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COMMUNICATION FROM THE COMMISSION

TO THE COUNCIL, THE EUROPEAN PARLIAMENT,
THE ECONOMIC AND SOCIAL COMMITTEE
AND THE COMMITTEE OF THE REGIONS

PROMOTING ROAD SAFETY IN THE EU

THE PROGRAMME FOR 1997-2001

Executive Summary

With unchanged policies, about 1 in 80 European citizens will die on average 40 years too early and 1 in 3 European citizens will need hospital treatment during their lifetime as a result of road accidents.

The annual road toll of 45.000 people killed and 1.6 million injured represents an unacceptably high burden on Europe's society and economy.

The Commission launched a first action programme on road safety [COM (93) 246] in 1993 to make a contribution to addressing this enormous problem. As this report illustrates, the programme has meanwhile been fully carried out and significant progress has been achieved even beyond the stated objectives, notably in the field of type approval legislation and rules on the transport of dangerous goods.

Whilst the programme has made an important contribution to reducing the number of victims from road accidents, there is no room for complacency. This can be illustrated by the social costs of road accidents which are currently evaluated at some 145 billion ECU per year in the European Union.

The Commission, therefore, proposes an ambitious new strategy - Road Safety 1997-2001 - to accelerate improvements in road safety. This strategy is based on the principle that the high costs of accidents (which can be roughly estimated at 1 million ECU for every fatality) should be fully taken into account in the safety policies of Member States. Since in the past investments have typically cost significantly less and there are currently a wide range of measures that would be justified by this approach (e.g. pedestrian friendly car design, improvements in seat belt wearing, reductions in average vehicle speeds, etc.), the application of this approach would give a major impulse to new efforts at all levels.

The Community cannot, of course, accomplish improvements in road safety on its own and the Commission, therefore, proposes a more widespread use of the cost benefit approach to road safety at all levels of policy making.

The Commission believes that adoption of this strategy would lead to a progressive reduction in the number of annual road fatalities of up to at least 18 000 persons by the year 2010.

The action plan at Community level proposed by the Commission targets both the determinants of accidents as well as measures to reduce the consequences of accidents when they occur. The three pronged strategy comprises:

Gathering and dissemination of information and best practice, notably through the setting up of an EU road safety information system.

Accident avoidance measures; for example curbing of alcohol and drug/medicine use by drivers and the applications of telematics for both traffic management and safe driving.

Tools to reduce the consequences of accidents when they occur. The Commission will coordinate the development of safety rating programmes to ensure that consumers have scientifically correct information on the safety of different vehicles (new car assessment programmes). Proposals for various technical measures will also be brought forward: e.g. type approval directive on pedestrian friendly vehicle front design, closed side guards for trucks and guidelines for both road and roadside design.

In conjunction with measures to be taken by Member States and regional authorities in accordance with the cost-benefit approach, the proposed actions at the Community level would lead to significant reductions in road casualties. The resulting fall in accident costs would represent important social benefits, enhance the sustainability of the transport system and strengthen European competitiveness.

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1. INTRODUCTION

1.1 Reasons for this report

Road safety is an issue which touches the life of every European citizen. Unfortunately, awareness of the issue of road safety is not always at the level it merits on objective grounds of risk assessment.

The primary reason for this report is to record the current situation in the EU and to present a programme for the coming years in order to give a new momentum to actions which are appropriate to the enormity of the problem.

At EU level, as from 1984, road safety has received increasing attention, reflected in several reports of the European Parliament and the Commission, resolutions of the Council and legislative and non-legislative actions.

In 1993, the Commission presented, at the request of the Council, a Communication for a first action programme on road safety (COM(93)246) with a commitment to evaluate the results of the programme after a period of three years. Consequently, the secondary reason for this report is to fulfil this engagement, providing an overview of the developments since 1993.

1.2 Scale of the road safety problem

The only objective indicators of the scale of the road safety problem are statistics on accidents and their consequences.

There are numerous ways to present road safety accident statistics and all presentations lead to the conclusion that traffic-related accidents are indeed still a major threat to life in the EU, especially when the low average age of the victims is taken into account.

In 1995, the total number of people killed in road accidents in the 15 Member States which now make up the Community was about 45,000. More than 1.6 million people were injured.

These figures are a clear improvement on those of previous years. Figures for earlier decades cover a smaller area (excluding the eastern Länder of Germany) and show that in 1980 more than 62,000 people were killed. It is also worth noting that traffic volumes grew by nearly 50% between 1980 and 1995.

However, on the basis of current figures, about 1 in 80 European citizens will still end their lives on average 40 years too early in a road accident and it is estimated that 1 in 3 European citizens will need hospital treatment during their lifetime as a result of a road accident.

As outlined in the Commission Green Paper "Towards fair and efficient pricing in transport", (COM(95)691), the direct costs of road accidents across the Community - medical treatment, police time, vehicle repairs and so forth - are estimated at 15 billion ECU a year. The estimated value of lost economic output - accentuated by the fact that so many accident victims are near the beginning of their working lives - is another 30 billion ECU. Their "cost" in pain and suffering - estimated through the "willingness-to-pay" approach as used in the Green Paper - is another 100 billion ECU. The total estimate of 145 billion ECU is the most important social cost of road transport. The latest estimate of the European Transport Safety Council (ETSC) for the year 1995 even reaches the figure of 162 billion ECU, which is about twice the total 1995 EU-budget for all of its activity.

The figures do not even try to estimate or place a value on the things people decide not to do because of the fear of traffic and of road accidents.

This can be illustrated through the fall in the number of children travelling unaccompanied to school - or by the reported unwillingness of elderly people to visit shops on the other side of busy roads as well as by the enthusiasm many people have shown for living in traffic-controlled or traffic-free environments where these have been created in different parts of Europe. It is important to ensure that an increase in road safety is brought about through making it safer for people to move around - not by curtailing their freedom of movement.

2. CURRENT SITUATION AND ACHIEVEMENTS SINCE THE 1993 PROGRAMME

2.1 The present position

In recent years, the Community has been able to adopt a broader-based approach to improving road safety. There are two main reasons for this.

Firstly, the Treaty on European Union (the Maastricht Treaty, ratified in 1993) modified Article 75 and, for the first time, made an explicit requirement that the Common Transport Policy should include measures to promote transport safety. That, of course, has to be brought about in the context of the provisions in the same Treaty which made subsidiarity an obligation in Community policy-making.

Secondly, the *Common Transport Policy White Paper*[1] - also adopted in 1993 - went beyond a mode-by-mode approach and introduced transport policies based on general objectives - such as enhancing safety.

In this context *the Trans-European Transport Network*[2], for which the Council and European Parliament adopted guidelines in 1996, aims to connect up the key links for movement across the Community. *The Citizens' Network*[3] - the subject of a Green paper published in 1995 - aims to promote policies to ensure that Europe's citizens have access to smoothly running public transport systems, while the Green Paper on *Fair and efficient pricing*[4] aims to start a debate on how the pricing structure can best contribute to our shared transport policy objectives, including better and safer use of the transport infrastructure.

Two threads run through all these policies: each mode of transport should be as safe as possible, and people should be encouraged to switch to safer modes of transport where this is appropriate for their journey.

The general policy objectives that determine road safety policy can be summarised as follows:

- creating a proper balance between freedom, safety, social objectives and environmental concerns in transport;
- changing the way cars are used, so they take their appropriate place as useful but not too dominant or dominating forms of transport;

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1 COM(92)494 final of 02.12.1992

2 Decision 1692/96/EC of the E.P. and of the Council of 23..07.1996, OJ L 228, 09.09.1996, p. 1

3 COM(95)601 final of 29.11.1995

4 COM(95)691 final of 20.12.1995

- ensuring that whenever people travel on Europe's roads, they will find that vehicles meet high safety standards; that the roads themselves are easy and safe to use; that there are clear, well-enforced rules governing dangerous and anti-social behaviour by road users; that drivers are well instructed in order to master the variety of driving situations;

- using new technology, where appropriate, to provide travel and traffic information, driving aids and traffic management systems so as to increase road safety and comfort and influence modal choice.

Changing the way cars are used, or increasing compliance with the rules of the road, are objectives which require changes in attitudes and in drivers' behaviour, and laws alone cannot achieve that. The improvements, therefore, need to be encouraged by the words and actions of leaders and commentators throughout society. There is a great deal of work of this kind under way across Europe but there can never really be enough. However, there are still several examples where earlier information, co-ordination and exchange of best practice experience would have saved lives in the EU.

The Union's role, then, is to complement and supplement local and national action whenever its actions can provide "added value" and it is especially in the field of co-ordination, information and transfer of knowledge where this added value is apparent. To ensure that it makes the most of others' experience, the Commission has sought close co-operation with many groups in Europe.

The most important are:

- The High Level Group of Government Representatives on Road Safety.

  This Group was set up by a Council Resolution in 1991[5] to define the objectives of, and the specific arrangements for implementing a road safety programme. This Group has met several times and identified fields for which four separate Working Parties have delivered reports with clear recommendations for action:
  - the influence of alcohol/medicines and drugs on driving (WP1);
  - young drivers (WP2);
  - rural roads (WP3); and
  - advertising and road safety (WP4).

  Knowledge gained from these reports has influenced the future workplan of the Commission as presented in Chapter 3.

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5 91/C 178/01

- The European Road Safety Federation (ERSF), which brings together international organisations representing road users, motor manufacturers, road safety organisations, insurance companies, road hauliers and infrastructure professionals in order to contribute to an improvement in road safety.

- The European Transport Safety Council (ETSC), which brings together representatives of international and national organisations with transport safety interests, and members of the European Parliament from all parties and aims to present an impartial source of advice on transport safety matters.

  The Commission helped set up the ERSF and the ETSC, and supports their activities.

2.2 The action programme of 1993

In its Communication COM(93)246, the Commission presented its activities at that time in the following format:

- current legislation;

- proposals on the table of the Council; and

- the action programme 1993 which was divided into:

  . legislative actions in the short and medium term
  . studies that may lead to legislative actions
  . other non-legislative actions.

As regards this action programme and other activities in the 1993-1996 period, the following observations can be made :

- Almost all of the announced legislative actions were undertaken and resulted in the adoption of Community legislation or Commission proposals that are still under discussion. In addition in the fields of type approval of vehicles and the transport of dangerous goods it should be noted that work has already progressed further than was envisaged in the action programme.

- In addition, all planned studies were carried out and several additional projects were undertaken. Studies and research have focused mainly on the vehicle (passive safety), telematics' applications and analysis of behaviour. The spin-offs of these efforts are essential for the years to come and were partly reflected in new legislative measures. The evaluation of the programmes on telematics applications for transport showed that these would have an important positive impact on safety.

- Many non-legislative actions were carried out in the EU. These were, in the main, initiated, financed and steered by national or local authorities and private organisations. The Commission has undertaken to encourage and co-ordinate such actions by allocating a part of the road safety budget (budget line B-2-702) to actions with a European dimension or a pilot function.

  In this context, the Year of the Young Driver 1995 and the ongoing "Yes"-campaigns deserve particular mention.

- The CARE project, based on the Council Decision of 30 November 1993 (O.J. No. L329, 30.12.1993), has led to the creation of a disaggregated database on road accidents resulting in death or injury in the Member States of the European Community.

  Today, for the first time, valuable comparisons of accident statistics have been made feasible through CARE that no other current international database would permit (see also Annex II).

  The development of the CARE database is continuing and will in the future provide detailed and disaggregated information on the location, cause and further characteristics of accidents. The evaluation of the first three years' trial period is the subject of a separate communication to the Council. The added value of a European disaggregated database on road safety is now accepted not only by scientific specialists, but also by policy makers. In this context, it should be mentioned that the US Department of Transportation runs a federal road accident data system with an annual budget of 19 million dollars involving 47 federal officials. This system is intensively used by the individual States, the manufacturers, insurance companies, consumer organisations and scientists.

  Annex I summarises the results of the 1993 action programme, including extra activities in the field of road safety that were not foreseen at that time.

3. THE PROGRAMME FOR 1997-2001

Since 1993 road safety in Europe has further improved but it is still at a far from acceptable level. Member States' regional and local authorities clearly have a major role to play in promoting road safety. However, the EC has also an important contribution to make given that the adoption of measures to improve road safety is a crucial element for the establishment of the common transport policy (art. 75.1 lett.c) of the EC Treaty). Therefore, in view of the shared competence, the proposed programme fully respects the principle of subsidiarity. Many legislative actions that could be undertaken at EU level have now been carried out, but implementation and enforcement of such legislation varies strongly from one Member State to another (e.g. the wearing of seat belts) which may reflect in great variances in accident and injury risks.

In order to establish a EU road safety programme for the future, it is necessary to assess :

- the trends and characteristics of the current situation.
- the expected future development of EU road safety under different scenarios.
- the role that the EU institutions and, in particular, the Commission can play in this future development.

3.1 Trends and characteristics of EU road safety

The accurate analysis of road safety necessitates an operational disaggregated database of accidents for which the CARE project, as developed by the Commission, will be the cornerstone.

Although such a database is not yet fully operational, it is still possible to draw conclusions from aggregated data from other sources, or specific data made available through specific studies, or from the CARE analysis of data sent by most Member States for 1993 and 1994.

The following specific trends from the past to the present , as well as certain characteristics, can be observed (see also Annex II - graphics and tables):

- There is a steady decrease in the number of persons killed but in some countries a certain stabilisation has become apparent in recent years.
- There are still significant differences in rates between Member States. In 1993, the best performing countries (Finland, the Netherlands, Sweden and the UK) suffered road death rates of between 6.8 and 9.6 per 100 000 population. This is of course too high but, in contrast, the rates in countries like Austria, Belgium, France, Greece, Luxembourg, Portugal and Spain were between 16.2 and 32.9.

- The worsening situation in some Member States (e.g. Spain, Greece) in the 1980s coincides with an explosive growth in the number of cars in these countries.

- The relationship of injuries versus persons killed is changing towards more injuries. This indicates less severe consequences of accidents probably because of improved car design and higher rates of seat belt and helmet wearing.

- Quantitatively, most of the people killed in road accidents are in cars. But in proportion to their share of total distance travelled, it is pedestrians, cyclists and motorcycle/moped riders who are more likely to be victims. In 1994 these groups made up respectively 19.0 %, 6.1 % and 14.8 % of road accident fatalities in the 12 States that were then in the European Community.

- Young adults are the group most at risk: death rates for 15 to 24 year olds are typically between 50 % and 90 % higher than those for the general population. And young men are statistically at the greatest risk.

- The risk for old people to be victims of a traffic accident whilst walking is also very high.

- Alcohol-related accidents are decreasing in several countries with specific action programmes, but in all Member States alcohol continues to be a major contributing factor in road accidents. In addition, evidence is growing that drug-related accidents are increasingly significant in some countries. The important influence of the effect of medicines on road safety is now widely recognised.

3.2 Accident Figures : the future scenario

Although there is a certain change in the relation between the numbers killed in accidents and those injured in by accidents, it is clear that the number of fatal casualties is still the clearest parameter by which to measure the development of the road safety situation for large populations.

Given that the road safety situation in the EU as a whole is also assessed on the basis of the total number of victims, it is therefore necessary to have a clear picture about the future development of this parameter under different scenarios in order to give road safety the place in the political agenda that it deserves.

A long term prediction of the future EU situation as regards road safety on the basis of a cumulation of quantifiable effects of potential measures or actions is very difficult because of the different political, social, economical and technological influences that will play a role in the 15 Member States. Moreover, it is difficult to relate the effects of separate measures over time and no account can be taken for technical advances that are not foreseeable today.

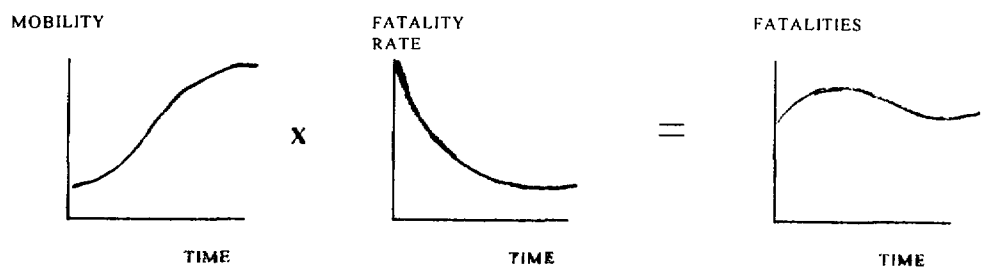
Therefore, it is more realistic to use a global approach, to analyse the development of road fatalities in the past (since 1980) and calculate an extrapolation to predict the future fatality rates which can then be used to constitute a realistic basis for monitoring the situation.

Of course, this should not be a simple linear extrapolation, as this would ultimately lead to an estimated number of fatalities of less than zero in the future.

The best model for describing development of fatality rates in the past appears to be a fatality rate per kilometre that decreases every year by a fixed percentage multiplied by the annual motor vehicle kilometrage that for the EU shows a quasi linear growth[6].

This model was calibrated with statistics from several countries around the world and also gives a good description of the worsening situation when the growth of mobility cannot be compensated by risk reduction. This happened recently in countries like Spain and Greece and at the end of the eighties in the EU as a whole and it will certainly play again an important role in future new Member States when the EU will be enlarged.

On the basis of this model we are able to make an extrapolation for the future development of fatality rates.



6 Source: Oppe & Koornstra, SWOV Institute, 1990

It should be underlined that extrapolation of this model implies a continuation of decreasing fatality rates per kilometre, thus an equal effectiveness of road safety policies in the future as in the past. Such an equal effectiveness of road safety policy would, for the 15 EU States, result in a reduction of total fatalities from 45,000 in 1995, to 38,000 in 2000, to 32,000 in 2005 and to 27,000 in the year 2010.

Indeed, the underlying assumption that road safety policy could be as effective in the future as it was in the past is only one of the possible scenarios.

Any tendency to underestimate the efforts that have to be made to follow such a scenario would jeopardize the process and might lead to more fatalities in the future.

On the other hand, there is absolutely no justification to be content simply with a continuation of the historic trend since this will still result in many people losing their lives or being injured.

Of course, one could argue that spectacular improvements since 1980, such as the introduction of seat belts, are no longer possible.

However, it should be expected that, in particular, certain telematics applications in the future will lead to some additional breakthroughs in road safety and there is still an enormous potential for improvement through the better enforcement of existing legislation.

Therefore, if the political will is there, doing better than the "continuation" scenario is a real option for the future.

3.3 Putting road safety higher on the political agenda: the economic justification

Apart from the human suffering involved in road accidents, there are also strong economic arguments for making extra efforts to ensure a strong and steady decline in the number of road fatalities. As indicated before, a conservative estimate of the "hard" annual costs of road accidents in the EU alone amounts to at least 45 billion ECU (15 billion ECU for medical treatment, police time, vehicle repairs etc. and 30 billion ECU as an estimated value of the lost economic output of the killed and injured persons).

Road safety is generally measured by the number of fatalities as the reporting of injuries and damage-only accidents varies significantly and is generally considered to be unreliable. Consequently, if the total economic costs are expressed as a factor of fatalities (i.e. costs per fatality), then this figure comprises not only the cost of a single fatality, but also includes the cost of a number of non-fatal accidents that generally correspond proportionally to a fatal injury. On average in the EU for each road fatality (45.000 per year) there are 8 serious injuries, 26 minor injuries and also 200 damage-only accidents.

With the present 45.000 fatalities a year and total economic costs of 45 billion ECU, this means that a crude proxy of economic benefits to society of the avoidance of one fatality (and the corresponding injuries and damage only accidents) would be roughly 1 million ECU. On the basis of this estimate, measures which save lives at a cost of up to 1 million ECU are justified on economic grounds alone ("the one million ECU test").

Although some Member States use similar criteria on costs per life saved (which are of the same order of magnitude[7]) in deciding on certain types of road safety policies, there are a large number of measures that would save lives at far lower costs, but that have not been taken. Local and regional authorities are often reluctant to carry the full costs of investments in road safety because a large part of the benefits do not occur at the local/regional level. Finally, the Community's general road safety policy has, in the past, also not been based on economic grounds and it is interesting to note that, in measures taken until now, the implicit valuation of the value of a life saved has been much lower than the rough estimate presented above. Consequently, a more widespread awareness of the benefits of larger investments in road safety will give a major impulse to new efforts at all levels. The "one million ECU" test, therefore, strongly illustrates the rationale for putting road safety higher on the political agenda.

The "one million ECU" test, in combination with a thorough evaluation of the costs of different measures, provides a useful starting point for developing road safety policies. For its part, the Commission intends to use this basic approach as one of the elements for the future development of its road safety policies and recommends that Member States do the same.

Clearly, such a cost-benefit approach cannot be the only criterion because other considerations (e.g. political and social) will also have to be fully taken into account.

However, several fields of action that were identified during the last three years would seem to merit very serious consideration on the basis of this approach because they are relatively inexpensive and cost significantly less than 1 Million ECU per life saved.The most important of these are:

- 15% less accident victims if the wearing of seat belts throughout the EU as a whole was at the level of the Member States with the best rate (95% for front seats and 80% for rear seats);

- 7% less fatalities if pedestrian-friendly car designs were introduced;

- 15% less fatalities if - by market forces and/or consumer information - all cars were made to the best level of passive safety in their size category;

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7 COST 313 report, 1993

- an important reduction of accidents if collision warning systems and intelligent cruise control systems would be used in vehicles, thus increasing the time available to drivers to react in dangerous situations;
- 5% less fatalities if daytime running lights were introduced for all motor vehicles;
- 25% less fatalities if by road engineering, information or applied telematics the average speed of motor vehicles could be reduced by 5 km/h;
- from 5% to 40% less fatalities if by legislation, enforcement, telematics or education, the estimated 1 in 20 of the driver population that sometimes drives under the influence of alcohol could be convinced or compelled not to drive with a blood alcohol content (BAC) over 0.5‰;
- a still unknown but important figure if drivers would not drive under the influence of drugs or medicines (local estimates indicate up to a 16% reduction)
- a figure which is not yet quantified through the application of infrastructure measures on the basis of best practice (e.g. roundabouts, use of covers on crash barriers to protect motorcycle riders, better lighting, etc.).

Although no detailed evaluation is available to date, the Commission believes that, in view of the large potential of these and other low cost measures, it could be fully justified on cost-benefit grounds to reduce the number of annual road fatalities by at least 7000 in the year 2000 and progressing to 18.000 by the year 2010. The Commission intends to carefully study and quantify the costs and the potential for reducing fatalities of different policy instruments in a forthcoming recommendation to the Council. This document will recommend that the high estimates of the economic costs of road accidents are fully taken into account and that a more widespread use of the cost-benefit approach to road safety at all levels of policy making be made.

3.4 The EU road safety information system

Following or improving on the trend, as calculated under 3.2. for the EU would imply at least a continuation of current efforts at the same level in order to achieve the necessary accident reductions by all actors involved, but also a reflection on the best strategy at EU-level to contribute to the reduction of EU accident rates and the role that the Commission can play in that process.

First of all, any strategy should be based on up-to-date analysis of the current situation.

Therefore, the Commission has an important role to play in:

Monitoring road safety at overall EU level and reporting regularly on the situation, indicating if the development follows the trend as calculated under 3.2, or is doing better or worse.

Such a regular assessment of EU accident rates would have the following advantages :

- it would lead to a more integrated programme involving all parties and components of the traffic and safety system;

- it would have an influence on European citizens highlighting the magnitude and international character of the problem;

- it would serve as a catalyst for road safety actions and would also help to prioritise actions with regard to their potential for casualty reduction effect in relation to other policy issues, notably as regards allocation of resources;

- Analysis of the EU as a whole would result in reduced statistical error as the large population would reduce the effects of random variations of fatalities per year. Even in the large countries - Germany, France, Italy, Spain and UK with fatality numbers of 5,000 to 10,000 per year - a 5% change from one year to another is statistically insignificant i.e. can be a result of random processes.

Alongside its monitoring of the general trend in EU road safety, the Commission should increase its activities in gathering, interpreting and disseminating information on all aspects of road safety. This includes the disaggregated database CARE, records on implementation of legislation and enforcement, effectiveness of road safety campaigns, results of studies and research and exposure data. Dissemination of information also implies making the road user more aware of differing national situations. It should be noted in this context, as an example, that 10 % of fatal accidents in the Netherlands involve non-nationals.

As indicated before, if the EU as a whole would have the same accident rates as the Member States with the best road safety record, the effect would be spectacular. However, such a situation cannot be reached merely by a "simple" transfer of best practices from one country to another. The integral effect of new measures should be assessed, taking into account the specific circumstances in each country and the impact of a measure on other factors that influence road safety.

Therefore, the Commission should also serve as a transfer point for best practice throughout Europe, thus avoiding unnecessary delays and duplication of efforts in the EU, but at the same time trying to put measures in the right context.

In this connection, the Commission should also play a role in gathering information on infringements and penalties connected to serious traffic accidents in Member States . This is in the light of many appeals to the Commission from citizens who expressed their frustration at the outcome of legal proceedings outside their own Member State, which they considered to be unsatisfactory.

Finally, the Commission should initiate and support research in road safety by its own research programmes or by the coordination of initiatives in other fora in Europe in order to increase general knowledge on road safety and remedial measures. In the programme that is presented, several research projects are integrated under the different headings.

In the near future, the Commission will reflect upon the appropriate structure to be given to an integrated EU information system which brings together the above functions.

3.5 The key elements of the programme

It is now recognised that the traditional classification of road safety measures under the three headings: infrastructure, vehicle and road user may lead to an approach that does not sufficiently take into account the impact of actions on the system as a whole and possible side-effects that could reduce the effectiveness . Examples are: improvements in infrastructure that led to more accidents as drivers took more risks, cars with ABS-systems that initially were more likely to be involved in accidents, seat belts that are fitted in vehicles but not used, traffic rules that are not respected and over-steering a car with power steering.

Road casualties are caused by failures in complex systems of human decisions and actions, a variety of infrastructures and all kinds of vehicles. Reducing the number of casualties means improving these systems in such a way that failures occur less frequently and/or can be compensated within the system and, in case of an accident occurring, creating an environment that can reduce the consequences.

The human factor should be considered as the key element in these complex systems, as !!! 99% of all accidents probably could have been avoided if the right action had been taken at the right moment. Only the consequences of totally unexpected and unforeseeable collapses of infrastructure or vehicles cannot be avoided, but such events are very rare. The integrated approach to road safety should, therefore, be based on an information system as described in 3.3 and should be centred around this human factor, whereby collective measures should aim at improvements in the individual's behaviour in traffic and the creation of circumstances that make human error less likely, in order to avoid accidents.

Finally, if accidents occur, measures should be taken to reduce the consequences. In this field much has been achieved in recent years as regards improved standards for vehicles. However, great potential still exists, particularly in designing more "accident-friendly" infrastructure.

Moreover, consumers should be provided with accurate and reliable information, for instance on the safety aspects of cars that they purchase. Although European type approval standards ensure that all cars put on to the European market offer a high level of protection for the occupants, it is obvious that they still differ in many aspects. Some of these can be easily assessed (model, price, comfort), but others, notably safety, cannot be evaluated by individual consumers. Consumers should, therefore, be appropriately informed of the safety performance of vehicles in different accident situations on the basis of objective tests (including EC type approval system tests).

Consumer organisations, touring clubs and some Member States (the United Kingdom and Sweden) have recently initiated such test programmes to establish safety ratings of vehicles in a particular class (New Car Assessment Programmes). However, the test procedures differ from each other and also from the regulatory tests. Moreover, the tests are selective in that not all vehicles in a particular category are tested. In order to avoid confusing information to consumers and distortion of the car market the Commission will, therefore, coordinate and support these programmes taking into account the regulatory test procedures in this field.

By taking this action, the Community would follow the example of countries such as the US, Japan and Australia, where rating systems have been in place for some time. This development means that the human factor could play a more important role in furthering road safety because a "market for road safety" would be created which would enable consumers to base their purchase decisions on objective judgements of the safety characteristics of cars.

It should be noted that such a rating system is an action complementary to the legal obligation of the vehicle type approval system, which requires that all new vehicles fulfil the mandatory crash tests and other safety criteria.[8]

Co-ordination by the Commission of rating systems should inter alia respect the following recommendations:

- Sound and objective rules for testing;

- All vehicles of a category must be tested;

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8 Directive 70/156/EEC as modified by Directives 96/27/EEC, 96/37/EEC and 96/79/EEC

- The assessment of the overall safety of a car should also include the performance of active safety measures which help to avoid accidents, such as brakes, ABS systems, lighting and vehicle road holding.

On the basis of the above considerations, the road safety programme of the Commission for the forthcoming years as presented in Annex III is structured as follows :

I. Information gathering and dissemination in order to identify and to monitor

. the development of EU road safety as a whole;
. target fields;
. target groups;
. effective measures (this includes the potential benefits of measures that could be realised and the assessment of effectiveness of measures that have already been taken);
. rapid transfer of information and best practice throughout the Community;
. implementation and enforcement of legislation.

II. Initiating and supporting measures to avoid accidents with emphasis on the human factor and its interface with the environment.

These measures include legislation, pilot projects and campaigns in order to improve the awareness, skills or physical condition of the road user, extended control procedures and technical measures aiming at the creation of a more fail-safe situation.

III. Initiating and supporting measures to reduce the consequences of accidents when they occur.

In this field, protection of the road user by seat belts, helmets and vehicles with a higher crashworthiness is envisaged as well as proposals for the development of EU standards and guidelines for more "forgiving" infrastructure in case of an accident.

In summary, the key elements of the programme 1997-2001 are :

- A recommendation of the Commission to fully take into account the very high costs of road accidents in a more widespread application of cost-benefit assessments for road safety measures.
- An integrated EU information system including info on accident statistics, exposure data, implementation of road safety measures, research, best practice and enforcement. - Measures to combat fatigue and the use of alcohol, medicines and drugs whilst driving. - Application of technology and telematics to ensure safer driving. - Coordination and support of safety rating systems in order to provide scientifically correct information to the consumer on the safety aspects of vehicles

The proposed action programme will fully respect the principle of subsidiarity: the announced measures will have to be taken at Community level because road safety is a crucial element of the Common Transport Policy; action at this level being required either because it constitutes an element necessary for the functioning of the internal market or because, when taken at Community level, it has a high added value (e.g. transfer of information, communication of best practice etc.).

The Commission will arrange for the resources required to implement the programme to be made available through the usual procedures and will monitor the road safety situation in the EU as well as report on progress of the programme in due time.

ANNEX I

Results of the 1993 Action Programme and additional measures

I. Legislative actions

Legislative actions planned in 1993	***Adopted by :*** ***(i) Council, or*** ***(ii) the EP and Council, or*** ***(iii) Commission***	***Proposals for a Directive or a Regulation***
Community data bank on road traffic accidents (CARE)	*(i) Decision 93/704/EC of 30.11.1993 (OJ L 329, 30.12.93, p.63)*	
Vehicle safety (Approximation of technical rules relating to type approval of motor vehicles)		
• Cars :		
Side impact	*(ii) Directive 96/27/EC of 20.05.96 (OJ L 169, 08.07.96, p. 1)*	
Frontal impact	*(ii) Directive 96/79/EC of 16.12.96 (OJ L 18, 21.01.97, p .7)*	
Seat strength	*(iii) Directive 96/37/EC of 17.06.96 (OJ L 186, 25.07.96, p. 28)*	
Retractable safety belts for the rear outer seats	*(iii) Directive 96/36/EC of 17.06.96 (OJ L 178, 17.07.96, p. 15)*	
Adjustable upper anchorage	*(iii) Directive 96/38/EC of 17.06.96 (OJ L 187, 26.07.96, p. 95)*	
Lighting and signalling		*Directive proposals to be presented to Commission shortly*

• Buses and coaches :			
* Fire resistance (coaches)	(iii)	*Directive 95/28/EC of 24.10.95 (OJ L 281, 23.11.95, p.1)*	
Special provisions relating to buses, coaches and minibuses (safety of doors, steps, emergency exits, etc.;)			*Directive proposal to be presented to the Commission shortly*
• HGVs			
Front underrun bumpers		/	*ECE Regulation 93 (rigid underrun protection) is assessed in relation to research projects on energy absorbing underrun protection systems in order to decide on the need for EC legislation*
** Coupling devices	(ii)	*Directive 94/20/EC of 30.05.94 (OJ L 195, 29.07.94, p.1)*	
• Vehicles, all categories :			
Electromagnetic compatibility +	(iii)	*Directive 95/54/EC of 31.10.95 (OJ L 266, 08.11.95, p.1)*	
Alarm systems	(iii)	*Directive 95/56/EC of 08.11.95 (OJ L 286, 29.11.95, p.1)*	
• Two- and three wheel vehicles :			
Harmonisation of the technical differences (lighting, brakes, tamper proof systems, signals, helmets)			*COM (93)449 final - COD 470 amended by COM (95)493 final and by COM (96)450 final Currently under conciliation procedure*
Roadworthiness tests for vehicles			
• Directive fixing the minimum standards for braking systems	(iii)	*Directive 94/23/EC of 08.06.94 (O.J. L 147, 14.06.94, p. 6)*	
• Consolidated Directive including speed limitation devices to be tested	(i)	*Directive 96/96/EC of 20.12.1996 (OJ L 46, 17.02.97, p. 1)*	

	Dangerous goods			
	• Framework Directive on the transport of dangerous goods by road (ADR)	*(i)*	*Directive 94/55/EC of 21.11.1994 (OJ L 319, 12.12.94, p. 7)*	
**	• " (as adapted by) to specifically reinforce provisions for driver training	*(iii)*	*Directive 96/86/EC of 13.12.1996 (OJ L 335, 24.12.96, p. 43)*	
	• Framework Directive on the transport of dangerous goods by rail (RID) (relevant for road safety in intermodal transport operations)	*(i)*	*Directive 96/49/EC of 23.07.1996 (OJ L 235, 17.09.96, p. 25)*	
**	• " (as adapted by)	*(iii)*	*Directive 96/87/EC of 13.12.1996 (OJ L 335, 24.12.96, p. 45)*	
	• Uniform procedures for checks on the transport of dangerous goods by road	*(i)*	*Directive 95/50/EC of 06.10.1995 (OJ L 249, 17.10.95, p. 35)*	
*	• Appointment and vocational qualification of safety advisers for the transport of dangerous goods by road, rail and inland waterway	*(i)*	*Directive 96/35/EC of 03.06.1996 (OJ L 145, 19.06.96, p. 10)*	
**	• Transportable pressure equipment Approval and regular inspection of equipment for the transport of dangerous goods and regular inspections by qualified bodies			*Proposal for Directive on the table of the Council and EP (proposed date for entry into force 1.1.1999) COM(96)674 final*
**	**Weights and dimensions** Regarding, inter alia, the harmonisation of the maximum authorised dimensions of vehicles M2, M3, N2, N3 + their trailers O3 and O4 : in national and international traffic)	*(i)*	*Directive 96/53/EC of 25.07.96 (OJ L 235, 17.09.96, p. 59)*	
	Control of driving time			
	• Regulation introducing a digital control device (tachograph)			*COM(94)323 final - 94/0187(SYN) (OJ C 243, 31.08.94, p. 8) modified by COM(95)550 final - 94/0187(SYN) (OJ C 25, 31.01.96, p. 5)*

	Driving licence		
**	• Derogation from the provisions of Annex III of Council Directive 91/439/EEC as for the number of dioptres for glasses of drivers of group 2	*(iii) Decision 96/427/EC of 10.07.96 (OJ L 175, 13.07.96, p. 34)*	
	• Coding system for the additional information contained in driving licences		*The study (which was envisaged in 1993) was realised and led to a proposal from the Commission for a Council Directive amending Directive 91/439/EEC on driving licences : COM(96)55 final - 96/0040(SYN) modified by COM(96)556 final / 2 96/0040(SYN) Council Common Position (EC) No 9/97 of 20.12.1996 (OJ C 69, 5.03.1997, p. 7)*

* : In 1993, there was a proposal in this field before the Council which was still awaiting adoption

** : This action was not listed in the 1993 programme on road safety.

II. Studies leading to possible legislative initiatives

Planned in 1993	Contents	State of Play
Education of road users and driver training		
• Specific measures for school transport	*Study on 'an illuminating pictogram for the public transport of children : experimentation and assessment*	*Finished November 1995*
• Training for drivers of mopeds	*Study on the access to mopeds' driving*	*Finished June 1996*
Social legislation		
• More effective control of driving hours for professional drivers	*Study concerning the link between working time of professional drivers and road safety*	*Started on 09.11.1995; results are awaited by June 1997*
Influence of alcohol		
• Standardisation and type approval of apparatus for testing blood alcohol levels	/	/
Infrastructure and road safety		
• Visibility of road markings	*Study on 'Criteria for the visibility of road markings'*	*Part I : January-December 1996* *Part II : end 1997*
• Direction signing (search for a Community approach)	*Studies on :* *'Proposal for a development plan related to directional road signing at European level'*	*Finished February 1996*
	'Consistency between AGR agreement, TERN network and directional road signing project'	*Finished February 1996*
Safety of vehicles		
• Crash test (study into the development of a new procedure)	*Study on 'Impact test procedure for a better protection of car passengers in a frontal collision'*	*This study, finished in November 1993, has resulted in the listed Directives on crashworthiness*

III. Other non-legislative actions

Planned in 1993	Contents	State of play
Setting up pilot projects for testing and checking telematic systems on site	*Setting up pilot projects for testing and checking telematic systems on site*	
-	*Guidelines for Traffic Safety Analysis and Evaluation*	*Project finalised - Final report submitted*
-	*Use of Advanced Transport Telematics Systems for the Modification of Geometric Road Design Standards and Operational Regulations.*	*Project finalised - Final report submitted*
-	*Prototype for monitoring driver behaviour*	*Project finalised - Final report submitted*
-	*Design Handbook for In-Vehicle Human Machine Interfaces*	*Project finalised - Final report submitted*
-	*Systems for the reduction of delays and risks for pedestrians at crossings*	*Project finalised - Final report submitted*
-	*Evaluation of Telematics Systems for the assistance of elderly drivers*	*Project finalised - Final report submitted*
-	*Database for aid systems for drivers with special needs*	*Project finalised - Final report submitted*
-	*Design guidelines for aids for drivers with special needs*	*Project finalised - Final report submitted*
-	*Safety Assessment of Accident Data and journey Data Recorders*	*Project finalised - Final report submitted*
-	*Evaluation of Intelligent Cruise Control and Intelligent Manoeuvre Control*	*Project finalised - final report submitted*
-	*Development of an intelligent driver support system*	*Project finalised - final report submitted*
-	*Evaluation of Man-Machine Interfaces for navigation devices, Collision Warning and Intelligent Cruise Control*	*Project finalised - final report submitted*
-	*Guidelines and Methodology for System Safety Analysis and Evaluation*	*Project finalised - final report submitted*

Research planned under the 4th Framework Programme		
ARROWS	*Study into safety at road workzones, aimed to produce a practical handbook for practitioners.*	*Project started in Sept. '96, final result (handbook) expected in Aug. '98. Review of safety measures, standards and practices scheduled for May '97.*
MASTER	*Study into assessment and evaluation of speed management measures (ATT and non ATT).*	*Project started in Sept. '96, final report scheduled for Aug. '98. Literature review report on speed and environment scheduled for May '97.*
SAFESTAR	*Study into safety design guidelines for roads (road design elements, geometry and dimensions).*	*Project started in Aug. '96, final report scheduled for July '98. Accomplished to date:* - *literature review on tunnels and road user behaviour;* - *report on head-on and run-off accidents.*
STAIRS	*Research study into standardisation of accident and injury registration systems.*	*Project started in Sept. '96, final report scheduled for Aug. '98.*
AC-ASSIST	*Validation of autonomous systems for collision avoidance*	*Project started in January 1996, final results expected for December 1998*
UDC	*Development and validation of autonomous longitudinal vehicle control combined with urban traffic management*	*Project started in January 1996, final results expected for December 1998*
CHAUFFEUR	*Development and evaluation of an 'electronic tow bar' between trucks and feasibility study on Automated Platooning/Automated Driving of trucks*	*Project started in January 1996, final results expected for December 1998*
SAVE	*Development and evaluation of an integrated system for driver state detection and emergency handling*	*Project started in January 1996, final results expected for December 1998*
Feasibility study into a documentary file on road safety		*Ongoing discussions with ERSF on desired format (CD-ROM, INTERNET). To be integrated in overall EU information system*
Study of experiments on accompanied driving, early introduction to driving and provisional licence	*Comparative study - driver training in Europe (TRL)*	*Project finalised - Final report submitted*

Road safety teaching in school : pooling experience		*WP2 Recommendations on educational programmes in primary and secondary schools*
Study of the influence of drugs on road safety		*WP1 'Alcohol and Drugs' submitted its final report to the High Level Group in 1996. The conclusions and recommendations of this report are reflected in the next programme.*
Relaunch of drink-driving campaigns		*Projects in framework of "Year of young drivers" (video cassettes etc...)*
Aspects of advertising which are bad for road safety : drawing up a European code of conduct		*WP3 'Car advertising' submitted its final report to the High Level Group on Road Safety in 1996. The conclusions and recommendations of this report are reflected in the next programme*

European Commission
Directorate General for Transport
Unit for road transport safety, technology and environmental affairs
(DG VII - B3)

Road Accident Statistics

1. Number of persons killed *

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
B	2 949	2 346	2 396	2 216	2 064	2 090	1 893	1 801	1 951	1 922	1 967	1 993	1 976	1 661	1 496	1 486	1 543
DK	1 208	827	690	662	658	669	665	772	723	698	713	695	634	606	577	559	546
D**	19 123	14 824	13 041	11 674	11 608	11 732	10 199	8 400	8 948	7 967	8 213	7 995	7 906	11 300	10 631	9 949	9 805
GR	1 111	1 482	1 701	1 727	1 920	1 906	1 933	2 048	1 625	1 682	1 692	1 903	1 945	2 005	2 048	2 050	2 050
E	5 456	5 833	6 651	6 409	5 832	6 066	6 275	6 348	7 045	7 615	8 185	9 344	9 032	8 836	7 818	7 158	6 248
F	16 415	14 355	13 672	13 547	13 526	13 021	12 736	11 388	11 947	10 742	11 497	11 474	11 215	10 483	9 900	9 867	9 301
IRL	540	586	564	572	533	535	465	410	389	462	463	460	478	445	415	431	404
I	10 923	10 269	9 135	8 637	8 245	8 223	7 687	7 535	7 571	7 259	7 425	6 859	7 084	8 054	7 991	7 125	7 036
L	132	124	98	100	75	85	70	79	79	68	84	67	70	83	69	78	65
NL	3 181	2 321	1 997	1 807	1 710	1 756	1 615	1 438	1 529	1 485	1 366	1 456	1 370	1 281	1 253	1 235	1 298
A	2 428	2 390	1 890	1 839	1 824	1 905	1 758	1 477	1 448	1 424	1 569	1 519	1 509	1 476	1 402	1 283	1 338
P	1 842	2 549	3 026	3 045	2 809	2 909	2 484	2 438	2 548	2 994	3 294	3 086	3 017	3 218	3 084	2 700	2 504
FIN	1 055	910	551	555	569	604	541	541	612	581	653	734	649	632	601	484	480
S	1 307	1 172	848	784	758	779	801	686	844	673	682	770	772	745	759	632	589
UK	7 501	6 366	5 953	5 846	5 934	5 445	5 599	5 209	5 382	5 108	5 050	5 052	5 373	4 753	4 379	3 957	3 807
TOTAL	75 171	66 355	62 213	59 419	58 065	57 726	54 721	50 570	52 642	50 680	52 853	53 408	53 032	55 576	52 424	48 993	47 013

NOTES

Source: CARE - EUROSTAT - IR

* Persons killed are all persons killed within 30 days from the day of the accident. For countries not using this definition corrective factors were applied.
Source of corrective factors: ECMT (GR: 1,12 - E: 1,3 - F: 1,09 - I: 1,07 - A: 1,085 only up to1991 - P: 1,3)

** Before 1991 only West Germany data are considered

2. Number of Persons Injured*

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
B	105 233	82 132	82 304	79 588	77 693	79 397	79 678	74 514	79 861	81 934	84 851	86 676	88 160	80 657	77 109	76 015	73 338
DK	26 164	20 100	15 751	14 311	14 100	13 806	14 383	14 627	14 121	12 714	12 503	12 353	11 287	10 265	10 514	9 930	9 757
D**	530 231	457 415	500 463	475 944	467 188	489 210	466 033	422 095	443 217	424 622	456 436	449 397	448 158	505 500	516 800	505 600	516 000
GR	24 705	24 795	28 410	28 773	32 375	29 990	33 722	32 589	28 953	27 980	29 371	28 914	27 391	28 949	30 284	29 910	29 722
E	86 455	93 314	107 115	106 183	100 151	112 272	115 528	127 766	137 145	153 388	165 847	169 411	155 476	148 450	129 949	118 065	114 525
F	322 200	353 059	339 632	334 289	321 369	301 422	284 906	270 799	259 009	237 638	244 042	236 000	225 860	205 968	198 104	189 020	180 832
IRL	9 269	7 198	8 504	8 283	8 006	7 946	8 210	7 818	8 327	8 409	8 437	8 803	9 429	9 876	10 189	9 833	10 231
I	228 236	229 898	222 873	225 242	217 426	219 744	217 533	212 628	213 159	217 511	228 186	216 329	221 024	240 624	240 931	215 818	238 932
L	2 367	2 883	1 483	2 141	1 964	2 118	2 117	1 997	1 983	1 625	1 927	1 862	1 777	1 639	2 656	1 642	1 575
NL	68 225	59 979	56 623	53 505	52 213	52 471	50 676	48 450	50 081	49 189	47 981	50 298	52 032	47 278	48 069	47 728	46 561
A	72 653	68 348	64 367	64 213	64 132	64 784	62 362	61 338	59 783	57 242	57 843	58 557	62 041	58 080	49 714	46 410	46 561
P	28 806	40 576	41 174	46 489	45 073	38 771	41 241	39 560	42 911	54 568	59 532	60 804	63 329	69 535	70 986	66 710	62 163
FIN	16 028	14 157	8 442	9 072	9 117	9 373	9 198	9 563	10 762	10 752	11 909	11 434	12 758	11 547	9 899	7 806	8 080
S	23 537	20 809	19 246	18 554	19 277	19 803	20 635	18 627	21 614	19 294	20 879	21 656	22 497	21 057	20 727	19 741	21 083
UK	355 847	318 584	320 779	318 994	328 362	303 139	318 705	314 969	321 451	307 844	313 400	322 305	341 592	316 829	317 557	313 163	323 476
TOTAL	1 899 956	1 793 247	1 817 166	1 785 581	1 758 446	1 744 246	1 724 927	1 657 340	1 692 377	1 664 710	1 743 144	1 734 799	1 742 811	1 756 254	1 733 488	1 657 391	1 682 836

NOTES

* Data not comparable between Member States

** Before 1991 only West Germany data are considered

Source: CARE - EUROSTAT - IRF

13

3. Number of Passenger cars registered

	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
B	2 033 934	2 576 907	3 158 737	3 206 472	3 230 951	3 262 713	3 300 248	3 342 704	3 408 721	3 497 818	3 613 571	3 697 353	3 833 294	3 928 906	4 020 933	4 109 601	4 210 197
DK	1 076 900	1 297 300	1 389 547	1 447 319	1 432 838	1 460 136	1 505 935	1 564 450	1 617 832	1 645 057	1 654 128	1 655 677	1 590 345	1 593 986	1 604 638	1 674 939	1 662 346
D*	14 376 484	18 161 179	23 236 060	23 680 911	24 035 907	24 688 843	25 377 637	26 099 297	27 223 810	28 304 184	29 190 322	30 152 399	30 695 082	31 309 165	37 578 950	39 202 066	39 917 577
GR	226 499	414 096	877 916	912 016	999 315	1 042 840	1 151 037	1 264 375	1 369 173	1 432 577	1 507 952	1 605 181	1 735 523	1 777 484	1 829 100	1 958 544	2 075 605
E	2 377 726	4 806 833	7 556 511	7 943 325	8 354 050	8 714 076	8 874 442	9 273 710	9 643 448	10 318 526	10 787 424	11 467 727	12 010 717	12 537 099	13 102 285	13 440 694	13 790 400
F	12 470 000	15 520 000	19 130 000	19 750 000	20 300 000	20 600 000	20 800 000	21 090 000	21 500 000	21 970 000	22 520 000	23 010 000	23 550 000	23 810 000	24 020 000	24 385 000	24 900 000
IRL	393 459	510 651	734 371	774 594	709 000	718 555	711 098	709 546	711 087	736 595	749 459	773 390	796 408	828 225	858 498	891 027	900 000
I	10 200 000	15 060 609	17 686 236	18 603 369	19 616 106	20 388 599	20 888 210	22 494 641	23 495 460	24 307 000	25 290 250	26 267 431	27 300 000	28 200 000	29 000 000	29 700 000	30 200 000
L	91 186	116 671	128 612	133 315	137 924	141 081	145 849	151 640	156 048	162 481	168 476	177 011	183 404	191 588	200 740	208 847	217 754
NL	2 591 607	3 400 000	4 515 000	4 594 000	4 629 000	4 728 000	4 817 700	4 901 100	4 950 000	5 118 000	5 251 000	5 371 000	5 509 000	5 569 000	5 658 000	5 755 000	5 884 000
A	1 196 584	1 720 722	2 246 950	2 312 932	2 361 071	2 414 466	2 468 452	2 530 800	2 609 000	2 684 000	2 784 000	2 902 949	2 991 284	3 100 014	3 244 920	3 367 626	3 479 595
P	513 478	873 351	1 268 969	1 345 988	1 428 820	1 517 569	1 600 738	1 701 709	1 236 000	1 587 111	1 530 706	1 474 300	1 605 000	1 800 000	2 020 000	2 210 000	2 400 000
FIN	711 968	996 284	1 225 931	1 279 192	1 352 055	1 410 458	1 473 975	1 546 094	1 619 848	1 698 671	1 795 908	1 896 895	1 926 326	1 909 787	1 936 329	1 872 933	1 872 588
S	2 287 709	2 760 264	2 882 956	2 893 242	2 935 985	3 006 760	3 080 981	3 151 195	3 253 601	3 366 570	3 482 656	3 578 042	3 600 000	3 621 114	3 600 000	3 566 040	3 600 000
UK	11 540 300	13 747 000	14 772 000	14 943 000	15 303 000	15 543 000	16 055 000	16 453 000	16 981 000	17 421 000	18 432 000	19 266 000	19 742 000	19 737 000	19 870 000	20 102 000	22 700 000
TOTAL	62 087 834	81 961 867	100 809 796	103 819 675	106 826 022	109 637 096	112 251 302	116 274 261	119 775 028	124 249 590	128 757 852	133 295 355	137 068 383	139 913 368	148 544 393	152 444 317	157 810 062

NOTES

* Before 1991 only West Germany data are considered

Source: EUROSTAT - IRF

4. Number of Persons killed per million passenger cars registered

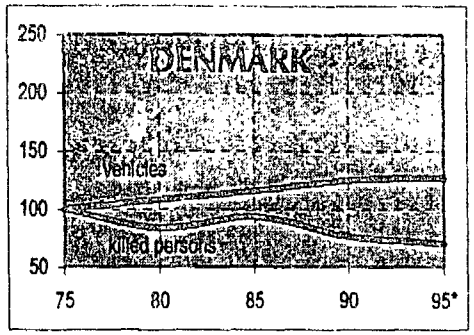
	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
B	1 450	910	759	691	639	641	574	539	572	549	544	539	515	423	372	362	366
DK	1 122	637	497	457	459	458	442	493	447	424	431	420	399	380	360	334	328
D*	1 330	816	561	493	483	475	402	322	329	281	281	265	258	361	283	254	246
GR	4 905	3 578	1 938	1 894	1 921	1 828	1 679	1 620	1 187	1 174	1 122	1 185	1 121	1 128	1 120	1 046	987
E	2 295	1 214	880	807	698	696	707	685	731	738	759	815	752	705	597	533	453
F	1 316	925	715	686	666	632	612	540	556	489	511	499	476	440	412	405	374
IRL	1 372	1 148	768	738	752	745	654	578	547	627	618	595	600	537	483	484	449
I	1 071	682	516	464	420	403	368	335	322	299	294	261	260	286	276	240	233
L	1 448	1 063	762	750	544	602	480	521	506	419	499	379	382	433	344	373	299
NL	1 227	683	442	393	369	371	335	293	309	290	260	271	249	230	221	215	221
A	2 029	1 389	841	795	772	789	712	583	555	530	564	523	505	476	432	381	385
P	3 587	2 919	2 385	2 262	1 966	1 917	1 552	1 432	2 061	1 886	2 152	2 093	1 880	1 788	1 527	1 222	1 043
FIN	1 482	913	449	434	421	428	367	350	378	342	364	387	337	331	310	258	256
S	571	425	294	271	258	259	260	218	259	200	196	215	214	206	211	177	164
UK	650	463	403	391	388	350	349	317	317	293	274	262	272	241	220	197	168
TOTAL	1 211	810	617	572	544	527	487	435	440	408	410	401	387	397	353	321	298

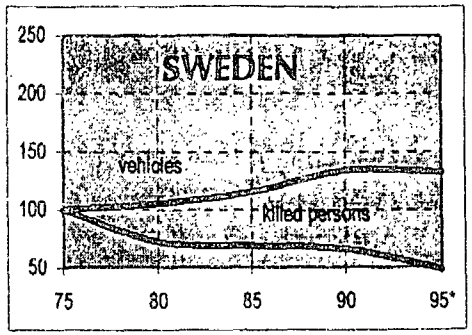
NOTES

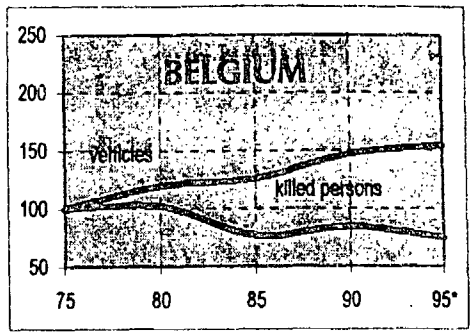
* Before 1991 only West Germany data are considered

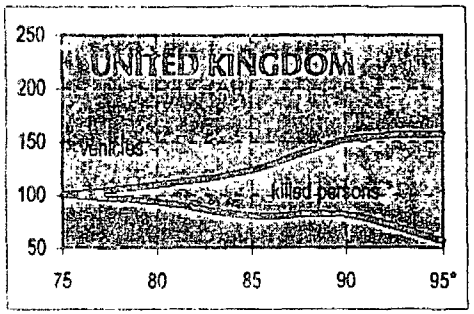
5. Trends of number of killed persons in road accidents and number of vehicles in the EU countries (1975 - 1995)

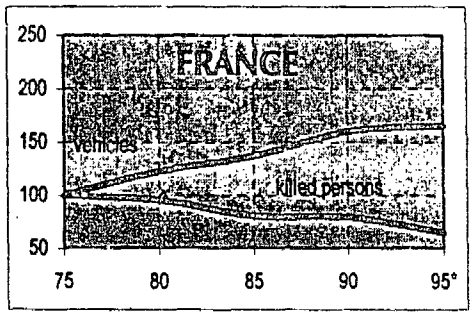
1975: index 100
* 1995 are estimates

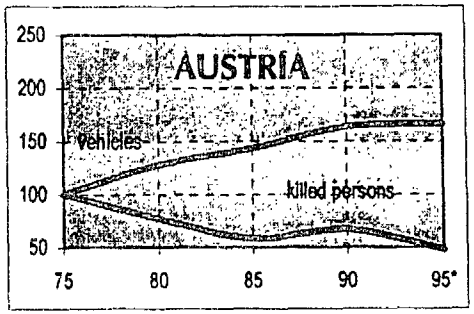


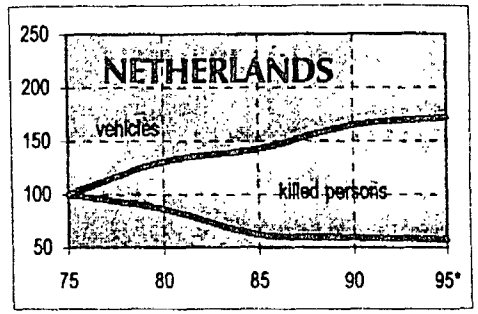


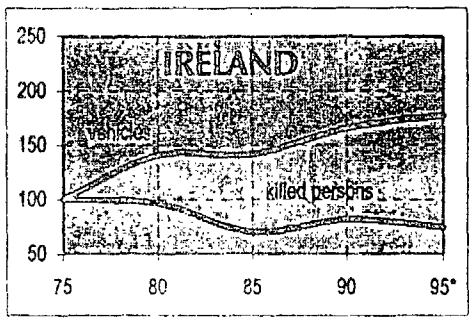


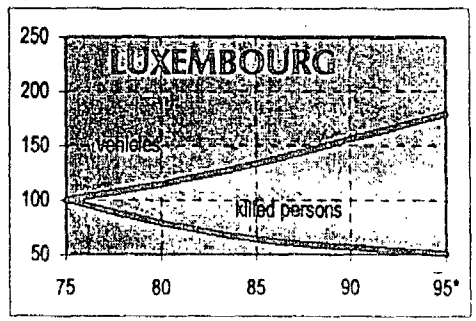


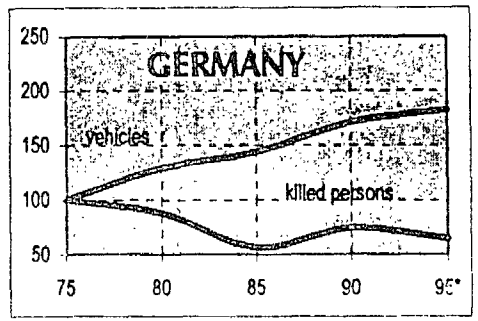


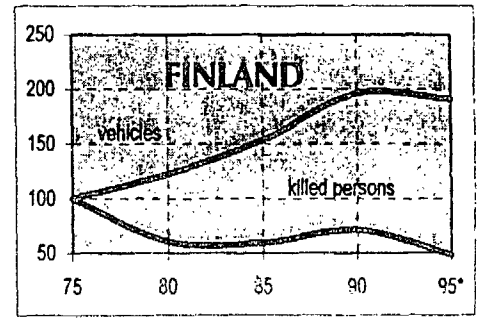


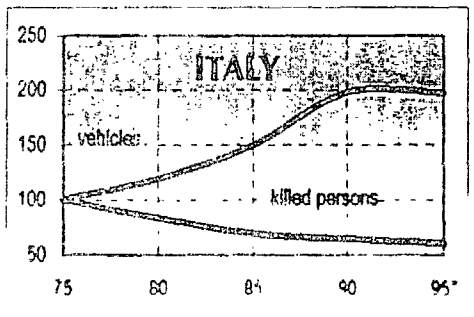


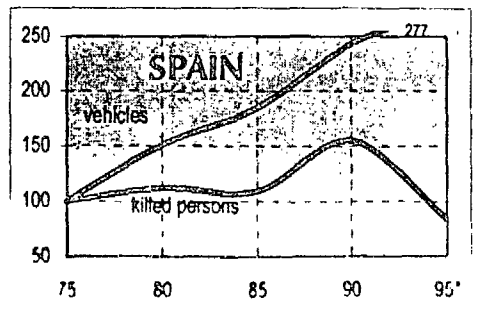


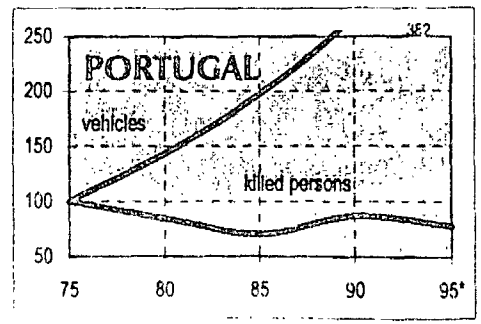


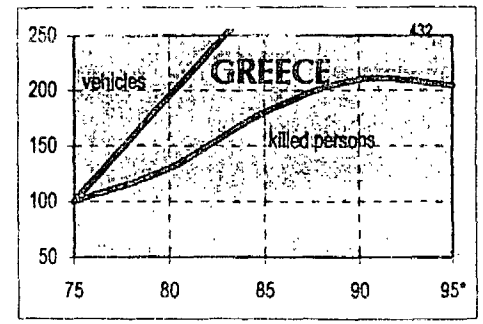












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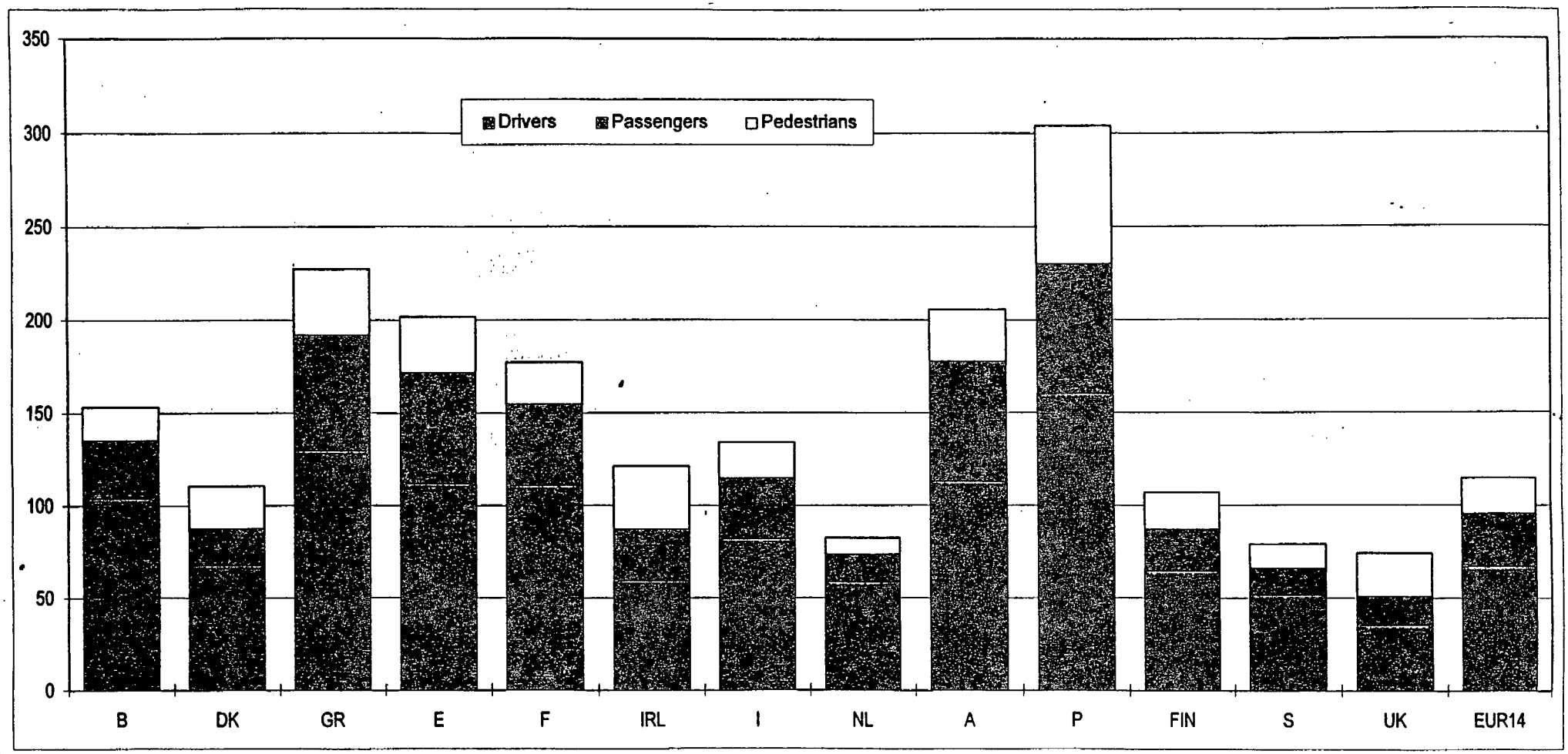
6. Persons killed* by million inhabitants - (1991-1994)

CARE - Community road accident database



1. Persons killed are all persons killed within 30 days from the day of the accident. For countries not using this definition corrective factors were applied

2. Source of corrective factors : ECMT (GR: 1,12 - E: 1,3 (up to 1993) - F: 1,09 - I: 1,07 - P: 1,3)

3. Source of population data: EUROSTAT

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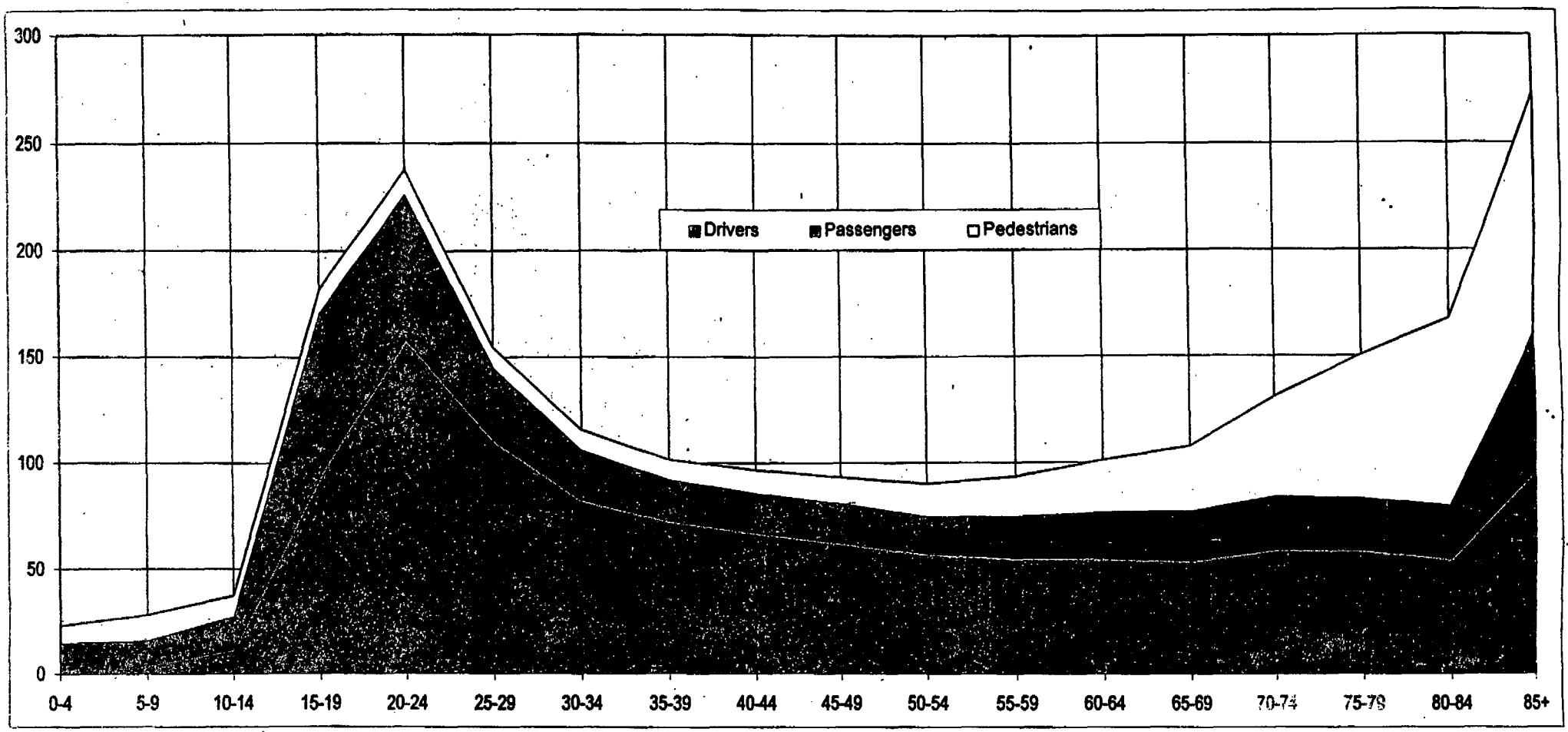
7. Persons killed* by million inhabitants per Age Group - (1991-1994)

CARE - Community road accident database



NOTE: Figures reflect persons killed in a particular age group in relation to existing population in that age group

** 1. Persons killed are all persons killed within 30 days from the day of the accident. For countries not using this definition corrective factors were applied*

2. Source of corrective factors : ECMT (GR: 1,12 - E: 1,3 (up to 1993) - F: 1,09 - I: 1,07 - P: 1,3)

3. Source of population data: EUROSTAT

EC DGVII B3 - 24/03/97

COMMISSION WORK PROGRAMME

The EU road safety programme until 1997-2001

Subject	Key provisions	Status/timing
Recommendation on the application of the 1 MECU test	The explanatory memo-randum will contain an evaluation of the costs and benefits of applying this test throughout the Community	1997

Field I: Information gathering and dissemination

A. Integrated EU info system EU road safety monitoring (system)	Regular up to date publication of the overall EU accident figures compared to predicted trend	1997 onwards
CARE database	Community accident data-base on the basis of disaggregated data collected by Member States	On-going development on basis of Decision 93/704/EC Evaluation of first three years subject to separate report (COM ...)
CARE plus	Homogenisation of accident data within the CARE database	1996 onwards
Exposure data	Integration of traffic data to complement accident data for better analysis	Feasibility 1997 Integration 1998
In depth data	Specific data collection on the site of the accident for more detailed info and better analysis	On-going (STAIRS, causation) (ERSF, accident causation)
Ad hoc surveys	Surveys aiming at better quantitative and qualitative assessments of specific measures	To be launched with interested Member States
Quick indicator	Recent trends in provisional data on fatalities (restricted publication)	On-going
EU info system on national implementation of road safety measures	Documentary file with content of main national measures taken by individual Member States	Feasibility study 1997

EU info system on recent international research in the field	Documentary file on research	Feasibility study to identify needs, contents, scope, format....
Communication strategies	Exchange of experiences in most effective communication strategies	Project with ERSF in 1997/98
Road safety indicators at EU level	Measuring instruments that can be used to assess the results of separate road safety actions (e.g. the success of enforcement)	To be developed 1998 and onwards
EU info system with guidelines	Documentary file on best practice in enforcement policy for road signs and signals and infrastructure design	1998 onwards
Integrated EU information system	The key issue for real efficiency of road safety efforts is accessibility of information at all levels . An independent EU information system built around the CARE database should be the basis for this.	Feasibility study 1997 to identify the integration of the above elements to a accessible and up to date info system
B. Additional activities in the field of information		
Sartre survey II	Large survey collecting car drivers attributes and reported behaviour in 13 EU countries (all except DK and L). Analysis of the results followed by in depth analysis of selected topics.	Follow-up of the Sartre I project 1997/98
International police cooperation	Setting up a network between traffic police forces and enforcement authorities e.g. in the field of driving licences and tachographs	First contact meeting in 1996. Financial support to an on-line accessible network is envisaged in the years to come.
Independent accident investigation	Starting discussion on desirability of independent accident investigation bodies in road traffic (analogue to air traffic accidents)	First orientation discussions with ITSA (International Transportation Safety Association) started in 1997.
Cost-benefit analysis of road traffic safety measures	A systematic forecast and review of the costs and benefits of various road traffic safety measures	To be undertaken as part of FP5

Field II: Accident avoidance

Subject	Key provisions	Status/timing
A. Direct influence on user		
I Driving licence (skills and behaviour)		
Application of Dir. 91/439/EC Art. 12.3	Creating a network between Member States for international management of licences	In 1998 the Commission will review with Member States the needs and appropriate means for facilitating the exchange of information
. Microchips on driving licences	Report on possible contents of future micro-chips on driving licences	Proposals in '98/99
. Testing for driving licences	Evaluation of existing differences in application of Annex II by Member States	Proposals in '98 and onwards
. Annex III (medical requirements)	Adaptation to medical and technical progress by Committee	On-going
. Art. 11 of Dir. 91/439/EC	Optional sub-categories	Proposal in 99
. Licensing of novice drivers	Improved methods/policies for the safety of novice drivers (follow up WP2 of High Level Group)	Working Group to be established in 98/99
. Disqualification	Mutual recognition of disqualification by a Member State different from the Member State of normal residence	Judicial co-operation (third pillar of Treaty) with observer status for Commission
. Periodicity of medical checks for professional and elderly drivers	Harmonisation needed in light of mutual recognition and for road safety reasons	Proposal in 99

2. *Physical condition*		
. Alcohol	* Harmonised maximum allowed BAC level at 0.5‰ for road users * Promote the use of analysis of the expired air as a measurement of impregnation * Re-integration of drivers that were suspended because of alcohol use	COM (88) 707 final (on table of Council) Follow-up WP1 of High Level Group Follow-up WP1 of High Level Group
. Drugs/medicines	Develop methodologies for roadside checks Warning labels on medicines	Studies to be launched with interested Member States in '97 Follow-up WP1 of High Level Group
. Fatigue	Effective control of drivers' hours for professional drivers	Proposals COM(94) 323 and COM(95)550 On-going discussion in Council
. Automatic systems to monitor drivers' condition	In-built systems in cars that can assess the physical condition of the driver (fatigue, alcohol or drug influence) and the driver's compliance with traffic rules and can initiate warning systems or devices that prevent driving	Research on-going
3. *Awareness*		
. Making the public aware of risks involved	Addressing high risk groups with EU wide information campaigns	Support to campaigns (with ERSF such as including YES campaigns, video's, etc.)
. Increasing attractiveness to travel on safer means	Promotion of a shift from car driving to the use of public transport that would have significant results for road safety	Citizen's network and follow-up actions 1997 onwards
. Improve advertising	Adoption of a code of conduct in advertising stimulating advertising that promotes road safety	Follow-up WP 3 of High Level Group

. Driver Tutoring systems	Inexperienced drivers (e.g. after drivers exam) need still assistance in various critical driving situations. The tutoring system should identify these situations and give advice in real time and/or after the trip	Follow up of Ariadne project (Telematics applications for Transport) and Research 1998 onwards.
. Accident recorders in motor vehicles	Accident recorders register essential data on a crash and facilitate enormously the post-accident analysis (more difficult as ABS systems avoid the traces of braking). The presence of recorders lead to a considerable reduction of accidents as drivers are more careful.	Follow-up to be given to Samovar project (Drive II).
. Allocation of the real cost of insurance in proportion to the risk	In the Green Paper on fair and efficient pricing, it was recognised that : - insurance premium does not cover the whole cost of accidents and their consequences - individual premiums are not in proportion to the potential risk of road users	Commission will enter into a dialogue with insurance companies and Member States on methods to improve internalisation of road safety costs.
. Traffic Safety Model (4th framework programme)	Development of : - a car safety declaration model - a car safety information model for consumers - and a model for basing car tax on socio-economic costs for traffic accidents and toxic emissions	Project planned to start in April '97. Final report scheduled for mid '99
B. Environment of user . Speed limiters for heavy vehicles	Compulsory installing and use of speed limiters	Evaluation of impact of Directives 92/6 and 92/24 (report in 1997/98)
. Speed limiters for other categories of vehicles	Extension to all vehicles above 3.5 tonnes Variable speed limiter for all vehicles	To be decided on the basis of impact report Research

. On-trip information (Radio Data Systems, Traffic Message Channel (RDS-TMC))	Installation of information systems; EU-wide installation needed	Being implemented in D and NL. Exchange of information, pilot projects
. Weather-Related Traffic Management	Installation of local monitoring and driver information systems	Being implemented in D and F. Exchange of information, pilot projects
. Variable speed messages on motorways and in car displays	Information to the driver in order to adapt speed to circumstances	Exchange of information, pilot projects
. Intelligent accelerator pedal	A device that generates more resistance in accelerator pedal if decrease of speed is needed	In pilot phase, possibility for introduction in series through legislation should be assessed
. Adaptive cruise control	Automatic adaptation of speed as a function of the distance to the next vehicle	In test phase for buses. Implementation of this available technology for other vehicles should be considered 1998 onwards
. Vision enhancement	Equipment of vehicles with UV-headlamps, infra-red detectors or radar systems	Prototypes being tested Actions to be decided on the basis of further assessment
. Obstacle detection systems	Driving aid systems that warn driver of obstacles (e.g. vulnerable road users)	Pilot phase introduction in series should be encouraged; liability problems should be solved
. Improved visibility of vulnerable road users	Implementation of a code of practice for the use of luminous or reflecting clothes in traffic	Means and knowledge available. Support to standards to be examined.
. Daytime running lights	Headlights during daytime to increase visibility for . motorbikes . other vehicles	Pilot trial with interested Member State(s)
. Roadworthiness tests for motor vehicles	Regular inspection of motor vehicles as regards safety provisions such as brakes, tyres and lights	Proposal for Directive 96/96/EC to be extended to two wheel motor vehicles in 1997/98
. Safety advisers for transport of dangerous goods	Appointment in the companies of key persons to oversee all activities related to the transport of dangerous goods	Directive 96/35/EC to be implemented by Member States before 1.1.2000. Proposal follow-up on uniform training provisions in preparation

. Traffic management	Defining road network hierarchy; segregating vulnerable road users where needed	Guidelines to be established, with support of the Commission, as follow-up WP 4 of High Level Group
. Improvement of infra-structure by telematic tools	Geometric road design standards can be upgraded in terms of safety by integrating possible telematics tools to assist the driver	Follow up of the results of the HOPES project (Telematics Application Programme for Transport)
. Safety impact assessment	The impact on road safety should, like the environmental impact, be systematically assessed at the decision stage for infrastructure	Draft Guidelines to be discussed in 1997/98 by High Level Group. To be applied in a first stage to TERNs and other EU financed projects.
. System Safety Evaluation	Before implementing new devices or systems, the system safety (reliability, error robustness etc.) has to be assessed	Guidelines and methodology of the PASSPORT project (Telematics Application for transport) to be followed up
. DUMAS (4th framework programme)	Development and assessment of urban safety management strategies; validation in field studies throughout the EU	Project started in Jan. '97. Final report scheduled for end of '98

Field III: Reduction of consequences of accidents

Subject	Key provisions	Status/timing
Use of seat belts and child restraints Commission report COM(96)244 indicates that the implementation of Directive 91/671/EEC in wearing seat belts is completed. Increasing the use should be subject to enforcement/education	Increased restraint use to 95% would reduce 7,000 EU deaths annually.	Exchange of best practice/ setting targets Proposal for extension of Directive 91/671/EEC to certain categories of minibuses and coaches in 1997/98
Motorcycle and cycle crash helmet use	Crash helmets reduce head injuries for this group by 50%	Support publicity campaigns and exchange of best practice on enforcement
Crashworthiness of cars	Crashworthiness minimum standards for new cars are introduced for the first time at EU level as from 1998 by type approval Directives on side impact and frontal impact. However, there are still considerable differences between cars from the same classes as regards crash-worthiness. Therefore, several governments and consumers' organisations run comparable test programmes in order to inform consumers on the relative performance of cars in this field.	Market forces should play a more important role. Consumers need scientifically correct information. The Commission should play a co-ordinating role 1997/98.
ADRIA (4th framework programme)	Design of an advanced, biofedelic crash dummy for injury assessment in frontal test conditions	Project started in Feb. '97. Final report scheduled for Jan. '99
Compatibility (4th framework programme)	Research project aimed at providing design recommendations to improve crash compatibility between passenger cars	Project is planned to start in April '97. Final reports are scheduled for mid '99.

"Friendly" design of motor vehicles	Cars and heavy vehicles should be so designed that in case of accident the damage to the other (more vulnerable) party is minimalized	- Development of compatibility standards and test procedures (first studies ongoing) - Proposal for Type approval Directive on pedestrian-friendly front design (1998) - Energy absorbing front underrun protection for trucks - research started in '95 should lead to proposals for design parameters in '98. - Closed side guards for trucks (Proposal for legislation amending Directive 89/297/EC including changing optionality towards mandatory fitting to be drafted in 1998/99)
"Forgiving" roadside design	Crash barriers' legs are extremely dangerous for motorcycles in case of accidents "Black spots" should be identified and corrected	Preparation of a recommen-dation to apply covers Development of guidelines for systematic audits and remedial measures
Automatic Incident Detection (AID) and Emergency Management	Installation of intelligent traffic surveillance systems	Technology ready for implementation Exchange of information
Emergency call system	Satellite Global Positioning Systems (GPS) in combination with Global System for Mobile Communication (GSM)	Field trials undertaken in Member States. Results to be disseminated for further application
Post-accident care	- first aid - roadside emergency care - trauma centres Development of in-car emergency warning systems	Support of Commission to establish : - Best practice guidelines - Exchange of information - Research

Financial Statement

1. Title of the action : Communication of the Commission to the Council and the European Parliament entitled Promoting Road Safety in the EU - The programme for 2000+

2. Budget line involved : B-2 - 702 and B-2 - 704

   Other budget lines can be involved (for example research, B6-7161)

3. Legal basis :

   Article 75 of the Treaty.

4. Description :

   4.1 Objective : to promote and develop, by legislative and non-legislative measures, road safety in the Community.

   4.2 Duration : open-ended.

5. Proposal for classification of expenditure or revenue

   5.1 Non-compulsory expenditure (NCE)

   5.2 Differentiated appropriations (DA)

6. Type of expenditure or revenue

   Co-financing, normally up to 50%, with other sources in the public or private sector, of actions pursuing Community objectives in this field.

   Contribution to international organisations in the sector.

   Contracts concluded with consultants or undertakings (public or private) in order to acquire the information and analyses necessary for the development of the common road safety policy.

   Drawing up of Community standards aimed, in particular, at promoting safety.

   The actions also cover expenditure on research, meetings of experts, conferences and congresses and information and publications directly connected with the achievement of the aims of the action of which they form an integral part. They do not include expenditure associated with the management of these actions or general administration (see Commission communication of 22 April 1992).

7. Financial implications

7.1 Method of calculating the total cost of the project

In the main, the actions envisaged cover grants to public and private bodies wishing to submit to the Commission projects falling within the scope of the objectives pursued by the Community. The total cost of these projects can vary greatly, depending on their scope, duration, geographical coverage, etc.

Examples of such actions are :

- grants for national actions selected by the competent national administrations on the basis of their Community appeal and general application and in the framework of the European Year of the Young Driver 1995.

The cost of these actions is determined by the authors of the projects but, under the Commission's contractual requirements, checks may be carried out to establish how these costs have been calculated and to assess their acceptability in relation to the cost of equivalent services obtained on a competitive basis.

In the case of research and the provision of services, costs are determined in the light of the costs proposed by the specialised transport service providers on an open competitive basis.

7.2 Distribution by measure

	BUDGET 97	PDB 98	99
Pilot projects	1	1	1
Data collection	1	1.5	1.5
Awareness campaigns, information transfer	3	2.5	2.5

7.3 Administrative costs directly linked to this measure

Information and publications		
1997	1998	1999
0.2	0.2	0.2

7.4 Multiannual operations schedule

Not applicable, given that the level of appropriations will be determined annually under the budgetary procedure.

8. Anti-fraud measures foreseen in the proposal

The allocation of grants, provisions of services and commissioning of preparatory studies (feasibility or assessment) are verified by the competent Commission departments prior to payment, taking account of contractual obligations and the principles of sound financial management. Anti-fraud measures (inspections, submission of reports, etc.) are included in all agreements and contracts concluded between the Commission and the recipients of payments. These measures are supplemented by on-the-spot inspections and external audits.

9. Elements of Cost Benefit Analysis

9.1 Specific quantifiable objectives, target groups

9.1.1 Specific objectives of the proposed action

The completion of the internal transport market has had the effect of multiplying travel patterns in the Community, whether for business or pleasure. consequently, the safety of road transport has become one of the Community's foremost policy objectives, recognised under the Maastricht Treaty and taking the form of various actions whose importance for the Community has been clearly demonstrated :

- technical harmonisation of road transport and road traffic rules;
- approximation of laws, technical standards and administrative inspection procedures designed to ensure the safety of inland transport;
- reduction of the risks associated with the transport of dangerous goods.

The external dimension implies actions to promote the transport policy beyond the Community, particularly in Central and Eastern Europe and in the Mediterranean Basin, in order to negotiate market access conditions in line with the principles of the development of a sustainable and safe mobility.

9.1.2 The target groups include all professionals and transport users as well

as the national and international administrations involved in these sectors, with special emphasis being placed on organisations that are representative at the European level.

9.2 Justification of the measure

As the objective is to improve road safety in the Community, it is legitimate to consider the socio-economic benefits to the Community. The most recent studies on the socio-economic cost of road accidents estimate the total cost of road accidents in the Community between 145 and 162 billion ECU per year if the estimated value of human suffering is included.

The 'hard costs' of accidents amount to about 45 billion ECU a year which means with 45,000 people killed a year as indicator that every measure that would save 1 life could be taken if it costs 1 million ECU or less.

Community action in the area of driver behaviour must seek to promote synergy among national measures and strengthen their effects, while at the same time allowing for economies of scale; The participation of the Commission will serve as a catalyst for the national initiatives and for the financial support measures, both public (national and local) and private.

As well as ensuring that States benefit from the experience acquired by others, the provision and exchange of information will also result in a levelling-up of safety levels in Europe (road safety levels four times lower in Portugal than in the United Kingdom, for instance). The introduction of the CARE base should help in identifying and quantifying road safety problems and also in measuring the efficiency of the measures taken (Council Decision 93/704/EEC of 30 November 1993).

Improvement of the passive/active safety of road vehicles is an area where the Community has a clearly defined role with clearly defined powers based on technical harmonisation in the context of the single market (vehicle type-approval). Consequently, in-depth studies will need to be carried out on all the technical aspects likely to contribute to improving community legislation in the field of active and passive motor vehicle safety.

Given the increase in transfrontier Community traffic, steps must be taken to improve the free flow of traffic and the levels of safety by ensuring that the environments (signs, traffic rules, etc.) encountered by road users on the move is as familiar as possible.

The transfrontier carriage of dangerous goods by inland transport is an area which requires increased attention on the part of the Commission, with a view to preparing the necessary preventive measures.

9.3 Follow-up and evaluation of the measure.

9.3.1 Performance indicators chosen : accident statistics, a monitoring system on EU Road Safety and specific reports on targeted actions

9.3.2 Method and timing of the evaluation foreseen : usual controls

10. Administrative expenditure (Section III, Part A of the budget)

Actual mobilisation of the necessary administrative resources will depend on the Commission's annual decision on the allocation of resources, taking into account the number of staff and additional amounts authorised by the budgetary authority.

10.1 Effect on the number of posts (excluding research)

Type of post		Staff to be assigned to managing the operation		Source		Duration
		Permanent posts	Temporary posts	Existing resources in the DG or department concerned	Additional resources	
Officials or temporary staff	A	4		3	1	indefinite
	B	2		1	1	indefinite
	C	1		1		
Other resources		1		1		
Total		8		6	2	

10.2 Overall financial impact of additional human resources

ECU

	Amounts	Method of calculation
Officials	158,000	1 A x 90,601 (average cost A6)
Temporary staff	-	1 B x 67,101 (average cost B4)
Other resources (indicate budget heading)	-	
		total : 157,702 rounded to 158,000
Total	158,000	

10.3 Increase in other administrative expenditure as a result of the operation

ECU

Budget heading	Amounts	Method of Calculation
	0	
Total	0	

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