direct costs))	Budget for staff: € 1 734 180	N. person/days	3,176 ²⁵²

Background and genesis

The first initiative leading towards the creation of TISPOL was organised in March 1996, where police officials of different traffic police forces met and decided that the co-operation between traffic police forces should be formalised.²⁵³ The project Co-operation of the Traffic Police, the basis of the TISPOL Organisation, commenced in the beginning of 1997 with EC support.

During 1998, TISPOL gave high priority to alcohol, drugs and driving and the first cross-border road policy initiative was developed.

TISPOL became a formal independent legal entity in 1999 with the aid of the Institute for Traffic Care.²⁵⁴

TISPOL organises an annual conference to discuss the latest developments in traffic and roads policing. The first conference in Amsterdam in 2000 launched the restructured TISPOL Organisation and set up the objectives of the organisation for the future.

The TISPOL Operations Project was launched in 2002 to support dissemination of best practices and latest techniques on traffic safety issues throughout Europe.

Typology of project

The role of the project in the policymaking process

The objective of the EU Road Safety Policy is to reduce accidents and injuries on European roads. For example, *“the European Parliament has adopted a resolution on the adoption of common measures to reduce road accidents.”*²⁵⁵ To address the issue of road traffic accidents,²⁵⁶ the European Commission has furthermore proposed an ambitious target of reducing, by 50%, the number of road fatalities by the year 2010.²⁵⁷

With the main mission of TISPOL being to *“bring together the Roads and Traffic Police Forces in Europe and promote the development of road safety*

²⁵¹ TISPOL Operations Project, Financial Report, August 2003.

²⁵² Includes TISPOL Organisation, Alcohol Project, Mermaid Project and National Representatives from 20 countries.

²⁵³ TISPOL Operations Project, Financial Report, August 2003.

²⁵⁴ ITC is a Dutch organisation in charge of the implementation of traffic safety activities to positively influence road traffic users (<http://www.itctrffic.com/>).

	<p><i>and law enforcement of road policy within Europe”, the operation plays an important role in working towards the achievement of this target.²⁵⁸</i></p> <p>In broad terms, TISPOL’s role in the policymaking process is to render existing regulations and enforcement more effective.</p>
The methodology adopted	<p>TISPOL Operations Project primarily consists of a series of pan-European initiatives on road safety checks and improvement to safety measures. These relate to alcohol and driving, commercial vehicle and bus/coach roadworthiness, techniques for safe driver monitoring and dissemination on best practice.</p> <p>The methodology is phased and planned on an annual cycle with specific activities planned over the three year period.^{259,}</p>
Geographical coverage	<p>At the beginning of the project (2002), the member countries of the TISPOL Organisation were: Belgium, England, Finland, Germany, Ireland, Netherlands, Northern Ireland, Norway, Scotland, Slovenia, Spain and Switzerland.</p> <p>During the project (2002-2004), the following countries joined the network: Czech Republic, France, Greece, Italy, Luxembourg, Poland, and Portugal.²⁶⁰ Therefore TISPOL is relevant to the European geographic area, not just the political Union.</p>

Specific project objectives

TISPOL Project was launched to improve the enforcement of the road traffic laws, and attempt to reduce the casualty rate. TISPOL aims to reach its objectives by creating a more co-ordinated approach.²⁶¹

TISPOL’s specific objectives are to:²⁶²

- demonstrate the latest techniques available for traffic enforcement.
- commence a process to harmonise and standardise the enforcement approach between participating forces.
- lay the foundations of a dedicated database and information network to enable best practice to be exchanged and research ideas to be generated.
- to increase public awareness and involvement of the media.

255 Council Decision 93/704/EC.

256 The CARE database shows that road traffic accidents in the European Union claim more than 40,000 lives annually and leave more than 1.7 million people injured, representing estimated costs, both direct and indirect of 160 billion euros.

257 2001 White Paper, “European Transport Policy for 2010: time to decide.

258 TISPOL Operations Project Phase 1 – Final Report p.2.

259 Project documents & interview with David Rowland, TISPOL General Secretary, May 24th 2004.

260 TISPOL Operations Project Phase 1 – Final Report p.3. At the time this report is written, TISPOL is considering the applications of Moldova and Romania.

261 TISPOL Operations Project Phase 1 – Detailed project description p.3.

Possibilities and limits of evaluating the project

The Organisation Project at TISPOL is currently underway. While it is relatively straightforward to evaluate the one off impact of a number of the activities that TISPOL has coordinated the overall evaluation is more difficult to achieve. For example the number of vehicles and drivers discovered to be unfit to continue their journey at the time of the pan-European road side enforcement exercises can be assessed as an activity. On the other hand, the wider take up of improved practices and better enforcement has not yet been systematically measured or reported on within the project.

Activities undertaken during the evaluation

- Background research into the policy context and that of the project.
- Analysis of the background material.
- Interview with Ms. Carla de Vries of DG TREN, 14/05/2004.
- The grid was sent to Ms. Carla de Vries for validation on 24/05/2004.
- Interview with Mr. David Rowland, TISPOL General Secretary, 24/05/2004.
- Interview with Mr. Roland Aellen, Swiss Federal Roads Authority, 17/06/2004
- Emailed relevant national police departments participating in the organisation, which included Belgium, Czech Republic, Finland, Germany, Greece, Finland, Hungary, Ireland, Italy, Luxembourg, Moldova, Northern Ireland, Norway, Portugal, Slovenia, Spain, Romania and the UK.

Relevance to the Policy

How is the project evaluated relevant to the Policy goals?

The key test for relevance of the project is: Has the implementation of the TISPOL Project contributed to the Commission objective of halving the number of road fatalities by 2010? No systematic analysis of this has been undertaken within the scope of the project. It is difficult to examine how one particular intervention, namely one-off large scale road side checks for example, affects road accident statistics.

Nevertheless, the improved cooperation between the police forces of the Member States and improved and uniformly enforced implementation of traffic legislation is a key part of the EU safety policy and as such this is a significant element in support of the policy.

Independently, using the CARE statistics, it might be argued that between 10,000 and 15,000 lives might be saved each year if all EU-15 countries had the same fatality rate as the lowest in the sample. While this might not be effected solely through better enforcement, at the opposite extreme if there was only a 1% fall in fatalities in only the four worst performing states, a possible target for enforcement led improvements, this could be estimated to save up to 50 lives each year, valued at about Euro75 million/yr.

While the legislative basis to improve road safety exists in all European countries, effective enforcement is crucial to reducing road fatalities. Given the wide variety of approaches across Europe, TISPOL promotes learning from other countries' successes and contributes to more effective co-ordination of cross-border efforts.

262 In some cases TISPOL objectives were defined too broadly, as in "TISPOL Operations Project Phase 1 – Detailed project description p.3". (Example: "Organising and co-ordinating multinational operative campaigns"). The specific objectives presented in this study are a redefinition of those.

How could the relevance of the project be improved / have been improved through adjustments at the margins?

A more focused set of objectives might have been better to achieve improved relevance. The stated objectives are for a very wide spread implementation of simultaneous road checks as well as a more localised speed enforcement technique and training/ information sharing. Initial results reported in the project reports suggest that more locally based approaches to enforcement might have been more effective.

Overall Rating on Relevance: HIGH

Effectiveness

Has the project evaluated been effective in addressing its specific objectives?

To address the specific objectives of the project, TISPOL launched several multinational operative campaigns (Objective 1):

Drinking and Driving: An annually co-ordinated activity conducted across Europe to reduce the driving under the influence of alcohol and to attract media attention on the subject.²⁶³ More than 250,000 drivers over 20 European countries were stopped and checked. More than 9,900 persons (4%)²⁶⁴ were arrested.

- **European Operation Mermaid:** An initiative directed against commercial heavy goods vehicles to improve road safety and detect road crime.²⁶⁵ Over 100,000 heavy goods vehicles have been stopped with over 39,000 offences in total (out of which 13,000 had dangerous conditions and were not allowed to continue their journeys).

- **European Operation Bus:** Police checked 28,470 passenger service vehicles and detected 3,835 offences ranging from dangerous vehicles to breaches of hour drivers legislation. Around 13.5% of the vehicles checked were illegal.

- **Operation Speed:** A speed enforcement campaign on the Amsterdam-Berlin corridor using new technology. Vehicles are checked in Amsterdam and re-checked in Berlin. By comparing the data, it can be calculated if the driver breached the legal driving hours or exceeded the legal speed limit for his class of vehicle. Results are not yet fully available.

The other objectives were addressed as follows:

- **Lay the foundation of a dedicated database:** In August 2003, the dedicated database had not been fully established,²⁶⁶ the preparation work was undertaken.
- **Harmonise and standardise the enforcement approach between participating countries:** Some of the campaigns serve as a basis to harmonise the enforcement approaches in the EU. For example, the Drinking and Driving initiative was used to *“prepare common definitions, and develop a systematic approach to breath/blood testing in all road*

263 TISPOL Operations Project Phase 1 - p.8.

264 Traditionally, this rate was only 1.2%. This was considered not to be an effective use of police resources. Improvements in the location of police control and the type of vehicle stopped led to an improved detection rate of 4%.

265 TISPOL Operations Project – Detailed description. Phase 1 – Appendix I - p. 9.

266 TISPOL Operations Project Phase 1 –p.10.

	<p><i>collisions.</i>²⁶⁷ Despite the efforts to standardise drinking and driving policies, they are still not harmonised.²⁶⁸</p> <ul style="list-style-type: none">• Exchange information between relevant stakeholders and serve as a transfer point for best practices: Several initiatives mentioned including the Drinking and Driving campaign, which improved the alcohol detection rate by 3% and this practice were transferred to other police forces, new technology for long distance speed checking, cross force training and familiarisation sessions. Three conferences organised by TISPOL further served as a good opportunity to exchange information. The third one, held in the Canary Islands, Spain, was especially successful. Delegates from four continents were present.• Increase public awareness and involvement of the media in the work of traffic police and in the dangers of driving: TISPOL has secured the help of McCann-Erickson, leader of a marketing company, to produce road safety material. <p>The TISPOL website²⁶⁹ is operational and provides abbreviated publicly available information on the work of TISPOL. There is also a members section which gives access to more detailed information.</p>
<p>How could the effectiveness of the project be improved / have been improved through adjustments at the margins?</p>	<p>The effectiveness of the TISPOL Operations Project could have been improved through a more focused attention to a limited number of locally informed activities and outputs. Possible focus could have been on:</p> <ul style="list-style-type: none">• Introduction of new technology.²⁷⁰ Diffuse speed technology, actually implemented in the Netherlands, France and Austria, all over Europe.• Continue efforts to harmonise the road policing practice among different countries with specific areas (one or two) chosen.• Launch the dedicated database as planned. An implementation plan should be defined as well as the functionalities and specificities of the database.• investigate the need for translation into Spanish, French and German. If English is the common policing language then this resource might be better targeted at translation of specific training/implementation techniques.
<p>Have the outputs been effective in addressing the Policy goals?</p>	<p>The TISPOL campaigns directly reduced the number of defective vehicles and removed a number of defective drivers. As a result it is likely that a number of fatalities and injuries on the road were averted.</p> <p>However, the Phase I Final Report notes that: <i>“Whilst the Europe wide campaigns have produced some results, members believe that more localised campaigns and the exchange of data across borders may be more</i></p>

267 TISPOL Operations Project Phase 1 –p.8.

268 Commission Recommendation of January 2001 states the maximum permitted blood alcohol content for drivers of motorised vehicles (0.5 mg/ml for “normal” drivers and of 0.2 mg/ml for inexperienced drivers). This recommendation is not fully implemented in EU countries.

269 <http://www.TISPOL.org/content/Home>

270 A system has been developed whereby at a transit point the number plates are read and stored digitally. At a second, another device again reads the number plates. Indications on speed, for example, are given when a number plate recorded at the first point arrives at the second.

271 TISPOL Operations Project 2002 – 2005 – Phase I Final Report p. 7.

<p><i>effective.</i>²⁷¹ The mentioned report does, however, not provide further analysis of this statement. Other TISPOL initiatives (database, public awareness) were also not considered to be very effective. Nevertheless, the project is still ongoing and there is time to address these deficiencies.</p> <p>Improved implementation of traffic enforcement is likely to have been effected through the work of TISPOL.</p>	
Further project-specific remarks	None
Overall Rating on Effectiveness: MEDIUM	

Sustainability	
Aspects likely to continue / not continue after end of EC involvement	<p>The TISPOL Organisation is likely to continue but in a reduced form without EC support. Certainly high profile blanket operations such as those carried out under the Operations Project would be most likely to disappear. Additionally the cross border initiatives (following international traffic, sharing best practice, sharing technologies, pressing for standardisation of enforcement) might also weaken as each jurisdiction caters for its own needs.</p> <p>Nevertheless, the TISPOL Organisation managed to subsist during part of its history without EC involvement²⁷² This indicates that the organisation could exist without EC funding, but its scope would clearly be reduced.</p> <p>The stronger police forces are likely to continue to work together and the weaker forces most likely to fall out. The weaker forces are likely to be the ones most in need of the support offered by TISPOL.</p>
Factors influencing sustainability	<p>The willingness of the police forces of different countries to exchange information, participate in the campaigns and harmonise the road safety policies, is an important factor influencing the sustainability of the TISPOL Organisation.</p> <p>Continued relevance of the work carried out under the auspices of TISPOL and the dissemination of best practice through its named channels.</p> <p>Increasing the profile of the work of TISPOL within the police organisations and with the national and EC legislators.</p>

²⁷² <http://www.TISPOL.org/content/About/lang/English/8.phtml>

<p>Financing alternatives</p>	<p>Nowadays, TISPOL receives around 30-40% funding from EC (probably 36% currently). Co-financing comes from the members themselves (individual police forces) and this funding provides largely for attendance at conferences.²⁷³ In addition the national forces also cover the cost of police in the enforcement exercises.</p> <p>Alternative financing might be from a levy of TISPOL stakeholders collectively to finance the TISPOL Organisation (TISPOL full members). These stakeholders are the police forces of Belgium, Czech Republic, Finland, France and Germany. While this might be possible, it is unlikely to pass the test of budget investigation if only a limited number of forces are supporting all others. The weaker forces, most in need of assistance are the ones most likely to withdraw or be neglected in these arrangements.</p>
<p>Impact</p>	
<p>Impact on Policy making</p>	<p>Impact on policy making is not the direct purpose of this project. This project is being conducted to support the uniform enforcement of existing policy across the EU.</p> <p>The results of the TISPOL Euro-wide enforcement campaigns have provided evidence that there are significant benefits to be gained from better enforcement. To this extent their work has been influential in supporting the implementation of policy particularly towards enforcement and the adoption of best practices by all members.</p>
<p>Secondary impacts on other policies</p>	<p>There have been a number a ways in which other impacts have arisen:</p> <ul style="list-style-type: none"> • Enhanced collaboration generally between police forces This has been one of the principal outcomes from the project that police forces in the Member States now can communicate more effectively with each other. • Highlighted the need for the harmonisation of the legislation of different countries: TISPOL should continue to encourage the harmonisation of the legislation approaches.²⁷⁴ Different legal systems in different but neighbouring countries can cause difficulties for drivers.²⁷⁵ Harmonisation of legislation is seen by the authorities as the basis for the implementation of the best practices in road safety. • Encouraged innovation in enforcement/ technology: The creation of an ad-hoc Commission with experts from different countries on this issue can enhance innovation at a European level. Areas for innovation include the development of easy detection tools for alcohol and drugs, for example tools to detect alcohol in blood and the improvement of speed limit control systems.

²⁷³ Interview with David Rowland, TISPOL General Secretary, May 24th 2004.

²⁷⁴ In a recent Seminar given by TISPOL in The European Commission/DG TREN regarding road safety and alcohol, it was stated: "How much alcohol is safe? For a Swedish driver: 0.2 g/100, for a Dutch driver: 0.5 g/100, British driver: 0.8 g/100. If you believe this....You must be drunk."

²⁷⁵ Email exchange, May 10th.

Communication and media	<p>Communication is a key issue to increase the impact of TISPOL campaigns. TISPOL's contract with McCann-Erickson shows the effort of the organisation to maximise the benefits.</p> <p>The TISPOL website contains some interesting articles published on the subject,²⁷⁶ but the quality and quantity of media coverage is low. TISPOL largely communicates through its website, and occasional press releases. It is developing a new media strategy for Phase 3."²⁷⁷</p>
Impact on industry	<p>Improved police techniques in checking drivers and vehicles leads to improved industry standards and equipment. Closer cooperation between police and manufacturers can also be pursued.</p>
Overall Rating on Impact: MEDIUM	

Efficiency	
Efficiency in the use of resources	<p>TISPOL initiatives relating to coordinated police checks on vehicles and the sharing of good practice between Member States were efficient considering its results. The cost to the EC was Euro550 per person day. In addition the police forces contributed over Euro20 million in kind through manpower resources.</p>
Cost effectiveness in terms of results and impact	<p>The work of TISPOL appears to be spread across a wide front on all aspects of enforcement. Much of the effort in this project has gone into a limited number of high profile pan-European exercises which while effective in their own right might have been more so in they had been better directed with local knowledge. This was set out in the regular reports from the project team.</p> <p>Nevertheless, even if only one fatal injury (cost Euro1.5 m) was averted at the time from the 26,000 defective drivers and vehicles taken off the road through the coordinated work during the project, it was money well spent.</p> <p>However, a more focussed approach on technology sharing and best practice might yield better results in terms of accident avoidance.</p>
Overall Rating on Efficiency: MEDIUM	

Scope for integration of indicators into the monitoring of current and future interventions	
<p>TISPOL initiatives have naturally led to some clear and quantifiable results in terms of defectives vehicles and drivers removed. However this misses the point. The objective should be for the long-term sustainability of improvements to enforcement Europe wide. A series of indicators based on the outcomes – improved techniques leading to reduced accidents in a more cost effective manner needs to be researched and put in place.</p> <p>Suggested indicators can be categorised as follows:-</p> <p>Enforcement</p> <ul style="list-style-type: none"> • Penalty/ fines issued • Number of vehicles inspected at the roadside • Court cases pursued for named offences • Records of defective vehicles withdrawn from national fleet 	

276 http://www.TISPOL.org/content/Media_Centre

277 Interview with David Rowland, TISPOL General Secretary, May 24th 2004.

- Accident rates
- Adoption of new and better technology e.g. Operation Speed in Amsterdam-Berlin
- Measure awareness of media campaigns to increase public awareness e.g. public surveys

Best practices

- Evidence of harmonisation of Member State legislation
- Evidence of legalisation enacted in member states
- Best practices identified and codified
- Training days for police forces
- Conferences, with number of attendees noted and analysis of post feedback gained by all attendees

Suitability of extension / future recurrence of similar activities

The work of supporting improved enforcement techniques through TISPOL should continue. These initiatives include sharing best practices among police forces, improving detection rates effectively and reducing the number of illegal bus and heavy commercial vehicles on European roads.

TISPOL initiatives need to be more clearly communicated not only internally to their police audience but also more widely to national and EC legislators.

EC funded activities undertaken through the organisation should seek to build on local knowledge to maximise effectiveness. EC funded activities should focus on more limited regional inter-cooperation between Member State police forces.

Ways of increasing value added from the funding

There are several initiatives to increase the value added from the funding:

- Focus the work through TISPOL on the sharing of best practice and the testing of new techniques.
- Enhance pan-European police collaboration to implement road safety best practices and campaigns.
- Encourage the harmonisation of road safety legislation to implement common best practices via the action of TISPOL authorities.
- Improve dissemination including the website and database.
- Investigate the need for translation of more work.

Conclusions

Relevance: HIGH TISPOL is highly relevant to achieving EC policy goals. It is directed at improving enforcement and best practice safety initiatives across all Member State police forces.

Effectiveness: MEDIUM The Operational Project in support of TISPOL has had mixed results. While the coordinated checking of vehicles across Europe identified a significant number of defectives, the blanket approach might have been better affected through a more targeted approach. Similarly the website and database elements were poorly defined. On the other hand, cross border cooperation on speed enforcement techniques was low-key and perceived to be very effective.

Impact: MEDIUM The impact so far is judged to be medium. High profile one-off vehicle checks of

suspect cost effectiveness have taken a high proportion of the support while low key cross border or inter-force communications initiatives have been undertaken alongside. This suggests a need for a refocusing of the objectives of the support.

Efficiency: MEDIUM While the direct record of potential accidents averted is good the TISPOL reports indicate that the considerable effort involved might have been better used at more locally targeted initiatives.

Recommendations

Continue and increase funding. The work of TISPOL in encouraging inter police force cooperation is one of the means of meeting EC goals of enforcement harmonisation. It is likely that funding will have to be increased to integrate the new Member States.

Better focus on fewer objectives/activities. The results to date indicate that centrally organised grand projects are not the most effective way to support the EC goals. A more focused and measurable set of activities and objectives should be considered. This might include specific enforcement technologies (e.g. related to corridor attributes – speeding, vehicle theft, accident types etc) or twinning between established and new Member State police forces.

7.9 EQUASIS

Project title, numbers and type	Project EQUASIS Phase I B98-B2 7020 SIN 3684-SUB CAAM/P D3 1998 005		
Type of funding	Subvention	<i>% of financing</i>	50%
EC budget €			€460,546 ²⁷⁸
Overall budget €	€921,092	<i>Contract: year</i>	1998-2000
Budget for fees €	€435,606	<i>N. person/days</i>	1125 ²⁷⁹

Project title, numbers and type	Project EQUASIS Phase II SUBP/B2 – 702B – SI2.317018/2000		
Type of funding	Subvention	<i>% of financing</i>	50%
EC budget €			€311,450 ²⁸⁰
Overall budget €	€622,987	<i>Contract: year</i>	2001
Budget for fees €	€200,414	<i>N. person/days</i>	1080 ²⁸¹

Project title, numbers and type	Project EQUASIS Phase III SUBP/B2 – 702 – SI2.327376/2001		
Type of funding	Subvention	<i>% of financing</i>	40%
EC budget €			€279,589
Overall budget €	€698,972 ²⁸²	<i>Contract: year</i>	2002
Budget for fees €	€252,656	<i>N. person/days</i>	1080 ⁴

Project title, numbers and type	Project EQUASIS Phase IV SUBP/B2-702B-S07.13436/2002		
Type of funding	Subvention	<i>% of financing</i>	33%
EC budget €			€231,207
Overall budget €	€700,628 ²⁸³	<i>Contract: year</i>	2003
Budget for fees €	€257,709	<i>N. person/days</i>	1080 ⁴

278 Compte Rendu Financier – Project EQUASIS – July 2000, p. 1.

279 Contract Project EQUASIS – Annex II (Cost estimations).

280 Convention de Subvention Project EQUASIS Phase II – May 2001, p.2.

281 Two persons working full time and four persons working at 50% (meeting with George BARCLAY, May 24th).

282 Convention de Subvention Project EQUASIS Phase III – December 2001, p.2.

283 Convention de Subvention Project EQUASIS Phase IV – November 2002, p.2.

Background and genesis

The European Commission defined a new strategy in 1998 to improve maritime safety. Subsequently a campaign called « Quality Shipping »²⁸⁴ was launched. A Charter on « Quality Shipping » was signed by the key players on the maritime scene with the objective of encouraging maritime transport leaders to have a more responsible attitude towards maritime safety. One of the concrete results of this campaign was the creation of a worldwide database (EQUASIS) that contains information about the quality and security of vessels.

The EQUASIS project was launched to gather information on the quality and security of ships. This information had hitherto been dispersed and difficult to access. EQUASIS also aimed at creating an information system to make this information accessible to everyone via the Internet.²⁸⁵

Typology of project

The methodology adopted

EQUASIS was implemented in four phases:

The first phase of the database development (1988-2000) consisted of the following tasks:

- Involving main stakeholders, namely the European Commission and DAMGM²⁸⁶.
- Feasibility study of the database.
- Detailed functional and technological analysis.

The second phase (the phase covered year 2001) included:

- Development of the website.
- Setting up partners with data providers.
- Day to day administration of EQUASIS.

The third phase (2002) consisted of:

- Consolidation of the database.
- Day to day administration of EQUASIS.
- Evaluate the introduction of technical improvements.

The tasks of the fourth phase (2003) involved:

- Development of new functionalities.²⁸⁷
- Day to day administration of EQUASIS.

The role of the project in the policymaking process

The objective of the EU maritime safety policy is to eradicate substandard shipping through a convergent application of internationally agreed rules.²⁸⁸

EQUASIS is a database created and managed at the international level to inform the shipping community about the quality and security of vessels. EQUASIS provides transparent information about ships, which helps the actors involved in maritime transport to choose vessels that fulfil maritime security standards and comply with internationally agreed rules. This is to

²⁸⁴European Commission website

(http://europa.eu.int/comm/transport/maritime/safety/index_en.htm)

²⁸⁵ EQUASIS website (<http://www.EQUASIS.org/>).

²⁸⁶ «Direction des Affaires Maritimes et des Gens de Mer » Institution directly linked to the French Ministry of Transport.

²⁸⁷ These new functionalities help inspectors to make ship control in ports and give access to the database information by ship manager (meeting with George BARCLAY, May 24th 2004).

	<p>overcome a recognised deficiency in the maritime transport business, which is characterised by incompleteness and lack of transparency of information.²⁸⁹</p> <p>Choosing safer ships leads to a reduction in substandard shipping and better application of international rules. Overall, the EQUASIS initiative results directly from and works towards EU maritime safety policy objectives.</p>
Geographical coverage	<p>As it is available on the internet, the EQUASIS database is at the disposal of the entire shipping community worldwide.</p> <p>In 2003, approximately 50% of the users were European. Of the rest, approximately 20% were from Asia (including Russia) and 10% from North America.</p>

Specific project objectives	
<p>The aim of the EQUASIS project is to provide a readily available database covering safety related information on the whole worldwide fleet.²⁹⁰ The database does not generate new data but provides a single contact source from a number of established but separate databases worldwide.</p> <p>EQUASIS specific objectives are to:</p> <ul style="list-style-type: none">• Promote the exchange of unbiased information and transparency in maritime transport with respect to the utilisation of substandard vessels.• Provide users with a tool to improve the selection of ships in terms of maritime safety.²⁹¹ <i>"With EQUASIS, shippers²⁹² have the information they need to distinguish good ships from bad and act accordingly by giving preference to the compliant vessels."</i>²⁹³	

Possibilities and limits of evaluating the project	
<p>The information received (contracts, Convention de Subventions, evaluation of the project) is relevant and complete. A thorough survey of user's opinion on the utility and functionality of the database does not exist.²⁹⁴</p>	

288 European Commission website

(http://europa.eu.int/comm/transport/maritime/safety/index_en.htm).

289 Rapport Final – Project EQUASIS – July 2000, p.2.

290 EQUASIS website (<http://www.EQUASIS.org/>).

291 EQUASIS is used on a voluntary basis, there is no legal pressure to use this database

292 Persons or entities that contract ships for commercial (or other) purposes.

293 Paper submitted to ICONS (International Commission of Shipping) by the UK Government (Department of Environment, Transport and Regions) October 2000. Available on <http://www.icons.org.au/images/92%20UK%20Govt.pdf>.

294 Interview with George BARCLAY, May 24th 2004.

Activities undertaken during the evaluation	
<ul style="list-style-type: none"> • Background research into the policy context and the project. • Analysis of the background material. • Correspondence with Mr. Jesus Bonet Company • Interviews with Howard Longley, maritime insurance, Brice Martin IMO • Correspondence with Olaisen Kjell of Det Norske Veritas (an international risk management service firm working with EQUASIS). <p>Contractor</p> <ul style="list-style-type: none"> • EQUASIS Director Mr George Barclay (telephone and in person in Paris). • Contacted Intertanko – Peter Swift, Capt. Howard Snaith • Correspondence with Rob Lomas, Intercargo <p>Advisory bodies</p> <ul style="list-style-type: none"> • Correspondence with Colin Wright, Senior Technical Officer, IACS Permanent Secretariat • Correspondence with Maurizio Zini - PSC Project Officer and Assessor, EMSA • Correspondence with Londonoffshore Ltd. <p>Beneficiaries</p> <p>E-mail questionnaires were sent to a number of stakeholders including:</p> <ul style="list-style-type: none"> • The American Bureau of Shipping, • the China Classification Society, • DNV Risk Management Services, and • Germanischer Lloyd Safety Consultants. 	

Relevance to the Policy	
<p><i>Is the project evaluated relevant to the Policy goals?</i></p>	<p>The objective of the EU maritime safety policy is to eradicate substandard shipping through a convergent application of internationally agreed rules.</p> <p>The EQUASIS database is designed to provide free information about the quality and security of the ships to all type of users.</p> <p>EQUASIS is relevant to the policy goals because most of the users are future contractors of ships,²⁹⁵ who use the information on the database to contract vessels that meet shipping standards. By facilitating the contracting of safer vessels, EQUASIS thus works directly toward the eradication of substandard shipping.</p> <p>The project has been well received and was deemed useful in decision making amongst the maritime community.²⁹⁶</p>
<p><i>How could the relevance of the project be improved / have been improved through adjustments at the margins?</i></p>	<p>Overall the project appears to be well targeted i.e. directly providing information to meet EU policy in reducing the number of unsafe vessels though providing information readily from a cross section of sources.</p> <p>EQUASIS could be an effective tool to assist establishment of a common targeting system and common detention appeal process across all the MoU's, and to further encourage common high standards internationally not just in Europe²⁹⁷.</p>

295 According to the statistics on EQUASIS, one out of four users contract a vessel after consulting EQUASIS database.

296 Telephone interview, Intercargo.

297 Captain Howard Snaith, INTERTANKO

Further project-specific remarks	None
Overall Rating on Relevance: VERY HIGH	

Effectiveness	
Has the project evaluated been effective in addressing its specific objectives?	<p>Yes. It has delivered the outputs which were expected, there is evidence that real practitioners in the field use the outputs and there is an increasing use of the database underscoring its credibility in the marketplace.²⁹⁸</p> <p>The project has been very successful in providing excellent assistance in detention monitoring work²⁹⁹. It provides a single point access for obtaining ship and company details and detention details.</p> <p>The EQUASIS database is a tool that provides free, centralised and complete data on vessel security³⁰⁰ for all type of users.</p> <p>The number of users is one key element to evaluate the effectiveness of EQUASIS. During the year 2000, there were 30 new registrations per day (approximately 70% consulted the database). Between December 2001 and December 2002, the number of users increased from 3,200 to 6,200. Users have increased in 2003. According to the Final Report for Phase 1 for the EQUASIS project, initial objectives were largely surpassed.³⁰¹</p> <p>Data is compiled primarily from an amalgamation of data from ICAS and Lloyds databases. Data from the total fleet of 39,500 international vessels on the ICAS database as well as data on all vessels in excess of 100 tonnes world wide from Lloyds means that the database has virtually all the ocean going vessel included within it. EQUASIS is making an important effort to include more data in the website. The quality of the available information in the database is a recognised concern. Data accessed through the database is dependent on updates from the contributors. This might be slow in arriving particularly data relating to recently changed circumstances of a vessel. During 2002, the EQUASIS team received 500 reports from users that data on the database was erroneous, this related to less than 1% of hits on the website in that year. If data is perceived to be unreliable then users will lose trust in it.³⁰² An important part of the present and future work of the team is to ensure that data is valid and up to date.</p>

²⁹⁸ IACS Permanent Secretariat and Londonoffshore

²⁹⁹ Captain Howard Snaith, INTERTANKO

³⁰⁰ The database contains the following information by ship: Identification information (Ship Number, Type of Ship, Flag, Ship Manager, Fleet Manager, Name of Ship, Gross tonnage, Year of build, etc)., Class Certificate, Auditing information (Date of Audit, Responsible for Audit, Date of expiration).

³⁰¹ "Une projection a la fin de l'année 2000.....laisse entrevoir un potentiel d'environ 5000 abonnés, ce qui dépasse largement les espérances initiales » Rapport Final – July 2000 p.9.

³⁰² Correspondence with Olaisen Kjell of Det Norske Veritas (an international risk management service firm working with EQUASIS).

	<p>Some technical issues were encountered during years 2001 and 2002. The service was interrupted several times during 2002, but only for short periods. During 2003 and 2004 the EQUASIS server was improved and a security firewall was added.³⁰³</p> <p>EQUASIS aims to promote the exchange of unbiased information and transparency in the maritime transport with respect to the utilisation of substandard vessels and addresses two main audiences:</p> <ul style="list-style-type: none"> • The freighters³⁰⁴ who have an information system to help them choose the ships that fulfil the standards. • The Ports' Control Officers who can now carry out their inspection based on the information provided by EQUASIS in a much more effective way. <p>EQUASIS has made efforts to improve the relationship with its users. The website, for example, has a feedback form.</p>
<p><i>Have the outputs been effective in addressing the Policy goals?</i></p> <p><i>How could the effectiveness of the project be improved / have been improved through adjustments at the margins?</i></p>	<p>It is not fully clear whether the outputs have addressed policy goals as it is not fully clear from the statistics which are collected why users contacted the database and the use they made of the data. Nevertheless, there is evidence from the website of a wide range of users from a broad cross-section of participants in the maritime sector, and from a wide range of countries that make repeated use of the database³⁰⁵. They also are making use of it in increasing numbers. This would suggest that it is a valuable reference tool for decision makers who are considering the suitability (and safety) of vessels which they are considering for charter.³⁰⁶</p> <p>The main way to improve effectiveness of the database at the margin could be to ensure the accuracy and timeliness of the data through enhanced participation from data providers. This might be by:</p> <ul style="list-style-type: none"> • Proactively seek for new providers of information, to expand the information on the vessels in the database. Examples include port authorities which have current information on vessel status. <p>Additionally there might be other areas for development including:</p> <ul style="list-style-type: none"> • Conducting a survey to understand how users are using the database. Do they really use it in their decision to avoid contracting substandard vessels?
<p><i>Further project-specific remarks</i></p>	<p>None</p>
<p align="center">Overall Rating on Effectiveness: HIGH</p>	

303 Mr George BARCLAY, interview 24th May.

304 In French, les affréteurs (Rapport Final – July 2000 p.2).

305 Detailed reports on website use segmented by category of user and nationality are collected during the registration process.

306 Result of website use 2002/04

Sustainability	
<i>Aspects likely to continue / not continue after end of EC involvement</i>	<p>The Commission involvement at present is key to:</p> <ul style="list-style-type: none"> • Continuing national interest in the database. • Encouraging the different partners to continue to send updated data. • Maintaining an international acceptance of objectivity. <p>It is possible that the current EC partial funding is the spur to ensuring free-to-user access</p>
<i>Factors influencing sustainability</i>	<p>The sustainability of the database will be determined by:</p> <ul style="list-style-type: none"> • The quality of information available in terms of accuracy, relevance and completeness. • Efforts to publicise the website and to make it more accessible, and easy to use. • Sufficient funding and industry cooperation to carry out these two tasks. <p>Should the quality and ease of access be assured, then a fundamental way to underpin sustainability would be to make registration and use of the database mandatory or at least recognise its use in financial transactions.</p> <p>Naturally, any dilution of the need to supply full data by cooperating agencies will fundamentally weaken the “one-stop-shop” nature of the EQUASIS database.</p> <p>In the short term, sustainability is affected by the adequate completion of the database and its updating performance to include timely data on all vessels required by EU legislation.</p> <p>Once the database is properly established, long term sustainability should be affected only by maintenance costs for keeping the database up to date.</p>

<p>Financing alternatives</p>	<p>EC financing has been reduced with time, from 50% in 1998 to a target of 26% in 2004. Nevertheless, EQUASIS representatives rated this funding as “very important”³⁰⁷. Six national maritime departments currently are the primary contributors.</p> <p>At present, one of the key attributes of the database is that it is free-to-users. As a result EQUASIS does not generate its own revenue. As alternatives,</p> <ul style="list-style-type: none"> • Governments could take the full cost; or • Associations in trade, ship owners, charters, insurers, bankers, and shipbrokers could finance the project through a levy/membership fee. <p>Private payment for the database in any way other than a token nature might fundamentally change the nature of the database and its user profile. There might be legal obstacles in obtaining cooperation from publicly funded databases, pressure to ensure accurate data would rise as there would now be an implied contract with users, the users would be reduced to bona fide members of the community who are probably already aware of vessel safety features.</p> <p>Nevertheless, once the database is firmly established and becomes the trusted source for objective data on vessel condition, there should be the opportunity for the EC to consider the withdrawal of its funding at the end of the development phase. Funding could pass to the other public sector bodies currently involved and from private sources.</p>
<p>Impact</p>	
<p>Impact on Policy making</p>	<p>EQUASIS is the result of, not an input to, policy making. The intention is to make ship safety information available to the entire shipping community.³⁰⁸ EQUASIS is thus not intended to have a direct impact on policymaking but is a means of affecting a stated policy.</p> <p>However, by constantly reminding the maritime community of the need for and value of safety information, it keeps safety issues at the forefront of users and, indirectly, policy makers. This should lead to a reduction in unsafe vessels operating and a rise in maritime community awareness.</p> <p>The main target is to highlight and hence decrease the use of substandard vessels. However a clear definition of a substandard vessel is prone to difficulty and the database may be only indicative of potential problems and cannot provide guarantees as to seaworthiness of a vessel.</p>
<p>Secondary impacts on other policies</p>	<p>Only indirectly through example of the usefulness of a widely available database of objective information in a sensitive area or operation. This might encourage similar initiatives elsewhere when the primary policy area is being addressed. An example in other transport areas might be freely available information on vehicle safety or on availability of intermodal service providers across Europe.</p>

307 Mr George BARCLAY, interview 24th May.

308 Mr Jesus BONNET COMPANY, DG TREN email, 10th May.

Communication and media	<p>Initiatives on this topic were:</p> <ul style="list-style-type: none"> • Promotion of EQUASIS website in international conferences during 2001/2.³⁰⁹ • Regular presence in the international maritime press. For example, during 2002, EQUASIS was mentioned 940 times in the BBC. • EQUASIS is referred to in authoritative forums such as the International Commission of Shipping³¹⁰
Impact on industry	<p>The high and rising use of the database by a broad cross section of the maritime community suggests that it is having a significant impact on the industry. However, there is no objective indicator of impact on decision making.</p> <p>There might be ways of increasing the impact through:</p> <ul style="list-style-type: none"> • Increasing the number of ship contractors that visit the website. This could be achieved through a better communication strategy and advertising campaigns. • Encouraging insurers to make the use of EQUASIS a prerequisite to contracting a vessel to transport goods. • Encouraging insurance companies to introduce incentives that discriminate against poor safety records (and using EQUASIS to check safety record). • Encouraging banks to vary their financing terms according to safety records, using EQUASIS in the process.³¹¹
Overall rating on Impact: MEDIUM	

Efficiency	
Efficiency in the use of resources	<p>Overall funding has remained at about Euro 600-700,000 per annum over the three years since 2000, while the EC commitment has fallen from 50% at the outset to 26% in the 2004 contract. Sharing costs with other administrations keeps the Community contribution at a low level.³¹² The concentration on collation of existing data sources means that maximum leverage of existing information is assured.</p> <p>Ongoing costs relate to both maintenance and development of the database. There is a significant amount of data maintenance to be done to make sure that data is accurate and up to date as well as continued development of the database to include further descriptive information relating to vessel condition. As the database has a finite and a well defined user community (decision makers in the selection of vessels), we should expect that in the future, once the database is established the cost will fall to maintenance only.</p>

³⁰⁹ Rapport sur le déroulement du programme EQUASIS pendant l'année 2002, p. 1.

³¹⁰ International Commission of Shipping, 2001 conference in Sydney

³¹¹ Paper submitted to ICONS (International Commission of Shipping) by the UK Government (Department of Environment, Transport and Regions) October 2000. Available on <http://www.icons.org.au/images/92%20UK%20Govt.pdf>.

³¹² Mr Jesus BONET COMPANY, DG TREN email, 10th May.

Cost effectiveness in terms of results and impact

In general terms, an internet-based information tool/ database has a wide outreach at relatively low cost.

The benefits of the use of the database are difficult to quantify.³¹³ Ideally, cost effectiveness should be measured by comparing the benefits of EQUASIS (reduced pollution in coasts, reduced damage in environment) with the cost of the database. At present, no such cost-analysis is available. In the absence of this measure we have used the usage of the data as a surrogate measure.

On the basis of the usage of the database there is clearly an increasing community of users and of web site activity. This has increased from an average of about 4,800 users/ month in 2002 to over 7,800 user/ month in 2003. If users did not find it useful they would not use it – especially repeat users. However, we don't know how many repeat users there are. The cost per hit halved between 2002-2003, and is expected to halve again in 2004, as evidenced by continued rising usage in the first few months of 2004.

A value of \$3 million is placed on a fatal accident averted in the maritime sector.³¹⁴ If one fatality every 4 years were to be avoided by the use of the database it would have covered its full annual operating costs.

Overall Rating on Efficiency: HIGH

Scope for integration of indicators into the monitoring of current and future interventions

313 Mr George BARCLAY, interview 24th May.

314 IACS Permanent Secretariat, IMO formal risk assessment.

The database nature of EQUASIS makes it particularly open to quantified monitoring of its activities. There are several indicators that are interesting to measure EQUASIS. Regarding the database such as the number, type, and purpose of users of EQUASIS database³¹⁵. Data is routinely and copiously collected during the ordinary operation of the database and fully reported in their feedback. A comprehensive set of indicators can readily be devised. It is also easy to record the availability of the database, noting downtime. This monitoring aspect could be extended to place the database within the context of the world fleet:

- Percentage of contractors that check EQUASIS database before choosing a vessel (by country).
- Statistics on substandard shipping independently collected.

Of more concern are the outcomes from the interaction with the database. How does one measure quality of information and the use to which it is put? This might be attempted by a simple follow-up email (the address is collected during the website registration process) some weeks after an inquiry asking about quality and use of data. This might be on a sample basis across user types and nationalities. Monitoring could also be extended to the publicity given to EQUASIS through:

- Number of mentions of the EQUASIS database in specialised press.
- Number of presentations/seminars related to EQUASIS.

However once established, this should be used carefully. The maritime community is quite small and once the database's usefulness is established its spread by word of mouth and a few well-targeted mentions in the relevant technical press are likely to be sufficient. Continued self-publicity might simply be an excuse for travel and conference attendance. INTERTANKO believe that there are excellent opportunities to expand the role of EQUASIS by supplying more detailed information to the general public and to continue to increase transparency³¹⁶. INTERTANKO is working with www.Q88.com in developing their web site which lists very detailed information for vessels, which they hope can be linked to the EQUASIS web site in due course.

Suitability of extension / future recurrence of similar activities

The maritime community appears to appreciate the value added to maritime security generated by EQUASIS. There is a concrete on-going plan for 2004, which consists of the following points:

- Disseminate relevant information concerning the quality and safety of the world merchant fleet.
- Enhance the database functionality (namely "Flag State Information" and "Port State Control" both of which relate to current and changing information on the status of a vessel. This is particularly important to ensure timely information).
- Refine information concerning ship operators in order to improve their identification
- Technical evolution of the database in order to improve its reliability and consistency.³¹⁷

Ways of increasing value added from the funding

Several initiatives could be carried out to increase the value added from the funding³¹⁸:

- Communication of the database to main stakeholders.
- Improvement of the quality of EQUASIS data, via improving the timeliness with which changing data is provided.
-
- Minimisation of technological problems with the website.

³¹⁵ Mr George BARCLAY, interview 24th May.

³¹⁶ Captain Howard Snaith, INTERTANKO

³¹⁷ Mr Jesus BONNET COMPANY, DG TREN email, 10th May.

³¹⁸ Most of these initiatives were treated in more depth in previous sections of this study.

- Conducting of surveys on the main users of the database to assess benefits and identify areas for further development of the database.

For the longer term, EC should consider whether it is possible to remove EC funding in what should be a proven application in the commercial market.

Conclusions

Relevance: VERY HIGH The project is well targeted. It directly provides information on the quality of vessels prior to use thus promoting the use of safe vessels and the withdrawal, through lack of use, of unsafe vessels; a key target of EU policy.

Effectiveness: HIGH The database provides the only internationally accessible one-stop shop for consideration of vessel safety characteristics. It is provided free at the point of use. There are an increasing number of registered users and evidence of contact with and inspection of the database. There is still some concern about the quality and timeliness of the data so it cannot be totally relied on.

Impact: MEDIUM The impact is difficult to measure. While the number of users has risen there is no confirmation that the data is used for decision making for the use of safer vessels. Further monitoring of users through follow up emails would assist measurement.

Efficiency: HIGH The cost per inquiry of delivering the database information continues to fall rapidly (halving in each of the last two years) reflecting the cost effective nature of the work.

Recommendations

Further funding is required. The aim is to establish EQUASIS as THE single source for authoritative data on vessel safety. Funding should be focused on ensuring that this objective is achieved.

Improving value added of the funding:

- Ensure that users are getting the information that they need to assess the quality of shipping. This will require a user survey/feedback.
- Improve the quality of EQUASIS data, timely data inputs from its main data providers.
- Enhance database functionality.
- Implement the proposed indicators to better assess the effectiveness and efficiency of the database.
- There might be scope for further communication with the maritime community about the database in particular insurers and charters. The maritime community is limited but there are opportunities to extend the use of the database for example into the Far East.

For the longer term, DG TREN should consider whether it is possible to remove EC funding in what should be a proven application in the commercial market.

7.10 EuroBOB

Project title and number	EuroBOB 2001 – 2003		
Type of funding	Subvention	% of financing	44.66% 2001-2002 41.05% 2002-2003
Overall EC budget €	Total Cost 2001-2002: €1,759,554 EC Contribution 2001-2002: € 785,750 Total Cost 2002-2003: €2,664,759 EC Contribution 2002-2003: €1,094,000	Contract: year	2001 – 2002; 2002 – 2003
Budget for fees € (Overall EC budget minus reimbursable and direct costs)	€298,726,5 ³¹⁹	N. person/days (Overall person days, irrespective of categories of experts)	Information not available

Background and genesis

It is estimated that excessive blood alcohol concentration is involved in 1 out of 4 accidents and better drink-driving management could prevent up to 10,000 fatalities in the EU annually.³²⁰ Among 15-25 year olds, road accident deaths represent the first cause of mortality (26.4%).³²¹ These statistics are the background to the implementation of a campaign against drinking and driving through a 'designated driver' approach in Belgium, France, the Netherlands, Luxemburg and Greece. ('Bob' is the personalisation of the designated driver who refrains from alcohol consumption). The campaign started in Belgium 1995; it has since been extended to the Netherlands, Greece and France, which all applied the concept to their 'Don't drink and drive' campaigns.

The key idea is to enable European partners to build on a strong basic concept, defined in a concise list of specifications, while on the other hand leaving them with a considerable degree of freedom to adapt the concept to local taste and sensibilities. On the other hand, using the original name and logo in different countries has the advantage of considerably increasing cross-border recognition.

Typology of project

The role of the project in the policymaking process	Lowering the number of road casualties related to drinking and driving, using the combination of mass media, police and local activities in pubs in line with the objectives of the EU Council Resolution on Road Safety of 26 June 2000.
The methodology adopted	In each country, a different set of measures was applied. For reasons of space constraints, we will provide a list of the main actions of two countries

³¹⁹ Grant Agreement EuroBOB 2002-2003, Annex III, p. 45.

³²⁰ Seminar 'Designated Driver Campaigns in Europe: A common approach to Fight Drink Driving.' 27 May 2003, Brussels.

³²¹ Grant Agreement Euro Bob 2002-2003, Annex I-B.

only. Belgium and France concentrating on the following sets of activities:

Belgium:

- A 'Bob-bus' with a 'drinking and driving simulator' goes to local initiatives or parties, provides information and provides alcohol tests with the same equipment that the Belgian police use. The Bob-bus had 33,155 visitors in 2001.³²²
- More than 9,000 pub managers received a free pack of Bob promotional materials.
- Distribution of Bob posters.
- Bob TV adverts.
- Bob musical radio adverts.
- Establishment of a Bob Internet page (www.bob.be), including a Bob of the month contest, and events column.
- Establishment of rotating advertising panels.

France:

- A poster campaign in discotheques.
- Local actions, usually in cooperation with nightclubs, including making breathalyser tests available, or the provision of non-alcoholic drinks.

Further, miscellaneous campaign elements in various countries included:

- Distribution in schools and on university campuses of 'prevention kits' containing breathalysers, information leaflets, or tables allowing an individual to judge his or her susceptibility to alcohol given his / her weight, gender.
- Concentration on merchandising in everyday goods, to ensure that young people encounter the 'Bob-message' in their daily lives: key-rings, beer-mats, T-shirts, serving trays, balloons, stickers, pens, folders, banners, window stickers.
- Staff hired by EuroBOB are sometimes present at the entry of nightclubs to help groups of young people choose the designated driver. The designated driver then obtains a wristband that entitles him to free non-alcoholic drinks all night, with his alcohol level controlled throughout by the EuroBOB staff.
- Mass email-campaign: an information email is sent to several thousand young people with essential information both about the effects of drinking and driving and about EuroBOB. The email is designed in a way to encourage young people to forward it to their friends, hence propagating the EuroBOB message instantaneously.

The method is one of an 'evolving project'. This is most clearly visible in the Belgian case, where the project originated. Firstly, people had to know 'who Bob was' (1995/1996; 1996/1997), afterwards their attitude toward drink driving had to be changed towards a clear recognition that drinking does not mix with driving (1997/1998; 1998/1999; 1999/2000), and the latest campaigns (2000/2001; 2001/2002) are targeted at a behaviour change towards choosing a 'designated driver' at the start of the evening.³²³

EuroBOB has a common basic concept, but aims at adopting itself to local tastes and sensibilities.

Geographical

Belgium, France, the Netherlands, Luxemburg and Greece until 2002. The UK

322 Bob Final Report 2002.

323 EC, Belgian Brewers Association, IBSC: Bob Final Report 2002.

coverage	joined in 2003; Ireland joined in 2004. Possible future members (with whom there have been negotiations at some point in the recent past) include Malta, the Czech Republic and Austria.
Specific project objectives	
The 'Bob' designated driver campaign is aimed at lowering the number of road casualties related to drinking and driving, using a combination of awareness-raising by mass-media, police controls and local campaigns in bars and pubs. A cross-border campaign will most certainly lead to an increased awareness of problems associated with drinking and driving throughout Europe, and will thus positively influence behaviour. ³²⁴	

Possibilities and limits of evaluating the project
<p>EuroBOB consist of a very diverse set of activities (as described in the background section of this evaluation grid) and includes, mass email campaigns and distribution of prevention kits on campuses. Moreover, the selection of which of these activities are applied at a national level differs from country to country. There is not one type of 'Bob' campaign, which leads to some difficulty of comparing the Bob campaign in its effectiveness.</p> <p>Moreover, the methodological complexities associated with measuring progress against the overall objective, (lowering of the number of road casualties related to drinking and driving) decreases the opportunities for providing a rigorous Impact evaluation of EuroBOB. There are clear limits in linking EuroBOB to effects on accident statistics. The link between the campaign and road accident statistics is almost impossible to establish with certainty. Only with a complex evaluation methodology, including attrition analysis, proxy indicators and large scale surveys, would it be possible to evaluate EuroBOB's impact. The fact that this has not been undertaken to date is an issue that stakeholders have raised as undermining the project.³²⁵</p>

Activities undertaken during the evaluation
<ul style="list-style-type: none"> • Desk research with various documents provided by the EC, contractors or stakeholders. No Final Report was yet available for 2003 (it is currently being drafted). • Further desk research with outside background material on campaigns against drinking and driving. • Personal interviews with Mr. Peter de Nieve of the Institut Belge pour la Sécurité Routière; Mr. Patrick Norroy of DG TREN, both on 14/05/2004. • Various correspondences and conversations with EuroCare, an alliance of voluntary and non-governmental organisations working on the impact of the European Union on alcohol policy in Member States. • Correspondences / Interviews with Andrew McNeill of the Institute of Alcohol Studies, UK.

Relevance to the Policy	
Is the project evaluated relevant to the Policy goals?	<p>The project is clearly highly relevant to the policy goals:</p> <ul style="list-style-type: none"> • Drinking and driving remains a serious problem on European roads, resulting in high levels of death and injury. It is estimated that excessive blood alcohol concentration is involved in 1 out of 4 accidents and better drink-driving management could prevent up to 10,000 fatalities in the EU

³²⁴ Grant Agreements between the EC and the Institut Belge pour la Sécurité Routière, October 2001 (for the Campaign 2001-2002) and December 2002 (for the campaign 2002-2003).

³²⁵ Interview with Andrew McNeill of the Institute for Alcohol Studies (IAS), UK.

<p>How could the relevance of the project be improved / have been improved through adjustments at the margins?</p> <p>Further project-specific remarks</p>	<p>annually.³²⁶</p> <ul style="list-style-type: none"> • Young people generally have a disproportionately high representation among serious traffic accidents: young drivers up to the age of 24 are involved in a quarter of all traffic accidents with death and serious injuries.³²⁷ • Both of the above problems combined lead to the most serious of all statistics – namely drinking and driving among young people. Road accident deaths are the leading cause of deaths (26.4%) among 15-25 year olds.³²⁸ Even when their blood alcohol contents (BACs) are not high, young drinkers are involved in driving accidents at higher rates than older drivers with similar BACs.³²⁹ • Awareness-raising with a view to change behaviour.³³⁰ <p>The group targeted by the project is still fairly broad (young people is defined in various ways and ranges from 15 to 25). The relevance of the project could be improved by identifying more precise target groups, especially those in the above age bracket. One approach would be to focus slightly more on male rather than female drivers in this age bracket, they are more likely to have accidents involving alcohol consumption.³³¹</p> <p>The relevance of the project could have been improved by further increasing young people’s sensibility to the dangers of alcohol and driving in a broader and all encompassing way.</p> <p>None</p>
<p>Overall Rating on Relevance: VERY HIGH</p>	

<p>Effectiveness</p>	
<p>Has the project evaluated been effective in addressing its specific objectives?</p>	<p>Within the confines of this evaluation, it has not been possible to evaluate the link between EuroBOB’s awareness raising activities, and impacts on the number of alcohol related accidents. However, there have been substantial amounts of research on this issue, although according to research carried out by EuroCARE; the evidence on the usefulness of designated driver campaigns is mixed.³³² Several road safety research institutes/ associations (e.g. those involved in EuroBOB, e.g. the Institut Belge pour la Sécurité Routière) do consider the approach generally effective. Whilst other researchers have suggested that designated driver campaigns are not very</p>

326 Seminar ‘Designated Driver Campaigns in Europe: A common approach to Fight Drink Driving.’ 27 May 2003, Brussels.

327 Deutscher Verkehrssicherheitsrat, www.dvr.de

328 Grant Agreement Euro Bob 2002-2003, Annex I-B.

329 U.S. Department of Health and Human Services. Ninth Special Report to The U.S. Congress on Alcohol and Health. (June, 1997) Available at <http://odphp.osophs.dhhs.gov/pubs/HP2000/hppub97.htm>.

330 Hotel, R. (1990) Random Breath testing and random stopping programmes in Australia.

331 Alcohol Concern, Fact sheet 4 on Drink-drive accidents. ‘Alcohol Concern’, is a UK national voluntary agency on alcohol misuse (www.alcoholconcern.org.uk).

332 EuroCARE (2003): Drinking and Driving in Europe – a report to the European Union, page 27. Saint Ives, England.

effective as a measure to prevent alcohol-impaired driving, pointing out that there is no evidence to date that they lead to a reduction in drinking and driving.³³³

Nevertheless the EuroBOB campaign is including two features in its work that are generally thought to strongly increase the success rate of designated driver campaigns:

Firstly, there is evidence that there is a higher success rate for designated driver programmes that are designed for a specific community³³⁴. This is reflected in EuroBOB, where the design is focused on the individual nations and their cultural specificities.

Secondly, it is acknowledged that the combination of designated driver campaigns with locally and temporally coordinated repressive campaigns usually raises the effectiveness of the designated driver campaign: “(The)...use of random breath testing leads to drastic reduction of driving under influence of alcohol if controls are accompanied by intensive publicity campaigns and are carried out often and in good visibility.”³³⁵

Though the design of the project and the selection of performance measures, may provide indications of effectiveness in meeting objectives. An examination of various EuroBOB reports it seems that the internal logic of working towards specific objectives has not been adequately addressed.

In the Final Report, ‘Awareness of Bob’ and ‘Media Impact’ are counted as major campaign results. However, both of these points should be mentioned as successful in message dissemination and achievement of outcomes, rather than as a campaign result (impact) – The assumptions that activities will lead to an impact on objectives have not been elaborated.

Hence, the ‘Memory Campaign’ (i.e. how many respondents had heard of the Campaign) in Belgium led to the results in the following table.

Basic = all %		Total	Gender		Age	
Yes	%	Male	Female	-35	35-54	55+
Yes	74	79	69	79	79	63

333 EuroCARE (2003): Drinking and Driving in Europe – a report to the European Union, page 6. Saint Ives, England.

334 Hingson, R.; McGovern, T.; Howland, J.; Heeren, T.; Winter, M. and Zakoos, R. (1996): Reducing alcohol-impaired driving in Massachusetts: The Saving Lives Program. American Journal of Public Health, 86, 6: 791:797.

335 Homel, R. 1990, Random breath testing and random stopping programs in Australia, Wilson, and Mann: Drinking and driving. Advances in research and prevention. The Guilford Press, N.Y., 1990.

336 Presentation of the campaign “C’est la fête, BOB conduit” (“It’s party time, and it’s Bob who is driving”). Press conference by Ms Isabelle Durant, Vice-Prime Minister, Minister for Mobility and Transport, President of the Belgian Institute for Road Safety. Brussels, 29 November 2001.

337 EC; Brasseurs Belges; Institut Belge pour la Securite Routiere: EuroBOB – Final Report, 12/2002.

338 EC; Brasseurs Belges; IBSR: EuroBOB – Final Report, 12/2002, p. 21.

339 EC; Brasseurs Belges; IBSR: EuroBOB – Final Report, 12/2002, p. 21.

340 EC; Brasseurs Belges; IBSR: EuroBOB – Final Report, 12/2002, p. 21 p. 23 and p. 42 respectively.

Recognition of EuroBOB in Belgium

Moreover, considering respondents' practical experiences with Bob, among respondents, 36% had proposed themselves to be a Bob, 35% had been selected at some point as a Bob, 66% know somebody who had been elected as Bob, and 43% had been driven by a Bob. For the under 35's, each of these figures was even higher.³³⁶ This type of survey on practical implications of EuroBOB, which appears central to the project, was only conducted in a very limited fashion in the other participating countries.

Additional questions included whether those who had proposed themselves to be a designated driver had done so because of having seen the campaign.

The campaign also extensively presents police control results, e.g. in Belgium³³⁷, but might have made more clear the link between the EuroBOB campaign and these police control results. Already, the police control results on their own encountered some methodological difficulties (as the report acknowledges, *"with regard to the results of these controls, we must be very careful about generalising conclusions: the data collection is done on a voluntary basis, which means that the number of participating police forces and those who send the results to the IBSR change every year."*)³³⁸ If one combines this with the methodological challenge of establishing a clear link between the EuroBOB campaign and police control results, the challenge in assessing the effectiveness of EuroBOB becomes evident.

Similarly, the Final Report for EuroBOB in France mentions alcohol controls but might have made clearer the explicit link with EuroBOB. The conclusions of the Final Report for France also mostly discuss message dissemination results.³³⁹ The Final Report for Greece also concentrates on message dissemination and equates success in message dissemination with a successful EuroBOB campaign (which is of little effect if, as the conclusions for Greece state, that *"not even half of the persons from the target group think that drink driving is dangerous"*, even though it is in turn an encouraging sign that *"most Greek drivers between 18 and 39 indicate that they are willing to modify their behaviour as a result of the campaign"*).³⁴⁰

For the Netherlands, the assessment does go beyond message dissemination into whether EuroBOB has actually changed young drivers' actual behaviour (i.e. young drivers not only having heard about EuroBOB but actually agreeing among each other who will be the 'designated driver'). The evidence cited in the report suggests that this preparedness has not increased significantly since the start of EuroBOB in the Netherlands but explains this by the fact that this percentage of 'preparedness' was already high in a preliminary survey before EuroBOB started.

The Dutch report also reports from surveys on whether the campaign has 'changed the agenda' of conversations among young people, i.e. whether it has helped to bring the issue of drinking and driving and designated drivers into conversations. Again, this already seems to have been widespread in the Netherlands before the campaign so that no large increase due to EuroBOB could be seen.

On several occasions, reports on EuroBOB links an increase of the campaign during the months of December and January to fewer intoxicated drivers during the same period. However, the causal connection might have been established in a rigorous manner.

Thus, the campaign can only show to have partly achieved its objectives. While "lowering the number of road casualties related to drinking and driving" is of course a highly ambitious objective to agree to, the campaign might do

<p>Have the outputs been effective in addressing the Policy goals?</p> <p>How could the effectiveness of the project be improved / have been improved through adjustments at the margins?</p>	<p>well to go beyond measuring message dissemination towards attempting to measure behavioural change.</p> <p>However, it is admittedly in the very nature of an awareness-raising campaign that its precise impact is difficult to evaluate. But, especially given that EuroBOB applies many of the right measures to be effective, there is a need for the project itself to explicitly make these logical links to the ultimate objectives (i.e. reduction of drinking and driving among young people), and at least attempt to measure them.</p> <p>There might still be scope for improvement on this front, given that mere media dissemination seems to be the main measure of success for EuroBOB, with very few results on whether this message has actually changed the behaviour of young drivers. Clearly, this would be methodologically very difficult to do, but EuroBOB Reports should go further in attempting this.</p> <p>EuroBOB has to go beyond mere 'message dissemination' if it is to be effective.</p> <p>Some of the stakeholders working with EuroBOB in Belgium have also demanded a better collaboration with the police forces and better figures on alcohol-related accidents. In future, research institutes in Belgium are hoping for all breath testing to be conducted at random to allow for more rigorous statistical analyses.³⁴¹</p>
<p>Further project-specific remarks</p>	<p>None</p>
<p align="center">Overall Rating on Effectiveness: MEDIUM</p>	

<p align="center">Sustainability</p>	
<p>Factors influencing sustainability</p>	<p>A strong public interest in combating drinking and driving, and consequent public financing for EuroBOB and complementary activities, is one of the main factors influencing sustainability. For instance, France has seen an intense interest, with much media attention, in road safety and alcohol and driving issues. The attention paid to, and the money given to EuroBOB will also be dependent on this broader level of public awareness, which relies in turn on various factors.</p> <p>One factor is accident statistics; but there could also be unforeseeable events. For instance in France, public awareness of safety issues among young road users has been much increased recently by the case of a young tetraplegic accident victim writing (with the help of a journalist) a book³⁴² about his experiences. This unexpected factor has stirred much debate in France about road safety issues among the 15-25 age group (the main target group for EuroBOB).</p> <p>It should also be kept in mind that the effects of the campaigns are short, and require many repetitions if it is to continue to be effective.³⁴³</p>
<p>Aspects likely to continue / not</p>	<p>This is likely to differ for different countries. While the financing of EuroBOB is on a sound footing, for example, in Belgium (due to non-EC financing, such as</p>

341 Personal interview with Mr. Peter de Nieve of the Institut Belge pour la Sécurité Routière, Brussels, 14/05/04.

342 Vincent Humbert: « Je vous demande le droit de mourir. » Editions Michel Lafon, 2003.

343 Interview with Mr. Norroy, 14/05/04.

**continue after
end of EC
involvement**

national public financing or the contributions from the drinks industry; in fact initially EuroBOB in Belgium did finance itself without EC help), the financing in more recent participant countries (Greece, Portugal) is much more dependent on the EC.³⁴⁴

EC Funding for EuroBOB is mainly seen by the managers of the campaign as an initial 'big-push'-investment that is meant to lead to financial self-sustainability,³⁴⁵ especially in light of the fact that the credibility bonus of having obtained EC financing functions as a leveraging device for obtaining further financing from elsewhere.³⁴⁶

**Financing
alternatives**

- Public funding at national level.
- Funding through private associations for road safety. Numerous such associations exist throughout the EU, sometimes initiated by victims of alcohol-related road accidents or their families. Since these associations often do not have access to large funds, they might represent a less expensive alternatives rather than a source of funding. However, given the plethora of such organisations and the ease with which they can be set up, there is an issue of investigating clearly here which of these associations work in the most professional and financially transparent manner.³⁴⁷ Moreover, there is a risk that these associations will not want to see themselves as a 'low-cost-alternative' to do work that was previously done by paid civil servants or private researchers.
- There is evidently also the option of further involvement from the drinks industry: however, this is rightly considered problematic by many

344 Personal interview with Mr. Peter de Nieve of the Institut Belge pour la Sécurité Routière, Brussels, 14/05/04.

345 Ibid.

346 Personal interview with Mr. Peter de Nieve of the Institut Belge pour la Sécurité Routière, Brussels, 14/05/04.

347

- European Federation of Road Traffic Victims, www.fevr.org
- Fédération des Associations de la Route pour l'Education, France, www.federation-fare.net
- Fondation Anne Cellier Contre l'Insécurité Routière, France, www.fondation-annecellier.org
- Ligue Contre la Violence Routière, France, perso.wanadoo.fr/lcvr
- Strassenopferhilfe -VFS, Switzerland, www.strassenopfer.ch
- Associazione Italiana delle Famiglie delle Vittime della Strada (AIFVS), Italy (no website).
- Campaign Against Drinking and Driving (CADD), UK, www.cadd.org.uk
- The National Society of Polio and Accident Victims in Denmark (no website)
- Föreningen SMART, (Sweden) (no website)
- Deutsche Interessengemeinschaft für Verkehrsunfallopfer (Dignitas), Germany, www.verkehrsunfallopfer-dignitas.de
- Hellenic Association for Road Traffic Victim Support, Greece (no website)
- RoadPeace, UK, www.roadpeace.org
- StradaAmica, Associazione per la Sicurezza degli Utenti Deboli della Strada, Italy, space.tin.it/scuola/ffrera
- Vereniging Verkeersslachtoffers, The Netherlands, www.verkeersslachtoffers.nl

22 Personal interview with Mr Peter DeNieve of the Belgian Road Safety Institute, 14/05/04.

23 International Centre for Alcohol Policies (2002), www.icap.org : ICAP Report 11 - Blood Alcohol Concentration Limits Worldwide.

stakeholders, given that the credibility of campaigns might be impaired if it appears to give a platform to the drinks industry to market its products.³⁴⁸

Impact

Impact on Policy making

EuroBOB has had some impact on policy making and on its impulsion a recommendation has been produced in 2002, and it is likely that a second one will be carried out. It has also had some impact at the MS level, for example the Dutch Minister of Transport has repeatedly insisted on designated driver campaigns being a key means to improved road safety.³⁴⁹

The designated driver campaign however is precisely a way of 'non-repressively' improving road safety. Moreover, it has been shown that in the context of drinking and driving, further legislative efforts may be largely ineffective. For instance, one of the EU's top performers on road safety (the UK) has a legal limit of blood alcohol level of 0.8 mg/ml, whereas two of the EU's countries with the worst road safety record (Belgium and France) have lower limits of 0.5 mg/ml.³⁵⁰ The key difference might be differences in enforcement of current legislation, making new legislation on drinking and driving a lower priority.³⁵¹

Therefore, in addition to some direct impacts on policymaking, EuroBOB does appear to be aligned with some policies of some of its national governments.

Secondary impacts on other policies

Public spending: in the short run, campaigns like EuroBOB can only work if accompanied by alcohol controls and repressive measures (severe punishment for drivers caught over the drink drive limit). If, however, campaigns like EuroBOB lead to a profound change in attitude towards less drinking and driving, then (careful) experiments with fewer alcohol controls and repressive measures might be envisaged. This could lead to savings on policing costs.

Communication and media

The EuroBOB campaign was promoted via TV slots, radio advertising, billboard advertising, national-language internet sites etc. Much of this communications work constitutes the very core of the EuroBOB campaign, and has been described extensively above in this evaluation. What is more, the success in getting the message across is one of the main achievements of the campaign.

Impact on industry

Several countries have successfully involved Alcohol Producer Associations, e.g. the Beer Brewer and Pub Associations in UK and Spain³⁵². In Spain, the Beer Brewers Association has also, in the context of EuroBOB, increased marketing of low-alcohol beer.

Overall Rating on Impact: HIGH

Efficiency

348 EuroCARE (2003): Drinking and Driving in Europe – a report to the European Union, page 6. Saint Ives, England.

349 Ibid.

352 www.beerandpub.com; www.cerveceros.org

including:

- lowering legal limits and changing severity or swiftness of punishments
- preventing reoccurrence of drinking and driving (license suspension; treatment programmes)
- restrictions on young or inexperienced drivers (especially licensing restrictions; lower legal limits for young drivers)
- reducing availability of alcohol (raising price; regulating sales).

However, a discussion of these measures and how the interplay with EuroBOB could work for each of them would go beyond the scope of this evaluation. Our discussion on suitability of extension / future recurrence of similar activities will therefore only focus on awareness-raising campaigns and particularly designated-driver campaigns.

First and foremost, the most straightforward extension activity is for EuroBOB to be extended to more countries. The UK joined in 2003; Ireland in 2004; and possible future members (with whom there have been negotiations) include Malta, the Czech Republic and Austria. (For experienced members such as Belgium, the main work now focuses on tasks such as the harmonisation of databases).

Already, EuroBOB relied to some extent on other stakeholders, e.g. manufacturers of alcoholic drinks as well as pub owners. The responsibility for educating and providing information about the dangers of drinking and driving is not exclusively that of the government. The manufacturers of alcoholic drinks and those who run pubs, bars, and discos can also play an active role. Hence, the evaluators propose the following extension activities:

- The promotion of non-alcoholic drinks (including non-alcoholic beer). Such a campaign already exists in Spain involving Cerveceros de España, National Traffic Authority, National Federation of Driving Schools CNAE, Royal Automobile Club of Spain RACE, Spanish Association of Petrol Suppliers AOP, Spanish Highway Association AEC, and Motorist Aid Association ADA.
- Negotiations with associations of producers of alcoholic drinks, e.g. Cerveceros de España has a self-regulation advertising code forbidding its members to promote beer at motor events or in motoring magazines.³⁵³
- Good Practice Guides for Pubs, as undertaken by the British Beer and Pub Association, should be promoted at the European level.³⁵⁴

EuroBOB might be combined with increased efforts on teaching about alcohol and driving at the level of driving schools.³⁵⁵

EuroBOB might do well to identify other high-risk groups apart from the 15-25 age group (a risk group is not necessarily defined by age but possibly by other common characteristics).

Moreover, one 'deeper' issue that the EuroBOB campaign has to address is why many young people do not insist that a person who has been drinking should not drive – with the likely answer being peer pressure. Hence, a useful project extension activity might be to conduct interview-based surveys, and do awareness-raising accordingly. Linked to this is the criticism of the designated driver concept that has arisen in France, namely, that the designated driver campaign might be ineffectual if it neglects the negative safety impact of passengers who have been drinking on a (sober) young driver. However, setting up such a campaign will prove much harder since it effectively aims at generally lowering alcohol consumption among young people, which will prove much less popular with the target group itself and would evidently have to be done without the help

353 'La carretera te pide SIN' / 'The road demands non-alcoholic drinks'. Presentation by Mr Jacobo Olalla Marañón – Director General, Cerveceros de España at the Seminar: Seminar: Designated Driver Campaigns in Europe: A common approach to Fight Drink Driving. 27 May 2003, Brussels.

354 Pan-European Designated Driver Campaign – integrated approach A way of raising awareness in young people at school. Presentation by Janet Witheridge, Deputy Director, Health and Social Issues, British Beer and Pub Association, UK, at the Seminar: Designated Driver Campaigns in Europe: A common approach to Fight Drink Driving. 27 May 2003, Brussels
See also the website of the British Beer and Pub Association, www.beerandpub.com.

355 'La carretera te pide SIN' / 'The road demands non-alcoholic drinks'. Presentation by Mr. Jacobo Olalla Marañón – Director General, Cerveceros de España at the Seminar: Seminar: Designated Driver Campaigns in Europe: A common approach to Fight Drink Driving. 27 May 2003, Brussels.

currently provided by the drinks industry (which currently supports the campaign e.g. in Belgium and the UK).

Ways of increasing value added from the funding

The campaign should aim to go beyond measuring message dissemination towards attempting to measure behavioural change. In other words, it does not suffice to carry out the EuroBOB campaign and subsequently conduct surveys on whether young people have 'heard of EuroBOB'. The Campaign should establish whether young people have refrained from drinking and driving and whether they have designated a sober driver in response to the EuroBOB campaign.

Conclusions

Relevance: VERY HIGH

Drinking and driving remains a serious problem on European roads, resulting in high levels of death and injury. It is estimated that excessive blood alcohol concentration is involved in 1 out of 4 accidents and better drink-driving management could prevent up to 10,000 fatalities in the EU annually.³⁵⁶

Road accident fatalities are particularly pronounced among young drivers. Road accident deaths represent the first cause of mortality (26.4%) among 15-25 year olds.³⁵⁷

Awareness-raising with a view to changes in behaviour, as EuroBOB attempts, is key to tackling this problem.

However, defining groups at risk more narrowly might still improve relevance.

Effectiveness: MEDIUM

While there is still some disagreement in the transport safety research community about the effectiveness of designated driver campaigns, EuroBOB includes two crucial features that are vital for effectiveness: firstly, it includes specific design for individual countries; secondly, it combines designated driver campaigns with locally and temporally coordinated repressive campaigns. However, mere media dissemination seems to be the main measure of success for EuroBOB, with very few results on whether this message has actually changed the behaviour of young drivers (not to mention an actual reduction in road accidents involving the target group). Clearly, both of these would be methodologically very difficult to do, but EuroBOB reports should at least attempt to go further in this direction. The evaluators recognise that it is in the very nature of an awareness-raising campaign that its precise impact is difficult to evaluate. However, EuroBOB at least might have to go beyond mere 'message dissemination' into measuring behavioural change (have young people refrained from drinking and driving and have they designated a sober driver in response to the EuroBOB campaign) if it is to be effective.

Impact: HIGH The project was not intended to have a direct policy impact, although it has had some impact in 2002. Other policy impacts are likely to be limited because the designated driver campaign is a way of 'non-repressively' improving road safety. In addition, there has been considerable impact on media and on industry. The EuroBOB campaign was promoted and mediated via TV spots, radio advertising, billboard advertising, national-language internet sites. As for industry, several participating countries have successfully involved Alcohol Producer Associations, e.g. the Beer Brewer and Pub Associations in UK and Spain.

Efficiency: MEDIUM on efficiency in use of resources. Cost of effectiveness in terms of results and impacts is impossible to measure due to methodological difficulties.

With an EC contribution of 1,879,750 Euros over the past two years alone, i.e. 939,875 Euros p.a. (compared to 8,640,573 euros average annual spending on Transport Safety) EuroBOB is an unusually expensive project for the EC, forcing the EC to consider difficult trade-offs between this and other projects. However, this assessment should be seen in the light of the fact that EuroBOB is also a project with an unusually wide distribution across Europe, with Belgium, France, the Netherlands, Luxembourg, Greece, UK and Ireland and soon a series of other countries taking part.

There are, however, fields to be recognised in which there is scope for improvement on the use of resources of EuroBOB. Notably having several different campaigns instead of one European

Recommendations

Future funding: Further funding at current levels. While there is some scope for running EuroBOB more efficiently and cheaply, the concept is important for awareness raising and is arguably the only large-scale initiative at a pan-European level. Given the need to expand this awareness raising to additional countries (including new EU member state), funding should be continued at levels allowing for this, accompanied by discussions with the contractors on how to increase effectiveness and efficiency. These measures, together with a gradual phasing-out of funding for the early EuroBOB countries, should lead to a situation where current funding levels or at best marginally increased funding levels should suffice.

Improve value added of the funding: Measures might include further cooperation with brewers and pub owners e.g. on good practice guides; or more narrowly defining of risk groups. Most importantly, however, it is imperative to focus the project on more concrete results (have young people actually chosen to designate a 'sober' driver?) rather than on pure message dissemination.

implies potential for duplication and hence sub-optimal use of resources. While the above discussion on effectiveness has argued for having country-specific campaigns (and cited evidence that indeed this might make EuroBOB more effective), this aspect of the campaign has to be monitored closely for its use of synergies to minimise the risk of suboptimal resource use.

Cost effectiveness in terms of results and impact is currently impossible to measure for EuroBOB, given the difficulty of measuring the results of EuroBOB as an awareness raising, campaign. While for other Transport Safety projects currently evaluated (such as EuroNCAP or RESPECT) there is at least a rough indication of e.g. the number of lives saved which can in turn be compared to the spending on the project, little such indication is available for EuroBOB.

1 ANNEX 1: TASK SPECIFICATIONS FOR THE ASSIGNMENT:

EX POST EVALUATION OF SPECIFIC INTERVENTIONS FUNDED UNDER THE TRANSPORT SAFETY POLICY

1.1 BACKGROUND FOR THE EVALUATION

The Unit responsible for the Financial Resources & Activity Based Management (Unit A1) of the Directorate-General for Energy and Transport (DG TREN) plans to outsource an expertise to carry out an ex post evaluation, aiming to assess some specific projects funded under the Transport Safety Policy.

1.1.1 Description of the activities to be evaluated

The Transport Safety Policy is funded on an annual basis under the budget line B2-7020 (from 2004 according to the new Activity Based Budgeting under the 06 02 03), in compliance with the general competencies allowed by the Treaty to the Commission.

The general objective of this policy is to reduce accidents by improving the safety of inland, air and sea transport, without unduly affecting the economic efficiency of these transport modes. It can be split by means of transport.

In order to reduce the complexity of evaluating the entire policy, some selected projects will be evaluated as case studies to provide information about the projects' achievements and management as well as their perspectives and cost-opportunity to continue to fund this kind of actions. In this way, the case studies will give a policy overview too.

1.1.1.1. Road Transport Safety

The specific objective is reducing casualties by improving quality and applying existing regulations more effectively.

Several actions or/and measures have been launched to attain this objective by tightening up controls and penalties.

1.1.1.2 Air Transport Safety

The specific objective is to control the growth in Air Transport, tackle saturation of the skies, maintain safety standards and protect the environment.

1.1.1.3 Maritime Transport Safety

The specific objective is to reduce maritime accidents by ensuring the safety of sea transport, enhancing all aspects of navigational safety and pollution prevention in Europe's seas, convergence of legislation, technical standards and administrative monitoring practices relating to transport safety.

1.1.2 Rationale and aims of the evaluation

These actions are co-financed under the Transport Safety Policy in accordance with **Articles 71, 80, 154, 155 and 156** of the Treaty establishing the European Community giving to the Commission the prerogative of specific competence in these fields.

There is no other basic instrument for these interventions as they are not part of a specific programme.

According to the Financial Regulation, actions funded on an annual basis have to be subject to an evaluation every six years.

The aim of this evaluation is to provide the European Commission with the results of its interventions in this policy, as well as an overview of its overall effects in order to orient future interventions.

Considering the high number of projects funded during the last three years and the implementation of some projects divided into different phases and funded on a multiannual basis, a limited number of projects have been chosen because of their relevance, illustrating the specific objectives of the European Community (EC) Transport Safety Policy.

Evaluating these projects as case studies will offer an overview of their effects as well as a perception of their impacts on the entire policy.

1.1.3 Scope of the evaluation

Referring to each objective of the Transport Safety Policy, the projects selected for evaluation are the following;

- **“Operational Grant for EQUASIS information system”**: a multiannual action with the operational objective of setting up a database to increase the safety of maritime traffic in European waters.
- **“EuroNCAP”**: a multiannual action with the operational objective of setting up a New Car Assessment Programme in order to create a safer market offering adequate consumer information.
- **“European Transport Safety Council (ETSC) – studies, conferences, lectures and co-ordination of experts action”**: a multiannual action with the operational objective of increasing information exchange and dialogue among transport safety stakeholders, such as authorities, industrialists, operators, scientific institutes and consumers.
- **“CESARE (I, II)”**: a multiannual action with the operational objective of designing and introducing an interoperable service for electronic fee collection on tolled network in the ASECAP Member States. CESARE III is planned
- **“Periodic training and testing through simulators (Phase I and II)”**: a multiannual action with the operational objective of completing data on the effectiveness of permanent education of truck drivers.
- **“CARE”**: a multiannual action with the operational objective of setting up and developing an accident database.

- “**SARTRE**”, Phase I and II. with the operational objective of informing about users behaviour related to safety transport measures.
- “**TISPOL**”: Data base on trucks and buses and Enforcement 2002-2003 Phase I. The Phase II is planned.
- “**ROSITA**” Phase I and II. with an operational objective dealing with the users behaviour related to safety transport measures.
- “**Designated driver campaign - EuroBOB**”: an information campaign on users behaviour.

1.2 OBJECTIVES AND TASKS OF THE ASSIGNMENT

The objectives are to provide an **ex post evaluation** based on case studies and a general overview on the basis of the findings for the projects above.

The Contractor will focus on each single project and on the policy taking into account its findings concerning each project’s evaluation.

He will evaluate the achievement of its global objective of reducing accidents and casualties in road, maritime and Air Transport means, taking into particular account the sustainable development aspects of the projects.

The Contractor will assess the relevance of the projects above with respect to the policy’s general objective. Based on its findings, the Contractor shall propose its recommendations of areas of improvement for these projects in order to comply more effectively and efficiently with the policy’s global objective.

The planned evaluation particularly aims to put forward a **judgement of value on the selected above projects** co-financed by the Safety Transport budget line (B2-7020) in order to:

- identify their achievements and impacts with respect to the operational, specific and general objectives;
- draw conclusions on the effectiveness and efficiency of these projects and to be in a position to integrate indicators into the monitoring of current and future interventions;
- allow the Commission to judge the suitability of an extension and a future recurrence of similar activities;
- take action, if necessary, to improve the added value of the funding.

The broad purpose of the evaluation study is to comply with Commission’s good governance standards such as improvement of projects’ management, accountability and optimal allocation of budgetary resources.

The narrow purpose of the evaluation study is to depict the net effects (direct and indirect) of these projects, both on collectives and individual beneficiaries they were designed to serve.

The required task is mainly to measure their (desired, unexpected, systemic or side) effects on a scale spanning from their bottom to top objectives.

The evaluation study will specifically be used by the Directorate-General for Energy and Transport of the European Commission to improve the monitoring of studies and in order to direct its choices at the time of project selection or when launching similar activities in the future. It will be communicated to the Committees dealing with the major institutional stakeholders, such as the European Parliament, the Council, the Social and Economic Committee and the Committee of the Regions.

This evaluation will also take into consideration the aforementioned institutional stakeholders when producing the reports to be submitted to the Commission.

1.3 REPORTING AND DELIVERABLES

The contractor is requested to produce and present the following reports:

- 1) an **inception report**, which will describe the findings;
- 2) a **draft final report**, which content has to be discussed with the Commission;
- 3) a **final version of the report**, resulting from the comments and approval of the Commission.

Each report shall be supplied in 4 copies in paper form and one copy in electronic form, either in MS Word or in HTML format.

For the draft of the final report and the final version of the report, the contractor shall produce two kinds of sample; a written sample (exhaustive and literate version) and a presentation sample (summarised version supported with slides presentation).

1.4 ORGANISATION AND TIMING

A steering group will be constituted with the representative of the services in charge of the Policy. It will participate to the meetings with the Contractor.

Shortly after the signature of the contract, a **kick-off meeting** will be held in Brussels in order to settle all the details to be undertaken.

Not later than three months after the signature of the contract, an inception report depicting the preliminary findings is to be submitted to the Commission.

The first payment will be made after the approval of the inception report.

Not later than five months after the signature of the contract the draft final report is to be submitted to the Commission.

Within 10 working days after the submission of this draft final report the Commission will provide the contractor with its comments on the draft final report and the date of a **final meeting** in Brussels will be agreed upon in order to discuss the Commission's comments.

Unless otherwise agreed, the final version of the report, which shall fully reflect the Commission's comments, is to be submitted 5 working days after the final meeting.

The Commission will approve the final report within 15 working days from its reception.

Any correspondence with the Commission and any document or report produced during the evaluation work shall be either in English or French upon the Contractor's choice.

The copyright of the services undertaken under this multiple framework contract will reside with the Commission. The Commission services will be responsible for deciding the possible dissemination of the evaluation and its related materials produced under this joint contract.

2 ANNEX 2: INITIAL METHODOLOGY

The initial methodology included a section on project identification, the method of analysis and the work plan.

2.1.1 Project identification

The projects that have been funded with the Policy are described in more detail in the table below.

No.	Projets sélectionnée Sécurité des transports	Resp	Amount
1	Operational Grant for EQUASIS information system	G2	609,059
2	EuroNCAP	E2	5,200,000
3	European Transport Safety Council (ETSC) – studies, conferences, lectures and co-ordination of experts action	E3	944,375
4	CESARE (I, II)	E4	1,000,000
5	Periodic training and testing through simulators (Phase I and II)	E3	956,000
6	CARE	E3	1,560,000
7	SARTRE I, II et III	E3	1,200,000
8	TISPOL	E3	1,400,000
9	ROSITA	E3	
10	Designated driver campaign – EuroBOB	E3	1,100,000

The 10 projects are described under 1 generic heading and the initial work will seek to classify this selection within the wider range of projects to see to what extent these are representative of the programme and Policy as a whole.

Up to 2 of the 10 projects were selected for early examination in Month 2 and the remainder will be visited in Month 4.

2.1.2 The method of analysis

To meet the stipulations of the task assignment, a simple logframe is used as a reference to design the analytical tools for each project to tease out the intervention logic inherent in the initiative:

Logframe components	Intervention logic	OVI	SOVs	Assumptions and risks
Policy impact				
Purpose				
Results				
Outputs				
Activities		Means	Costs	
Pre-conditions				

Note: OVI=Objectively Verifiable Indicator; SOV=Source Of Verification

In particular, the framework is being used to draw analytical tools to address the following items:

- Project results and impacts with respect to policy objectives and rationale;
- Conclusions on the effectiveness and efficiency of the projects;
- Indicators for monitoring.

Evidence is being gathered to complete the tools through:

- The initial descriptive analysis;
- Visits to projects;
- Telephone interviews with different stakeholders.

The aggregation of the logframes tools will provide the basis for the wider examination of the Policy and the evaluation of:

- The suitability of an extension and a future recurrence of similar activities;
- Actions, if necessary, to improve the added value of the funding.

The deliverables will be in the form of a final report in both electronic and hard copy format, in English, supporting by analytical material, such as individual case study logframe.

3 ANNEX 3: POLICY CONTEXT

This section presents the initial background research into European Commission Transport Safety Policy, the concern of this evaluation.

3.1 Air Transport Safety

Regarding the Air Transport Safety, Europe already enjoys a privileged situation because, with a third of global traffic, only a tenth of accidents occur there. Security has always been a matter of concern in the field of aviation, in particular since the Lockerbie bombing in 1988. However, this concern has always been addressed on an essentially national and intergovernmental basis rather than a Community one.

The White Paper "European Transport Policy for 2010: time to decide " addressed this issue, concluding that the cooperation between the Community and the administrations of the European states, within the Joint Aviation Authorities (JAA), reached its limits. The most important limitation was found on the legislative front, since this organization lacked real power. The Commission has therefore proposed the establishment of a European Aviation Safety Authority (EASA)³⁵⁸, which would provide the essential machinery for all aspects of Air Transport activities.

3.1.1 The Creation of a European Agency for Aviation Safety

The European Aviation Safety Agency (EASA) formally came into being on 28 September 2003. It was created to pursue specific regulatory tasks in the field of aviation Safety.

The Agency would help the European Commission to shape new rules for aviation Safety in the following areas:

- The certification of aeronautical products, parts and appliances test.
- The approval of organisations and personnel engaged in the maintenance of these products.
- The approval of air operations.
- The licensing of air crew.
- The safety oversight of airports and air traffic services operators.

The Agency has also been given the power to manage executive tasks related to aviation Safety, such as:

- Issuing type certificates for aeronautical products.
- Assisting the European Commission in the monitoring of the application of rules and in the implementation of safeguard measures.

The attacks on 11 September showed that there is an unprecedented dimension to the terrorist threat which raises the need for coherence in all cooperation efforts (banks, police, courts, etc). and effective action. It has therefore been decided to introduce an EU Security Policy in order to give legal force to the rules and mechanisms for cooperation at EU level.

3.2 Maritime Safety

Despite the existence of a well developed international legal framework regarding safety at sea, some operators break the rules, putting crews and the environment at risk, taking benefit from unfair competition. Hence, the EU Maritime Safety Policy aims at eradicating substandard shipping through a convergent application of internationally agreed rules.

3.2.1 1993 - 2000: The start of the Common Maritime Safety Policy

In its 1993 Communication "A Common Policy on Safe Seas"³⁵⁹, the Commission analyses the Maritime Safety situation in Europe and outlines a framework for a common Maritime Safety Policy based on four pillars:

- Convergent implementation of existing international rules.
- Uniform enforcement of global International rules by the port states.
- Development of navigational aids and traffic surveillance infrastructures.
- Reinforcement of the EU's role as the driving force for global International rule making.

3.2.2 The Erika's Packages I & II

On 12 December 1999, the Erika, a 25 year-old single-hull oil tanker flying the Maltese flag and chartered by TOTAL-FINA, broke in two 40 nautical miles off the southern tip of Brittany, polluting almost 400 kilometres of French coastline. The wreckage of the Erika highlighted the risk presented by old, poorly maintained ships and the need to reinforce and harmonise European rules on Maritime Safety and the control of ships in ports.

After the accident the European Commission prepared measures designed to increase Maritime Safety off our coastlines substantially. On March 2000, the Commission adopted a first series of proposals, known as the Erika I package, which was quickly followed by a second set of measures, the Erika II package. The Erika I package provides an immediate response to certain shortcomings highlighted by the Erika accident by:

- Stepping up controls in ports
- Greater control of the activities of classification societies
- Elimination of single-hull tankers

The Erika II package comprises three additional measures designed to bring a radical improvement in Maritime Safety in European Union waters:

- The creation of a European Maritime Safety Agency charged with improving the enforcement of EU Maritime Safety rules.
- The establishment of an information system to improve the monitoring of traffic in European waters.
- A mechanism to improve compensation for victims of oil spills³⁶⁰ and in particular the raising of the upper limits on the amounts payable in the event of major oil spills in European waters.

3.3 Rail Safety

As it is addressed in The White paper “European Transport Policy for 2010: time to decide” improving the Rail Safety is one of the milestones of the European Transport Safety Policy.

The growing demand for international services in the context of network and system interoperability combined with the opening of the market has therefore meant rethinking the approach to Rail Safety first. Interoperability must guarantee a level of safety equal to that achieved today in the national context. In order to achieve this objective the Commission adopted several directives:

- The directive on the interoperability of the high-speed rail system³⁶¹
- The directive on the conventional rail system³⁶²

This entails simultaneous action at two levels:

- At the technical level, standards need to be set for each component of the railway system (track, rolling stock, signalling system, operating procedures, etc)..
- At the administrative level, duties and responsibilities need to be established for all stakeholders, from the infrastructure managers to the Community authorities, and including the railway undertakings and the national authorities.

3.4 Road Safety

The EUR-15 has now more than 40,000 fatalities and 1.7 million persons injured every year in road accidents, at a total cost estimated at 160 billion €/year. To modify this situation the Commission has proposed an ambitious target to reducing by 50% the number of road fatalities by the year 2010.³⁶³

In order to contribute to the achievement this target the Commission has published a European Road Safety action programme. This programme offers a framework for all partners and it guides the EU action by:

- Stimulating road users towards a more responsible behaviour, in particular through a better respect of existing rules, initial and continuous training of private and professional drivers and a better enforcement against dangerous behaviour.
- Making vehicles safer through improved technical performance standards; improving the road infrastructure, in particular through the identification and diffusion of best practices and the elimination of black spots.

The measures proposed in the White Paper to improve Road Safety may be summarised as follows:

- Harmonise inspections and penalties by the end of 2001.

- Keep the road transport profession attractive by promoting the necessary skills and ensuring satisfactory working conditions.
 - Set a target for the EU of reducing by half the number of people killed on European roads by 2010.
 - By 2005 harmonise the rules governing checks and penalties in international commercial transport on the trans-European road network, particularly with regard to speeding and drink-driving.
 - Draw up a list of 'black spots' on trans-European routes where there are particularly significant hazards and harmonise their signposting.
 - Require coach manufacturers to fit seat belts on all seats of the vehicles they produce.
 - Tackle dangerous driving and exchange good practices with a view to encouraging responsible driving through training and education schemes aimed, in particular, at young drivers.
 - Develop a methodology at European level to encourage independent technical investigations.
-