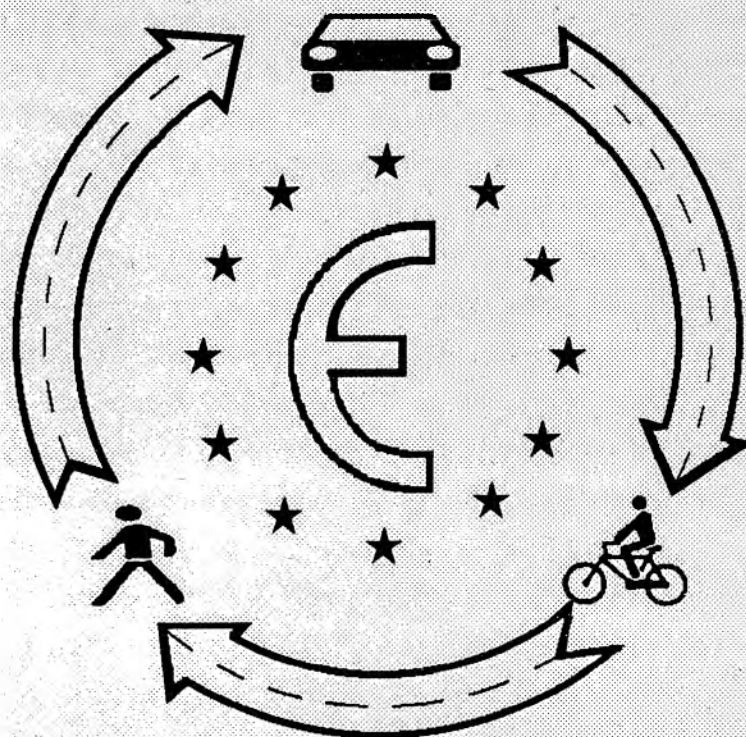


**REPORT OF THE HIGH LEVEL EXPERT GROUP  
FOR AN EUROPEAN POLICY FOR  
ROAD SAFETY**



**February 1991**

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COMMISSION OF THE EUROPEAN COMMUNITIES

REPORT OF THE HIGH LEVEL EXPERT GROUP

FOR A EUROPEAN POLICY

FOR ROAD SAFETY

February 1990

## THE COMMITTEE OF EXPERTS ON ROAD SAFETY

Christian GERONDEAU  
Chairman

Paris, 31 December 1990

Dear Sir,

You entrusted me last December with the task of presiding over the Committee of Experts whose job was to draw up a report on the state of affairs of road safety throughout the member states of the European Community, and to make proposals with a view to improving the situation.

With a human cost of 50,000 deaths per year and over 1,500,000 injuries, and an economic cost in the order of 70 billion ECUs, road accidents are of such an importance that their treatment must be a fundamental axis of any sound Community transport policy.

After reviewing the situation, the Committee first set about compiling a list of the various technical measures that could contribute to this overall objective. Over 60 were listed, belonging to very different fields.

Many of these measures are already well known, yet their implementation throughout the different member States of Community is far from being homogeneous and complete. This is why the Committee rapidly concluded that its work should not be limited to identifying the technical means liable to help reduce the number and severity of road accident, but equally to determine the ways through which the EEC could contribute to the setting up of efficient road safety policies on the totality of the Community territory.

Such is the purpose of the second part of the report which I hereby submit.

The Committee proposes in fact that a 20-30 % reduction by the year 2000 in the number of persons killed and seriously injured in the Community as a whole should be adopted as an overall objective. To help obtaining this objective, the Community can act following two complementary ways.

The first, and the only one so far explored, is the issue through regulatory channels of Directives binding on member States. However this form of action, although undoubtedly useful, is limited in two ways. To begin with, there are at present differing perceptions as to its scope and, secondly, most measures concerned with road safety do not lend themselves to the Directive procedure.

The second type of action had not been considered hitherto. It is based on the pooling of experience in the different member States, so as to advance knowledge, formulate a common approach to reducing road accidents, and allow all member States to benefit from the others' experience, something which is not happening at the moment.

Contrary to what might be thought, there is at present no permanent European body devoted to this major problem that Society is facing.

In order to bridge this gap, the Committee strongly recommends that a specialised Community body should be set up, on a strictly professional basis, with the following main tasks :

- to survey the experience of the different member States with the various types of action aimed at improving road safety, to analyse this experience, to promote research, and to disseminate the knowledge acquired,
- to assist and advise the Community and the different member States as appropriate,
- more generally to monitor road accident trends in the light of the objective proposed above, and to give if needed the necessary impetus to the implementation of active and effective road safety policies throughout the Community.

In other words, to act by means of advice, assistance and persuasion. It seems to us that this would be the most useful contribution the Community could make in the years to come.

Without such a permanent body, we fear that our report can only produce minor improvements of the situation. If, on the contrary, the Community could agree to adopt the necessary means - which are relatively modest - and implicate itself fully in the fight for greater road safety, we are certain that the action taken would be effective and that the results that could be expected would be apparent on three levels:

- On the human level, the number of deaths and injuries that could be avoided each year would run into tens of thousands, such is the scope for improvement, given the current disparities between road accidents levels in the different member States.

- On an economic level, the potential savings would be far superior to the sums spent.

- In terms of its general public image the Community would have everything to gain by actively participating in an action that affects the lives of all its inhabitants and which would contribute to demonstrating that the Community institutions do not deal exclusively with matters of political and economic interest, but are also close to the concerns of day to day life.

Before closing, I would like to take this opportunity to thank my colleagues in the Committee, all of whom, with their respective expertise and experience, have contributed in a very positive manner to the drawing up of this report.

I would like to thank also the members of the Transport General Directorate, for volunteering their precious help, and more generally for their support for this cause which they, like us, clearly consider to be of exceptional human importance.

Yours faithfully,

Christian GERONDEAU

Monsieur De La PENA  
Directeur Général des Transports  
(D.G.7)

This report was written during the first half of 1990, at the request of DG 7 (Directorate General for Transport) of the Commission of the European Communities, by an ad-hoc Committee of independent experts, composed as follows :

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The Committee thanked the Directorate General for Transport of the Commission of the European Communities and, in particular, Mr Egidio LEONARDI, Head of Division, Transport Safety, Research and Technology.

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ANNEXES



**SUMMARY**

**PRINCIPAL RECOMMENDATIONS**

**SUMMARY;  
PRINCIPAL RECOMMENDATIONS**

Each year, road accidents are the cause of about 50,000 deaths and more than a million and a half injuries on the roads of the Community. Since the Treaty of Rome was signed, almost two million people have been killed in the twelve countries which are now Community Members, and almost forty million injured: that is a wartime casualty list. The economic loss which these accidents have produced every year are of the order of 70 billion Ecus, distinctly more than the Gross National Product of different countries of the EEC.

These dry figures can of course not give an idea of the unquantifiable sum of grief and pain caused by what is one of the most shocking scourges of modern times. But, notwithstanding these major human and economic costs, the Community has so far involved itself only incidentally in dealing with the lack of safety on the road.

The Community's activities have chiefly been concerned with harmonising the rules on construction of vehicles, as a part of removing barriers to trade and, also to its credit, we may cite a Directive on the general content of driving licences, plus others relating to the law on work by lorry and bus drivers (particularly the length of driving time). But these measures do not add up to a policy on road safety: the Community has not yet constructed a coherent body of policy on this matter, nor— of course— has it implemented one.

At this time, a number of important new draft directives prepared by the Commission (speed limits, drink-driving, compulsory seat-belt wearing) have been submitted to the Council of Ministers, who have not yet looked at them because of the differing views on the competence of the Community in the field of driver behaviour.

But there is no lack of grounds for determined action by the Community:

French p.5

There are many specific technical measures of recognised effectiveness which could reduce the number and seriousness of accidents. The Experts Committee have listed more than sixty, for very different areas; but at present these are enforced only incompletely, and differently in the various Member States, acting in isolation, with the resultant record of many unnecessary deaths and injuries. At this time there is no overall cooperation in this field. The fatal-accident rate (expressed per kilometre of travel) differs more than sevenfold as between the most advanced Member States and those with the least good figures: that indicates the extent of the progress that is possible. Using the same basis of measurement, the average risk on Community roads is nearly twice that in the United States: if it were possible to attain their level (which is also that of the more advanced European States), there would be a saving of more than 20,000 deaths every year within the Community.

The margin for advance is therefore substantial and the Experts Committee therefore believes that both mandatory and voluntary Community action could

contribute to a major reduction in the number of victims. This action could be taken in two principal forms: firstly, continuing in the ever-essential process of making binding Directives; secondly, developing a new range of activities, seeking more to help and convince than to coerce, since directives cannot settle everything, regardless of their sphere of competence, because many decisions will remain within the scope of the States and their local authorities.

## A CONVENTIONAL FORMS OF ACTION

The Community's main conventional form of action in support of road safety is based on binding Directives; this is already the case in a number of areas which have been referred to above, specifically in the matter of motor-vehicle construction. In other areas central to the implementation of an effective, uniform safety policy, it may turn out to be necessary to adopt this process unless matching decisions are taken by all of the Member countries— so this is of considerable importance.

French p.6

But we must stress that across another section of the activity which could support improved safety on the roads, this process cannot be envisaged, for the national States (and their regional and local authorities) still have the major rôle. Thus, for example, most measures on training of and information for drivers, the control of behaviour and corresponding penalties, the improvement of road networks, the organisation of assistance and, more generally, the actual management of accident prevention.

That does not mean that the Community therefore cannot take action: on the contrary, its contribution can be vital but it must take various forms.

## B NEW FORMS OF ACTION

The Experts Committee have identified three types of need which are not met at present, but where the Community could give decisive assistance in meeting them by acting essentially through information and encouragement. These actions would be:

1. To share the (very rich) experience of individual Community countries in a process of permanent exchange of information which at present is lacking, and to commission studies and research to fill the gaps in knowledge, particularly by comparing the results attained in individual Member States.
2. On that basis, progressively to develop reference material for the publication of technical manuals intended to propose solutions which individual countries could then adopt, mostly on a voluntary basis, to improve traffic and safety on their own road networks, and to move towards an approximation of national practices. This corpus of knowledge should increasingly extend to all areas of action that might assist in accident prevention, relating to:
  - organisation of action against lack of road safety;
  - road-user behaviour (training, information, laws and regulations, enforcement and punishment);
  - the road network (standards on planning, improvement, signing and maintenance);

French p.7

- vehicles (when outside the scope of Community Directives);
- assistance to the injured. (etc)

This process would, *inter alia*, include the drafting of material for a 'European Highway Code', which individual Member-States could progressively adopt. It should be noted that this is what has happened in the United States, where almost identical 'Highway Codes' in all the States are not the outcome of any Federal requirement, but a voluntary adoption of technical material of irreproachable quality.

3. To play an on-going part in promoting road-accident prevention by national, Community and international bodies, since such accidents tend too often to be seen as inevitable and, hence, be ignored. For that, quantified targets would be set and continually monitored. Recommendations could be addressed to individual Member States and help could be given to them if they feel the need. A passive recording of accident figures would thus be replaced by an active, voluntary approach.

In order to discharge these three tasks, the most appropriate (perhaps the only) approach would be to set up a permanent, but small-scale, specialised body. At present there is no Community-level body dedicated to road-accident prevention, even though such accidents are utterly important in human and economic terms.

The international authorities in this field (the OECD, ECMT and UNO) work from the proceedings of experts, meeting or consulted from time to time according to the matters in hand; this places narrow bounds to their activities, and it does not answer the needs we have described above. Further, they are not matched by a political entity which has resolved to implement a common transport policy within which road safety should of course be a major element.

The experience of countries where permanent bodies have been set up with motivated leaders has shown that road safety has considerably gained there. It seems that such a resource should be created without further delay, whatever the result may be of the current discussion on the extent of the Community's competence.



French p.8

To sum up, it seems that the Community could provide notable assistance in the work undertaken by individual Member States against road accidents, and that the Community is in the right position to do this.

Alongside the making of directives binding on Member States, the creation of a specialised Community body with an essentially technical rôle could make a notable contribution to that aim. The initial resources assigned to such a body could be on the same scale as those for the Environment Agency (5 million Ecus and some twenty people for the first year) and should be seen against the economic and human problem described above.

The Experts Committee therefore expresses the wish that the Community should take such action in a matter to which its citizens are highly sensitive, since it concerns the preservation of life itself, and the safety of millions of those citizens.

LIST OF PROPOSALS FOR ACTION

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**INTRODUCTION (GENERAL OBJECTIVES)**

1. To set a Community target for a 20 to 30% reduction by the year 2000 in the number of deaths and serious injuries in road accidents. [French page 25; English page 16]
2. To harmonise the situation in individual countries, for the gradual creation of a European Road Safety and Traffic Space. [French page 25; English page 16]
3. Both in towns and rural areas to promote a model of calm driving. [French page 26; English page 17]

( 3 PROPOSALS)

**PART ONE (TECHNICAL ACTION TO BE TAKEN)**

**1 ACTION FOR BETTER USER BEHAVIOUR**

1.1 Education & Training

4. School and pre-school training to be compulsory and to be developed. [French page 29; English page 19]
5. To disseminate in all Community countries the practice of accompanied learner driving. [French page 31; English page 20]

1.2 Public Information

6. To create an information and exchange base on Community countries' information campaigns on road safety. [French page 33; English page 21]
7. Periodically to organise opinion surveys on road safety in the Community. [French page 33; English page 21]

French p.10

1.3 Traffic Law & Regulation

1.3.1 Speed Limits

8. To make speed limits general on motorways throughout the Community. [French page 36; English page 23]
9. To adopt homogeneous motorway speed limits: between 100 and 130kph for rural motorways and between 80 and 100 on urban motorways). [French page 36; English page 23]
10. To end the requirement to shift to the outer lanes of motorways when driving at the maximum permitted speed. [French page 37; English page 24] (1)
11. To reduce general speed limits on ordinary roads to 90kph, if they are higher at present. [French page 37; English page 24]
12. To adopt 50kph as the primary reference speed limit for the urban network. [French page 38; English page 24]
13. To introduce the '30-zone' concept in the highway codes of all Member States, i.e. with speed restricted to 30kph. [French page 38; English page 24]

- (1) Recommendation adopted with the opposition of one of the members of the Committee

### 1.3.2 Occupant-Protection Systems

14. As soon as possible to make seat-belt wearing compulsory in every seat of cars. [French page 39; English page 25]
15. As soon as possible to prohibit carrying children in cars unless they have a suitable protection appliance. [French page 41; English page 26]
16. To require coaches for inter-urban journeys to be fitted with seat belts at every seat. [French page 42; English page 27]
17. To adopt technical standards for helmets offering the highest level of safety. [French page 42; English page 27]
18. To recommend that cyclists and especially young ones wear a suitable helmet. [French page 42; English page 27]

### 1.3.3 Alcohol

19. To strengthen national and local information campaigns. [French page 43; English page 28]
20. Where an adequate level of enforcement can be attained, to reduce the maximum permitted level of alcohol to 0.5g/l. [French page 43; English page 28]

French p.11

### 1.3.4 Daytime Lighting on Vehicles

21. To make it compulsory to use dipped headlights for daytime driving. [French page 44; English page 28]

## 1.4 Enforcement

22. To authorise random alcohol checking of drivers by the police and recognise the legal value of breath-test measurement. [French page 45; English page 29]
23. To develop the use of automatic check apparatus. [French page 45; English page 29]
24. To regard the resources devoted by the police to enforcement on the roads as a priority and, mostly, to increase them. [French page 45; English page 29]
25. Regionally and locally, to undertake pilot operations of increased enforcement. [French page 45; English page 29]

## 1.5 Penalties

26. Gradually to develop a common approach among Member States. [French page 46; English page 30]
27. To introduce a simple and effective procedure for prosecuting for offences committed in the territory of another Member State. [French page 46; English page 30]
28. To examine the general use of licence endorsement. [French page 46; English page 30]

## **2 ACTION ON THE ROAD NETWORKS**

### 2.1 Technical Provisions to be Implemented

29. Gradually to increase and harmonise the human-life values regarded in cost-effectiveness analysis. [French page 48; English page 32]
30. To remove road-system black spots as part of a total process for the highways concerned. [French page 48; English page 32]
31. To create hierarchical road networks and to make characteristics homogeneous along each section or route. [French page 49; English page 32]

32. To reduce the number of potential conflicts and improve the readability of lay-outs and infrastructure. [French page 49; English page 32]

French p.12

33. To give drivers possibilities of avoidance and recovering control of vehicles; to clear roadsides and remove or protect lateral obstructions. [French page 49; English page 32]
34. To make signs uniform. [French page 50; English page 33]
35. At maintenance and construction sites, to take more account of the safety of road users and site workers. [French page 50; English page 33]
36. To develop anti-skid surfaces. [French page 50; English page 33]
37. Gradually to abolish highways which can be perceived as motorways but do not have motorway characteristics. [French page 51; English page 33]
38. On the European level, to clarify the principles of a hierarchical urban- road network. [French page 53; English page 35]

#### 2.1 Machinery to Check Roads are Safely Built and Maintained

39. To introduce systematic, periodical external compulsory inspection of road-system safety. [French page 53; English page 35]
40. To prepare and disseminate reference material with all the rules for building and maintaining the safest-possible road networks. [French page 53; English page 35]

### **3 ACTION ON VEHICLES AND CERTAIN USER CATEGORIES**

#### 3.1 Motor-Cars

41. To promote vehicle design that encourages calm driving. [French page 55; English page 36]
42. To assist the spread of all options and equipment supporting improved safety. [French page 55; English page 37]
43. To make car fronts less dangerous to pedestrians. [French p.56; English p.37]
44. To improve the protection of the occupants from front and side impact and make steering wheels less dangerous in impacts. [French p.56; English p.37]
45. To require all cars to be fitted with comfortable and effective safety belts at all seats. [French page 56; English page 37]

French p.13

46. To fit cars with a warning light to show when the driver's seat belt is not used. [French page 56; English page 37]
47. To fit cars with a third, high-position stop light. [French page 56; English page 37]
48. To develop automatic switching-on of the dipped lights when the vehicle is moving. [French page 56; English page 37]
49. To generalise a compulsory periodical technical inspection of vehicles. [French page 57; English page 38]

#### 3.2 Heavy Vehicles

50. To undertake systematic consideration of active and passive safety of heavy vehicles. [French page 58; English page 38]
51. To improve the equipment of HGVs (side protection, over-ride bars, driver vision, night markings, etc). [French page 58; English page 38]
52. To encourage accident-prevention contracts with road-haulage companies. [French page 58; English page 39]



53. To encourage the use of the safest modes of transport (rail and waterways). [French page 59; English page 39]
54. To harmonise Member States' speed limits for heavy vehicles and require the fitting of speed governors. [French page 59; English page 39]

### 3.3 Powered Two-wheeled Vehicles

55. To set a time for harmonising the classifications of powered two-wheelers. [French page 61; English page 40]
56. To require training and inspection of skill or knowledge in the handling of all powered vehicles. [French page 61; English page 40]
57. To restrict the use of motor cycles of more than 400cm<sup>3</sup> by requiring a licence for the category next below to have been held for at least two years. [French page 61; English page 40]
58. For the other categories, to examine how to implement the principle of 'progressive learning'. [French page 61; English page 41]
59. To fit motor cycles with leg-protection fittings. [French page 61; English page 41]

French p.14

### 3.4 Bicycles

60. To develop and harmonise the compulsory fitting of reflectors on bicycles, particularly by making the wheel outline (tyre or rim) reflecting. [French page 62; English page 41]

### 3.5 Pedestrians

61. To develop programmes for moderating town traffic. [French page 62; English page 41]

## 4 ACTION ON ORGANISING ASSISTANCE TO THE INJURED

### 4.1 First Aid

62. To provide elementary training in first aid at the same time as learning to drive. [French page 63; English page 43]

### 4.2 Alert

63. Eventually to offer a single emergency telephone number across Europe. [French page 64; English page 43]
64. To extend the possibility of no-charge emergency calls from public telephones. [French page 64; English page 43]
65. To develop emergency-call networks on the major inter-urban roads. [French page 64; English page 44]

### 4.3 Emergency Services

66. To coordinate all services which may take action. [French page 65; English page 44]
67. Within each Member State to set quantified targets for accident-site response times from the emergency services. [French page 65; English page 44]

( 64 PROPOSALS )

## PART TWO (THE ROLE OF THE COMMUNITY)

### 1 THE GROUNDS

68. To announce the intention that action against unsafe roads be made into an active Community policy. [French page 69; English page 48]

### 2 CURRENT COMMUNITY ACTIVITY

69. To continue making Directives. [French page 70; English page 49]  
70. To make Community aid for road infrastructures dependent on meeting minimum safety standards. [French page 71; English page 49]

### 3 DESIRABLE NEW FORMS OF ACTIVITY

#### 3.1 Improving Knowledge

71. To organise the pooling of Member States' experience. [French page 73; English page 51]  
72. To establish a detailed accident data base. [French page 74; English page 51]  
73. To develop more appropriate instruments for measuring road safety, particularly by means of common proceedings and accident-survey forms. [French page 74; English page 51]  
74. To identify European research programmes. [French page 74; English page 52]  
75. From time to time to organise a Community-wide comparison of experiments and results, by means of a road-safety conference. [French page 75; English page 52]

#### 3.2 Producing Technical Reference Material; Gradual Introduction of a European 'Highway Code'

76. To produce and disseminate technical material on the various aspects of road-accident prevention, and gradually create a European 'Highway Code'. [French page 76; English page 53]

#### 3.3 Supporting Road-Safety Policy

77. To set multi-year targets for reducing the number of victims. [French page 76; English page 53]  
78. To produce a yearly survey of action and results. [French page 77; English page 53]  
79. To issue recommendations for action. [French page 77; English page 53]  
80. To give assistance to the Member States and the Commission. [French page 77; English page 53]

### 4 THE MACHINERY TO BE INTRODUCED

81. To establish a Community specialised body and assign it the resources required. [French page 79; English page 56]

( 14 PROPOSALS )

## INTRODUCTION

## INTRODUCTION

### 1 The Extent of the Phenomenon

Modern civilisation has brought many substantial advances to the people of today; in the developed countries, diseases have been reduced and average life expectancy has been greatly increased while, for the majority, the quality of life has attained a level once reserved for a tiny minority.

Contrasting with this overall improvement, road accidents have not matched these developments and are quite shocking. Each year, they cause the death of some 50,000 citizens of the Community and, for more than one and a half million, they are the source of injury, often with tragic consequences. If there is no change then, on average, one in three of the Community's inhabitants will be injured on the roads, and more than one in a hundred killed.

Most Europeans, therefore, are affected by the lack of road safety, whether directly or indirectly through accidents suffered by those close to them; for in addition to those who themselves suffer accidents, we must consider their close relatives— children, spouse, father and mother, grandparents— whose lives are often shattered by the tragedies on the road. We do not know how many there are, and there have been no studies about them, but they are still there.

And, unlike disease, road accidents strike most heavily at the younger age groups. Compared with other causes of mortality (expressed as years of life expectancy lost through fatal accidents), the consequences of unsafe roads are comparable with (or worse than) those from cancer and the cardio-vascular diseases. So unsafe roads are one of the major problems of public health in the countries of the Community.

French p.18

Since the Treaty of Rome, the number of deaths on the roads of the twelve countries now comprising the Community has come close to two million; the number of injured is over 40 million— that is a wartime casualty list, but it is too often accepted with indifference. But unsafe roads are not inevitable: it is unrealistic to hope to make them entirely safe, but action taken in many States has proved to be effective in bringing a considerable reduction in the numbers of accidents, and of their victims. Conversely, if nothing is done, the continued increase in vehicles and traffic can make the position worse yet, but the demand for safer roads is part of a wider move among Europeans in favour of a higher quality of life and greater protection of their environment.

But road accidents do not only have dramatic consequences in human terms: the economic cost is also substantial: for the Community, we can value this at about 70 billion Ecus a year, from estimates that (according to which method is used) range between 45 and 90 billion Ecus. Therefore, setting aside any human considerations, this is an economic phenomenon of outstanding scale: a much greater sum than the Gross Domestic Product of (for example) Greece, Ireland or Portugal— a demonstration, if any were needed, of the extent of the losses involved, and further evidence of the need to organise action to put them right as far as is possible.

## 2 Comparison with Japan and North America

If we compare the road accidents occurring on the Community's roads with those suffered by North America (United States plus Canada) and Japan, we find that all three areas suffer from unsafe roads, but not in the same way.

There were 48,223 killed on the Community's roads in 1987, compared with 50,663 for the United States plus Canada and 12,151 for Japan. Now, three types of analysis can be offered to compare these figures:

- if we relate these figures to population, we find that each year there are 100 road-accident fatalities per million inhabitants in Japan, against 149 for the Community and 192 for North America;

French p.19

- however, if we use the number of motor vehicles as our point of comparison, we see that each year Japan returns 241 killed per million vehicles, North America 259 and the Community 367 (half as many again as the two other main centres of the developed industrial world);
- finally (and most important), relating the number of fatalities per hundred-million vehicle kilometres (as an indicator for the amount of traffic), the Community's figure of 2.7 killed per hundred-million vehicle-kilometres is nearly twice that for the United States (1.4) and higher than that for Japan (2.3). And this rate is the most representative.

So, a comparison between the Community and North America or Japan is not favourable to Europe. We may estimate that a safety level comparable with that in North America would give more than 20,000 fewer dead on the roads of the Community. Even though such an outcome is, unfortunately, not possible in the short term, the extent of the progress possible is obviously considerable.

## 3 The Position in Individual Community Countries

It is always difficult to make comparisons among countries, and the statistics we have for each Community country may give problems of definition, uniformity or reliability, but these tools are essential to an objective understanding of lack of safety on the roads. Some of the differences we encounter among the Member States can no doubt be explained by a lack of uniformity in the base data for each country: a source of error which could be corrected by introducing some Community measuring instrument to represent road safety, accepted by all countries. Nonetheless, the figures in the Annexes give some picture of the facts on lack of road safety in individual countries.

French p.20

This picture can be evaluated on a number of criteria (and the first three here are those described above):

### 1. The number killed per million inhabitants

is the global indicator of this scourge as it affects public health, but identical figures for this indicator can result from very different situations, for it combines the scale of travelling and the level of danger applying to each journey. This criterion reveals three different categories of country:

- (a) countries with a high road-fatality level: Portugal (over 300 killed per million inhabitants a year), Belgium, Spain, France, Luxembourg (around 200) and Greece (169);
- (b) countries with moderate fatalities: Germany, Denmark, Italy and Ireland (around 130 killed per million inhabitants);
- (c) countries where road fatalities are lowest: the Netherlands and the United Kingdom (under 100 killed per million inhabitants).

2. An analysis of the numbers killed per million vehicles

can take account of differences in vehicle numbers. The number of vehicles (per 1000 inhabitants) is twice as high in some Community countries as in others. In descending order, in 1988 we find Germany has close on 500 vehicles per thousand inhabitants, then Luxembourg, France, Italy, Belgium, the Netherlands, Denmark, the United Kingdom, Spain, Portugal, Ireland and Greece (with a little over 200 per thousand).

Vehicle numbers are rising in all countries, but particularly fast in Greece, Portugal and Spain and it is in those three (certainly largely due to this fact) that the figure for those killed per million vehicles reveals an especially-high lack of safety, which has grown in recent years.

On this criterion (numbers killed per million vehicles), the Netherlands and the United Kingdom again return the best figures— around 280, with the same figure for France being close on 500, and over 1000 in Portugal.

French p.21

3. The figures for numbers killed per hundred million vehicle-kilometres

are not complete, and there are reliability problems with traffic counting, especially in urban areas. But we should note that, from the figures available, the rate of people killed per hundred-million vehicle kilometres ranges from 1.4 (UK) to 10.5 (Portugal), with an average for the Community countries of 2.7; that is, that there is a seven-fold difference among the Member States on the most objective criterion for assessing the danger on the road.

4. The changes over time in road safety

are also different for each Member State: apart from Spain and Greece (where vehicle numbers grew greatly during the period), the number of those killed each year in road accidents in the Member States fell greatly between 1975 and 1985. The position has tended to stagnate since 1985 and, in several countries, is even deteriorating fast.

If we take 1975 as the reference point (this was soon after the first oil crisis at the end of 1973), and compare that with 1987, there are considerable differences in the changes in fatality numbers; there are:

- countries which have made large advances (reduction between 46% and 36%: Germany, Luxembourg and the Netherlands);
- countries which have made moderate advances (reduction between 29% and 14%: Italy, France, Ireland, United Kingdom, Belgium, Denmark and Portugal);
- countries where the position is now worse (Spain, up by 30%, and Greece, up by 42%, although the most recent figures do show an improvement in Spain).

5. An analysis of those killed by category of road user

also reveals very different positions: in some countries, the percentages are especially high among the most vulnerable users (pedestrians in the United Kingdom, Ireland and Portugal, cyclists in the Netherlands, moped-riders in Portugal, motor-cyclists in the United Kingdom).

Very different causes may lie beneath this situation: a particularly-high intrinsic risk level, or the relative importance of the group of users in the country concerned, or the result of very high safety attained for motorists. Conversely, the proportion of victims who are car occupants is especially high in Luxembourg, France, Spain, Belgium, Germany (etc).

French p.22

Thus, the percentage of those killed who are pedestrians ranges from 8.8% in Luxembourg and 11.6% in the Netherlands to 30.8% in Ireland and 33.3% in the United Kingdom. The same figure for cyclists goes from 1.4% in Greece and 1.8% in Spain to 12.5% in Denmark and 21% in the Netherlands. For moped-riders, the percentage goes from 1.1% in the United Kingdom to 27.0% in Portugal and, for motor-cyclists, from 2.5% in Portugal to 12.8% in the United Kingdom. Lastly, for drivers or passengers of private cars, the corresponding percentages range from 28.7% in Portugal and 35.7 in Greece to 60.9% in France and 83.9% in Luxembourg.

6. Seriousness of accidents.

If we now leave the numbers killed and look at the number of victims (killed + injured), we cannot establish valid comparisons among the countries. There is no precise or uniform definition of the injured and the extent to which they are counted in individual countries' statistics is very uneven, especially for minor injuries. On the other hand, it is of interest to see the changes for each country in the relative numbers of those killed and injured.

We find that, in those countries with the best figures for reduced road fatalities, the numbers of injured often goes down more slowly than the numbers killed, meaning that the seriousness of their accidents is reducing. This is the case particularly in the United Kingdom and the Netherlands as well as Germany and Italy. No clear rule can be stated for the other countries, and accidents are becoming more serious in Denmark, France, Greece and Luxembourg but less serious in Belgium, Spain, Ireland and Portugal.

7. Finally, as regards the location

of accidents with deaths or injuries, generally between two-thirds and three-quarters are in urban areas, except in Spain, Greece and Ireland, where the level is around one-half.

But accidents in rural areas are more serious, which explains why the numbers killed in towns are on average only slightly above one-third of the total— except in Spain, where they are lower (about 20%), and, by contrast, in Portugal and the United Kingdom, where they are more than 50%.

French p.23

All in all, therefore, there are considerable differences among Member countries, and there may also be considerable differences between regions in a single country. A part of such differences of course is due to specific factors: population density, extent of urbanisation, vehicle numbers, distances involved, state of the road

network, traffic density, topography, climate and national or regional temperament. It also seems that the total experience of each country as it copes with the increase in driving is of great importance: in those countries whose inhabitants are only now beginning to make extensive use of cars, the level of road safety will tend to improve once the population has more experience of using them. But it is clear that in other ways, the differences in the figures come from differences in the intensity with which the individual member countries treat road accidents.

#### 4 The Responsibility of the Authorities

For a long time the increase in road accidents was regarded as an unavoidable corollary to the increase in motor traffic. But the experience of past years (more particularly in the last couple of decades) has shown that that was not true and that it is possible, if not to abolish, at least to reduce the number and seriousness of road accidents.

In this matter, the authorities have a fundamental part to play, through the action which they do (or do not) take:

- they are responsible for the road network and its equipment;
- they are responsible for the standards applying in building and controlling vehicles;
- they are responsible for organising assistance;
- lastly, they are to a very large degree responsible for the opinions and the behaviour of road users, whom they can influence through education and training, information, traffic regulation, enforcement and penalties.

French p.24

It is therefore important to separate the two levels of responsibility:

##### · individual:

Each road user has to be aware of his personal responsibility and the risks he takes (or imposes on others) through behaviour which is careless or contrary to the normal rules of conduct. Mistakes or bad conduct can be demonstrated in 90% or more of road accidents.

**But we must not draw the wrong conclusions from that point:** the behaviour of every road user is in fact very largely dependent on circumstances of his journey outside his control (road network characteristics, other users' behaviour, the regulations, the degree of enforcement, etc). And the consequences of his mistakes or offences can vary considerably according to the characteristics of the vehicles that are available or of the road system he uses (the rate of fatal accidents is four times lower on motorways than on an ordinary road). In fact, the individual user has no influence on the total figures for road accidents.

##### collective:

On the other hand, the authorities are responsible for the general level of safety on the roads. Only they can take lasting action to affect the global traffic 'system' and, especially, to influence the average of driver behaviour. The rôle of the authorities indeed has to be to take action both to cut the number of mistakes and offences by road users and to reduce their consequences.

Whilst the part played in accidents by the individual faulty actions of large



numbers of users is too often used as an excuse for inaction, there is a need for awareness that, in spite of the appearances, the responsibility for taking action against traffic accidents is primarily collective and that it falls firstly on the various public authorities which might take such action.

From the point of view of the community, road users must first be regarded as potential victims, needing protection, regardless of their involvement in starting accidents. Progress is only possible through this approach, as is shown by the experience of those Community countries which have achieved the best results.

It has to be added that in no country has public opinion really forced governments to act in this area, and that reinforces the need for determined, non-mandatory action by the authorities.

French p.25

Of course, other groups beside the authorities should and can take action on road safety: the car makers, the insurance companies, the media (etc). And voluntary bodies also can play an important part in attaining public awareness and in changing attitudes— in any coherent action, their potential support must be sought.

Nonetheless, there is a fundamental need for a commitment to preventing accidents, from all the public authorities involved. That includes a commitment from the Community.

## 5 General Objectives

The general objective to be set across the Community is of course for the speediest and biggest possible reduction in the total number of accidents. Priority must go to cutting the numbers of deaths on the roads, but that must not prevent a concern for cutting injury accidents, especially serious-injury accidents. Alongside protection for people in cars, special attention must be given to the most vulnerable or most exposed users (children and the elderly, pedestrians, cyclists and motor-cyclists).

The Experts Committee recommend that, from proposals made by the Member States, the Community should set itself quantified multi-year targets for improving road safety and report each year on the results attained. As will be explained in Part Two of this report, *the objective for the whole of the Community would be a reduction of between 20 and 30% in the number of victims (killed or seriously-injured) in road accidents, by the year 2000 (Recommendation No.1)*

We must also move towards harmonisation of the levels of safety in the Member State, encouraging the countries with the worst problems of low safety to catch up, but without thereby delaying any initiatives that could be taken by the countries more advanced in the field. *We should therefore aim at gradually establishing a European Road-Safety and Road-Traffic Zone (Recommendation No.2)*

It is necessary to promote the idea that it is possible, through appropriate means, to improve safety on the different road networks in the Community, in order to offer European citizens a safety level at the same time enhanced and more homogeneous.

In order to attain these objectives, which have to be affirmed and proclaimed as priorities, all available strengths— public, private or voluntary, active locally, nationally or throughout the Community— must be mobilised and must cooperate.

French p.26

Lastly, if a major, lasting improvement is to be made in road safety in the Member States, the Experts Committee are convinced that *we must set the target of promoting a behaviour model for road users mindful of others, a model of driving calmly and unaggressively, both in town and on rural roads (Recommendation No.3)*. The surroundings of roads and streets, and the design and equipment of vehicles must in particular seek to encourage this style of driving. It is of course possible for external factors (such as climate, especially sunshine and heat), through their general influence on national or regional temperament, to make it easier or harder to adopt such calm behaviour.

Nonetheless, this objective must, throughout the Community, be the guiding line for all action to be taken, as the foundation to any major, lasting improvement of the situation.

## 6 Outline of this Report

The Experts Committee have been concerned as far as possible to identify recommendations for immediate action and to propose measures which could be implemented speedily and affect the short-term improvement of road safety in the countries of the Community. We have always taken the viewpoint of the general interest and protection for the greatest good of individuals, namely, life and physical integrity.

No doubt, in the short or long run, changes in technology could open entirely new possibilities in traffic management, but the Committee consider it necessary to eschew technological utopias that might be used as an excuse for deferring decisions which may well be difficult but are necessary and urgent. We are convinced that unless the measures set out in this report are implemented, the use made of future technologies would perforce be much more restrictive of individual freedoms.

French p. 27.

This report will be set out in two parts:

**Part One** describes the technical measures that seem necessary to reduce the number and seriousness of road accidents in Europe, and is not concerned with the division of rôles among the Community institutions and national, regional or local authorities.

**Part Two** is more especially concerned to describe the rôle which the Community could play in order to support implementation of such action as soon as possible, and the organisation the Community should adopt for that purpose.

**PART ONE**

**TECHNICAL ACTION TO BE TAKEN**

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Many measures can be envisaged for the purpose of reducing the number and seriousness of road accidents. They relate variously to the road network, vehicles, road-user behaviour and assistance to the injured, for it has become quite clear in recent years that when action is taken on the road network and on vehicles, that may also have a very substantial effect on the behaviour of road users. Therefore, although the needs of this exposition require a separate presentation for each of the elements in the road-safety 'system', it is essential to allow for the many interactions among them, and to have an integrated approach to road-accident prevention.

The order adopted in this report for presenting such action is:

- measures relating to user behaviour;
- measures relating to road networks;
- measures relating to vehicles; and
- measures relating to assistance to the injured.

A separate section on improved road-safety knowledge and research will be included in Part Two of this report.

## 1 Action for Better User Behaviour

A whole range of activities can be considered for the purpose of modifying human behaviour, from encouragement to coercion; to simplify this presentation, they will be gathered into five main chapters:

- education and training;
- information;
- laws and regulations;
- controls and enforcement; and
- penalties.

We cannot seek to exhaust any of these points within the span of this report; we can only outline those activities which seem most important.

### 1.1 Education & Training

#### 1.1.1 School and Pre-School Education

Although many attempts have been made over many years, road-safety awareness in schools is still very patchy; this can only be a lengthy process to be pursued in coming years, but we must stress that, to an extent, this affects the effectiveness of later training.

Useful experiments have been undertaken in some countries or by some local authorities: these should be listed, evaluated and disseminated. In particular, among the useful experiments, we should cite the United Kingdom, with its announcement of setting up an extensive pilot club for traffic problems, with some half a million children. A young people's highway code has been published, whilst new educational material that takes account of the latest research is being distributed to children of between 10 and 14.

*The Experts Committee therefore recommends that road-safety training, provided by competent personnel who have themselves had special training and are equipped with quality teaching material, should be compulsory for children in all Community countries. (Recommendation No.4)*

#### 1.1.2 Training of Drivers

New drivers are the source of a much greater proportion of accidents than their numbers warrant: in France, drivers with a licence less than a year old run three times the risk of being killed in a road accident than experienced drivers. This extra risk, due mainly to lack of experience, largely explains the substantial level of accidents among young people: again in France, the roads are the prime cause of deaths among young people of 18 to 24 years— this group account for 11% of the population but 24% of all those killed in road accidents.

Work to remedy this situation, common to most countries of Europe, has been pursued mainly in two directions: improved driver/rider training, and the practice of accompanied driving. Driving can be learnt either in special establishments (driving and riding schools) or from experienced drivers, or from some combination of both. The first of these practices is tending to become the rule in Community countries, either because it is made compulsory to use them or because it spreads spontaneously. But, regardless of the progress of training establishments, the accident rate is still very high among new drivers, in large part because of their

lack of experience. Two routes have been explored to find at least a partial answer to this situation:-

- the first of these is introduction of a 'probationary licence': in Germany since 1 November 1986 new holders of driving licences begin a probation period of two years and, if they commit an offence during that period, have to take special additional courses or re-take the driving test, or even undergo medical and psychological tests. The outcome of current evaluations of this system of novice licences have not so far been conclusive and the Experts Committee do not feel able to decide whether it is useful to generalise this type of approach;
- secondly, Great Britain has long had a situation on driver training which is very different from that in the other Community countries, with two stages to obtaining a driving licence:

- From 17 years of age, an applicant can get a provisional licence, entitling him to drive if accompanied by an adult with a full licence (with not less than three years' experience of driving and aged 21 or more).

French p.31

- As the second stage, generally after taking lessons at driving school but also, and chiefly, after gaining experience from accompanied driving, the candidate can take the test for the full driving licence.

This form of starting to drive has the considerable benefit that the first few thousand kilometres are driven in the presence of an experienced adult (generally the new driver's father or mother), which can moderate the new driver's fervour. When the drivers trained in this way get their full licence and start to drive alone, they are a greater danger than are experienced drivers, but it does appear to be distinctly less than their opposite numbers in other Community countries which do not have accompanied-driver learning.

For the last two years, France has gradually been introducing a new, optional form of learning to drive, combining the benefits of school training and those of accompanied driving. In practice, this means three stages:

- initial training at an approved driving school: this training starts between ages 16 and 17 and lasts for a minimum of 20 hours; the driving school then issues a certificate of competency;
- driving with one or more (named) persons accompanying, aged over 28 and holding a licence for at least three years. The young person must drive at least 3000km on these terms within one to two years. During this period, there are two training sessions with the driving school, one of them with the person accompanying;
- the driving test is taken after age 18.

It is interesting to see that insurance companies reduce or entirely waive the 'young driver' loading for those who have been trained this way. The initial results indicate that drivers so trained cause seven times less accidents than those using the conventional process. Although these figures must be treated with caution, they seem to bear out the advantage of this approach.

*The Experts Committee therefore consider that a target should be set of attaining wide use in all Community countries of learning to drive when accompanied, subject to details to be refined (Recommendation No.5)*

French p.32

## 1.2 Public Information

Information can be of great importance in getting changes in behaviour, especially in preparing public opinion for new regulations (and then in facilitating compliance with them). The success of some campaigns, like those in the United Kingdom or in the Federal Republic of Germany on wearing seat belts, demonstrates the impact that can be achieved through public information on road safety.

Very specific campaigns seem to be more effective than general ones, which have little direct effect on behaviour although they are able to contribute towards a favourable climate for road safety. An evaluation in the Netherlands on the relative effectiveness of national and local campaigns also seems to point to the latter being more effective, especially when they are accompanied by increased enforcement.

Because of their importance, institutional information campaigns should be assigned substantial finance, in particular because of the proliferation of private media, who tend not to allow preferential tariffs to public-interest causes. The publicly-owned media should by their very nature give a major place to action against poor road safety. But there are many sources of information which can have an influence on user opinion and, possibly, on user behaviour; except for those campaigns which the public authorities organise for themselves, there are many over which they have little or no control: general or specialist media, drivers' organisations, automobile clubs, car manufacturers and traders, etc. And it can happen that the information put out by these various sources is inconsistent (or even conflicting) and every user can then take whichever agrees with his personal preferences, sometimes to the detriment of safety.

In talking of improving road-user information, all of these sources have to be considered. In particular, before any Community action, there is a need in countries which do not have them to organise pressure groups which can support road safety and as far as possible withstand those whose real or perceived interests go against it.

French p.33

In order to protect the consumers, a ban on 'anti-safety' publicity must also be considered whenever that appears necessary.

Next, *an especially welcome measure would be to compile the information campaigns run by individual Community countries (radio or television announcements, posters, articles in the press, etc) into a 'bank' for information and exchange (Recommendation No.6).* It would be useful for all countries to benefit from the experience of the others, provided they distinguish between material which can be used or transposed without difficulty and that which cannot, because of the individual sensibilities of national temperament.

Lastly, we should mention that a survey in 1987 highlighted differences and similarities in opinions on road safety in individual Community countries: it revealed many more agreements than clashes. *It would be desirable from time to time to repeat such surveys across the Community, in order to monitor changes in public opinion on the main points of road safety in each Member State (Recommendation No.7)*

### 1.3 Traffic Law & Regulations

One of the areas in which there is an unarguable need for regulation, because it concerns very large numbers of road users, is traffic. But regrettably there is sometimes a considerable delay between the time when a given road-safety measure is acknowledged to be effective in road safety and the time when it is enforced by regulation (for example, seat belts). Road safety is an area in which it is urgent to implement any proven measures passing the tests of feasibility and acceptability, since any delay is the cause of additional death and injury. It is also regrettable that the regulations now in force are of very great complexity, and that piecemeal reforms reduce the effect of the global message which the regulations should transmit.

There are a great many rules governing traffic in the 'Highway Code' of each country; some of them have a major impact on road safety, but others do not.

French p.34

For many reasons, these rules differ in the individual Member States, and it does not seem realistic to try to make them totally uniform within a reasonable timescale, even if that is a long-term aim. But it does seem highly desirable for a common approach to be developed among the Member States on the essential regulations, whilst safeguarding the possibility of advancing at different rates and of allowing for local conditions. Such a common approach would make its contribution to better acceptance of safety regulations by the citizens of the Community, and to harmonisation of road behaviour and, above all, to improved road safety.

The range of law and regulation covers many measures; of course we cannot discuss them all here, but we should chiefly discuss three, with a decisive influence on road safety. These are:

- speed limits;
- the use of protection systems for the users of the various vehicles in impacts; and
- drink driving.

We shall also touch on a fourth area of regulation: daylight driving of vehicles with dipped headlights.

#### 1.3.1 Speed Limits

Nobody can reasonably deny that accidents are becoming more frequent and serious at current speeds. Conversely, all experiments throughout the world (including the Community countries) on limiting and controlling speed have shown that they improve road safety, increasingly so where the limits set (or, rather, actual driving speeds) have been lower. Recent studies tend to show that accident frequency rises as the square of average vehicle speed and that the number killed rises as the fourth power. That means (for example) that where average vehicle speed rises by 10%, the number of deaths rises by nearly 50%. The number of injuries rises as the third power of average speed.

French p.35

A further very important observation is that average speed is not the only factor involved: at any given average speed, safety is improved if more or less all vehicles are moving at about the same speed: differences in the speeds of the vehicles on



the same road mean overtaking and braking, which greatly increases the danger of accident. Therefore, with even a limited degree of reduction in average speeds and of attaining uniform driving speeds, it is possible to obtain a cut in fatal accidents that can be quite spectacular. We must certainly see differences in driving speeds as one of the causes of different accident frequencies in Community countries.

But the question of speed limits is not the same for the motorways as it is for rural roads or conurbations. Before discussing the speed limits which the Experts Committee think desirable for each, we should remember: (1) that the limits stated apply in normal atmospheric conditions and that drivers must also adapt their speed to special atmospheric conditions (rain, snow, fog, etc); and (2) that the limits stated are for private cars: we shall come back to this point again for heavy vehicles and two-wheelers, in the sections of this report that relate to them.

We must also stress that the aim must be to affect driving speeds and, for that purpose, it is essential not only to prescribe the statutory limits but also to provide the means for seeing that they are properly kept to. And the limits prescribed must be credible, and upgrading of infrastructures must be consistent with such limits.

### 1. Motorways

This is the fastest network, and there is a two-fold problem here: *firstly*, should speed limits be extended to the entire motorway networks of the Community? and *secondly*, what are the optimum speeds for these networks?

French p.36

On the first of these questions, it seems that motorway speed limits are important for two reasons. Where speed limits are imposed, they considerably reduce the number of accidents, and their consequences: when speed limits were introduced on French motorways, overnight the numbers killed dropped by two-and-a-half times, and the fall was sustained (see graph in Annexe); conversely, making a higher speed limit on some United-States motorways produced an immediate, corresponding increase in the accident rate on them (see graph in Annexe). And the second reason for introducing speed limits on all the Community's motorway networks is that if speed were subject to some limit everywhere, there would be less encouragement to makers of motor cars [on sale] throughout Europe to market vehicles designed for very high (and ever-higher) cruising and top speeds; this does not relate solely to sports models, for which there will always be a special clientèle, but also to mass-market vehicles with performances that lead their drivers to exceed the limits, so that the very power of such vehicles tends to discredit the policy of the authorities in moderating the traffic flow.

*The Experts Committee therefore consider that, for both its direct and its indirect effects, speed limits should be made general on motorways throughout the Community (Recommendation No.8)*

Regarding the optimum speeds for these limits to be adopted for motorways, the Experts Committee believe that, according to traffic density, the scale of the country concerned (and distances to be covered) and the resources of the enforcement units, etc, they can range *between 100 and 130kph for rural motorways and 80 and 110kph for urban motorways (Recommendation No.9)*. There seems to be no urgency on narrowing these ranges although any reduction in driving speeds can only be favourable from the point of view of safety, and ought to be encouraged.

French p.37

On the matter of more uniform driving speeds which, we have seen, are a very important objective, *the Experts Committee believe that, as it is in the United States, it would be desirable to end any present requirement that drivers who are using centre lanes should move to the right-hand lane of a motorway (left-hand, in the United Kingdom and Ireland) provided they are driving at the maximum permitted speed (Recommendation No.10): the present situation exposes users who obey the law to major risks through ceaseless manoeuvring from one lane to another.*(1)

## 2. Rural Roads

Firstly, it must be stressed that throughout the Community these are the most dangerous routes—generally four or five times more so than motorways, sometimes more—and nobody disputes the need to restrict speeds on them. The current range of general speed limits for single-carriageway roads is 80 to 100kph.

For the same reasons as on rural motorways, it does not seem essential to set a single limit for rural roads throughout the Community. But *the Experts Committee believe that we should encourage the adoption of the lowest speed limits possible and that one of the most effective steps in improving road safety in the countries concerned would be to reduce to 90kph any general limits which are currently higher (Recommendation No.11)* This step should therefore be taken as soon as resources are available to provide reasonable enforcement.

But some exceptions could be envisaged where roads are intended for relatively long-distance traffic and have been improved, especially by a central reservation to separate the two traffic lanes.

## 3. Urban roads

Urban road networks are typically very diverse. We need firstly to distinguish village segments of major inter-urban highways from real urban road networks: these are two different cases and there are many reasons for treating them differently.

French p.38

For the former (inter-urban trunks through villages), excessively low speed limits could be unrealistic; so it may be justified to have quite high limits here, 60kph or higher, provided there are a certain number of improvements. But this point must not conceal the fact that such through roads account for only a small fraction of the urban network and that the general urban speed limit must not be set with these in mind.

For true urban networks, the 60kph limit still in force in five countries (Belgium, Spain, France, Luxembourg and Portugal) is clearly too high, since control points generally allow a margin of 10 or 20kph. It is perhaps no coincidence that these five countries have by far the least good figures for road safety.

*The Experts Committee therefore recommend that in urban areas the threshold of 50kph should be adopted by all Communities countries as the primary reference limit on speed for the urban network (Recommendation No.12)*

But, as part of the desirable scheme of a hierarchy of road systems (see below), this figure needs to be supplemented by a lower limit (30kph) within residential areas in which the priority should go to the quality of life or on roads where the prime

(1) This recommendation was adopted with the opposition of one of the Committee members, who feels that such a measure would give birth to many aggressive behaviours.

function is to serve the activities of frontagers. *The Experts Committee therefore propose that the individual Member States' highway codes should generally carry requirements of the '30-zone' type, with the 30kph limit then being a second urban reference speed (Recommendation No.13)*

A final category of roadway might be those areas in which clear priority is given to pedestrians and cyclists and where motor-cars must drive dead slow. Conversely, a higher limit, of e.g. 60 or 70kph could be considered in urban areas where roads carry special markings and where conflicting flows are strictly limited and properly handled (see below).

In some countries there is a new move for 30kph to be the basic urban speed limit and 50kph roads to become the exception: it does not seem that we should agree to this demand, but the Committee believe that national regulations should in future provide for two reference speeds, 50kph generally and 30kph in specified areas.

French p.39

On this point, as in our discussion of motorways, it should be noted that modern cars are not designed to run habitually at around 30kph and it seems desirable there should be some adaptation to the steps in gear boxes to cope with this; another appropriate response to this difficulty is a wider spread of vehicles with automatic gear changing.

### 1.3.2 Passenger-Protection Systems

#### 1. Vehicles with Four (or more) Wheels

In an impact, the use of restraint systems (belts for adults and older children and adapted systems for babies and younger children) considerably reduces the risk of death and injury to the occupants of cars and, more generally of all enclosed vehicles. The studies show that if front passengers in cars wear a seat belt, overall that reduces their risk of being killed in a road accident by more than 50%. *For that reason, the target to be attained is, as soon as possible, for all occupants of such vehicles to enjoy such protection (Recommendation No.14)*

Almost all Community countries have already made seat-belt wearing compulsory in the front seats of cars on the whole of their territory. But it is not enough to issue the requirement: it has to be obeyed and in this matter there are very great differences in behaviour: in some countries, compliance with the requirement is very high (95% in Great Britain and Germany, for example, both rural and urban); in others it depends on which road system (such as France, with over 90% on motorways and 85% on rural roads, but distinctly less in towns, where there are also differences by region: studies show differences of 40% as between the North and the South, around a national average of 50%); in some countries, such as Italy and Spain, the levels of belt-wearing are currently low or very low, even though it is required. The success in countries with the highest levels of belt-wearing is explained in particular by the quality of the information campaigns before introduction of the requirement, and by the frequency and effectiveness of checks.

French p.40

But we may well believe that national temperament also plays a part in the quality of the result attained, as (for example) in France, where the level of belt-wearing in town varies by region, although the work of the authorities would seem to have been the same throughout the country.

The importance of securing a high rate of belt use becomes greater when we see that experience has shown that the drivers most reluctant to use belts are precisely those who take most risks on the road and are involved in a great number of accidents. Clearly, it is for each country to take the most effective steps (information, enforcement, penalties) to get the highest possible level of belt use, relying on the experience of those countries which have produced the most convincing results and seeking as far as possible to transpose that experience (in this connexion, see the Chapter on enforcement and penalties, especially on local information and enforcement campaigns). A considerable effort is required in this field, for all the studies show that this is one with the highest potential gains in human lives: so it is essential to do the utmost to increase protection of motorists.

We should point out that one simple technical step could make a useful contribution to attaining the results desired: fitting a red pilot light on the dashboard, lighting up when the driver fails to snap his seat belt. Similar low-cost units exist to warn of incidents which are much less important to safety (eg, handbrake not released); this simple step is therefore strongly recommended by the Experts Committee.

The protection afforded by restraint units must not be limited to front-seat passengers in cars, and must be extended gradually to rear-seat car passengers, children, occupants of commercial vehicles and, if appropriate, coach occupants. Each of these extensions must be discussed separately:

#### rear-seat passengers

Only one out of the twelve Community countries has made it compulsory for seat belts to be worn in the back seat: the Federal Republic of Germany, with effect from 1 August 1984, for vehicles fitted with belts. The requirement has also been made in Australia, Canada, Norway and Sweden.

In the United Kingdom, there has been a statutory requirement to fit rear-seat belts on new cars since 1987, and it should soon be made compulsory to use them.

French p.41

In France, new cars have had to have rear-seat belts since 1978 and the Government have recently announced the decision to make their use compulsory from 1 December 1990 onwards.

This past experience reveals that:

- it seems more difficult to get this requirement obeyed than the one for front seats;
- particularly intense information campaigns are therefore required; they could usefully refer to the experience of other countries (especially Germany). The Committee think it would be harmful to issue any requirement on wearing seat belts in the back seats unless public opinion has been adequately prepared to accept it;
- if vehicles are generally fitted with seat belts that are as comfortable to use as possible (especially 'reel'-type), it will make it less difficult to get the requirement obeyed.

However, it is desirable to implement this in as short a period as possible, for experience has shown that, in the countries where seat belts are systematically worn in front but not behind, the risk of injury in the back seat becomes twice that in the front seats.

#### children

The Federal Republic of Germany and Great Britain have already made it compulsory to use protection fittings for children where the vehicle is so fitted.

In France, the requirement to restrain children in the back of cars by means of approved appliances should be effective in 1992.

*The target to be reached across the Community is as quickly as possible, to prohibit the carrying of children in cars unless they have a suitable protection appliance (Recommendation No.15).* Opinion polls show that such a step would be approved by nearly everybody. The technical fittings required exist: there is therefore no reason to delay introduction of such a requirement in all Community countries, as it has already been in many North-American States. This concerns the lives of children, and the Experts Committee believe that such a provision should be general no later than 1 July 1991.

French p.42

#### occupants of commercial vehicles

The protection afforded by the seat belt has also been shown to be effective for the occupants of commercial vehicles, and extending the requirement to wear one ought to include them also. The question remaining open is whether it should be restricted to some of these vehicles only, and which.

#### Coaches

Although there are but few coach accidents, we have to remember how serious such accidents can be because of the numbers of people involved. This mode of transport is also growing fast, and there is every reason to believe that growth will continue in coming years. So the Experts Committee believe it has to be considered whether there should be a requirement to wear seat belts on inter-urban journeys over a certain distance. The Committee think that such a requirement could only help in accustoming passengers to wearing seat belts systematically. They believe that *the first stage would be to require coaches intended for inter-urban journeys to be fitted with safety belts at all seats (Recommendation No.16).* Such a requirement would at least enable those passengers who want it to benefit from their protection.

### 2. Two-wheeled Vehicles

To an extent, helmet wearing gives the occupants of two-wheeled vehicles the equivalent to what wearing a seat belt does for car occupants. The requirement is now (properly) general in all Community countries and for all types of powered two-wheeled vehicles.

*The Experts Committee recommend the adoption of technical standards for helmets offering the highest level of safety (Recommendation No.17)*

*The Committee believe that it would also be appropriate to recommend cyclists, and especially young ones, to wear a suitable helmet (Recommendation No.18)*

#### 1.3.3 Alcohol

The connexion between alcohol level and the likelihood of accident is now well known and has been confirmed by many international studies (see graph in Annexe).

French p.43

It formally establishes that alcohol and driving are incompatible and that behavioural changes, increasing the accident risk, are already apparent at quite low alcohol levels: in the Federal Republic of Germany, it is deemed that alcohol is a factor in an accident if an alcohol level of 0.3g/l is found in any of the drivers. According to French studies, the risk is multiplied by a factor of two at an alcohol level of 0.5g/l, rising to 10 at 0.8g/l, to 25 at 1.2g/l and 80 at 2g/l! Alcohol is one of the principal factors in accidents: the total number of physical accidents in which alcohol is the chief factor is certainly more than 500,000 a year across the Community. From studies, it has been estimated that in France alcohol is involved in 40% of fatal accidents and 15 to 20% of physical accidents. These figures are borne out by a Dutch study made in the Rotterdam region, showing that 25% of persons injured in road accidents had an alcohol level above the legal limit (0.5g/l in the Netherlands).

Drink-driving has to be a priority theme in road-safety information campaigns; some of these have shown that they can be very effective. It must also be noted that pedestrians must not be forgotten in such campaigns: in the United Kingdom, one-third of pedestrians killed in traffic accidents were under the influence of alcohol.

Laws and regulations on the maximum alcohol level for drivers vary from one Member State to another (see Table in Annexe); the national requirements range from 0.5g (of alcohol per litre of blood) and 0.8g/l, with most Member States having the maximum rate at 0.8.

*The Experts Committee stress that they believe priority must be given to compliance with the current requirements, by increasing information campaigns, especially as part of coordinated and enhanced action programmes run locally (Recommendation No.19), BUT the Committee also consider that, where an adequate level of enforcement can be attained, the maximum alcohol level should be reduced to 0.5g/l, as proposed by the Commission and to which we need to move in order to harmonise the regulations of individual Member States (Recommendation No.20)*

French p.44

#### 1.3.4 Daytime Lighting on Vehicles

From a number of converging studies it has been possible to evaluate the considerable additional safety which can result from vehicles having their dipped headlights on during the daytime. This extra safety is quite considerable, because of greater awareness of vehicles with lights. And the gains remain even at Southern latitudes, as is confirmed by experiments on vehicle fleets in Israel and the United States. For the entire Community, the potential estimated gain is of the order of 10% of daytime accidents, ie, 5% of the total. There is already a requirement for daytime lighting on vehicles in three countries of Scandinavia (Finland, Norway and Sweden); in the Community, Denmark will be adopting it by the end of 1990, and the Netherlands hopefully in 1991.

*The Experts Committee recommend a generalised requirement for vehicles to drive with lights on during the day in all countries of the Community (Recommendation No.21)*

#### 1.4 Control & Enforcement

The Experts Committee have examined a number of research results which show the effectiveness of enforcement campaigns, especially for drink driving, seat-belt wearing and keeping speed limits, and making it possible to quantify the results according to the resources used (see Annexes). The findings from these studies should be disseminated widely, to convince political and police leaders of the success possible through vigorous enforcement campaigns, and of what conditions afford the maximum effectiveness.

The results attained in New South Wales (Australia) on drink driving are of special interest here: the number of road accidents in which alcohol was a prime factor was cut by something like 75% by a massive increase in enforcement (0.33 alcohol checks per driver per year— ten times the previous level), plus systematic driving bans on drivers with more than 1.2g/l of blood alcohol.

French p.45

These results bear out those observed in France after introduction of the Law of July 1978 setting up random checks of driver alcohol levels, where the effect (600 lives saved during the second half of 1978) was unfortunately shortlived, as road users quickly realised how few checks were carried out.

The Experts Committee consider that the development of campaigns of random alcohol checks is without doubt one of the most effective steps to be taken to improve road safety in the Member States *and therefore recommend:*

- *that national law systems be adapted if need be to permit police forces to check users at any time to ascertain drivers' alcohol levels;*
- *that national law systems also allow the use of breathalysers instead of blood samples to measure drivers' alcohol level (Recommendation No.22), since such apparatus has long since given proof of its reliability in many countries.*

Generally (and particularly by enforcement of speed-limit compliance) *the Experts Committee recommend development of the use of automatic check apparatus (to increase throughput from checking operations, to make them more effective and less costly) and continuation of work on research and development of new apparatus (Recommendation No.23).*

Enforcement campaigns, provided they are intense enough and last long enough, can produce lasting changes in behaviour which can then be maintained through much more sporadic enforcement. Enforcement and information schemes must be closely coordinated; the latter must include preparation of public opinion and getting people to understand the reasons for road-safety measures.

The Experts Committee consider that checks made for the the purpose of road safety undoubtedly provide the most effective method for the police to save human life and to protect citizens from harm. From studies in the Netherlands it is estimated that the rate of return from enforcement efforts is 200%. Therefore, *the resources which the police put into enforcement on the roads must be regarded as a priority and, mostly, be considerably increased (Recommendation No.24). As a first stage, the Experts Committee recommend that pilot operations of increased enforcement should be undertaken both regionally and locally in Europe, to show that it is possible thus to secure changes in driver behaviour (Recommendation No.25).*

French p.46

## 1.5 Penalties

There is a need for a precise comparison (which the Experts Committee have not been able to make) of the policies implemented by individual member States as regards penalties: these seem to differ substantially both in their procedures and in the level of penalty for the same offence. These comparisons should not be restricted simply to the rules in force but should look into the way they are actually carried out. It should especially be noted that it is essential not only to compare the penalty applying to an offence but also to regard the likelihood of detection, which doubtless is the most important point in preventing criminal behaviour. It would also be useful to compare practices in individual Member States on alternative sentencing and on organising training courses for offenders.

Clearly, the matter of penalties is one in which progress towards European harmonisation will be slowest, but it does seem necessary to work resolutely towards that; however, the process must not (at least for the foreseeable future) cover penalties and procedures and *the Experts Committee think there ought to be encouragement to develop a common approach among Member States (Recommendation No.26)*. This would mean, inter alia, establishing a hierarchy of risks, with its concomitant hierarchy of penalties. Harmonising such penalties might relate only to the most serious.

It would also be desirable to attack the matter of an offence committed by a citizen of one Member State in the territory of some other Community country. This problem can only grow as intra-community exchanges develop. *In order to avoid a degree of impunity for offences committed by drivers outside their own national territory, it seems essential to have a simple and effective procedure among the Member States to prosecute such offences (Recommendation No.27)*. Even this problem alone requires a degree of consistency in the penalties imposed for any one type of offence in the various countries of the Community. From this point of view, the existing agreement among the Benelux States on recovery of fines is an interesting advance in the right direction and we should look into the possibilities of extending it.

At present, endorsable licence systems are in force in two Community countries (Germany and the United Kingdom) and the principle has also been accepted in France, to be implemented in 1992; the systems in force in Germany and the United Kingdom seem to be effective. *The Experts Committee therefore recommend looking into the possibility of generalising the endorsable type of licence (Recommendation No.28)*: this extension would be an integral part in gradual harmonisation of driving licences across the Community, but it must be understood that the advisability of introducing an endorsable licence is linked to an adequate frequency of checks.



2 Action on Road Networks
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Improved road networks can be of great importance to improving road safety, both through their potential direct effect on the number and seriousness of accidents and through the changes they may bring in road-user behaviour. This double effect has long been under-estimated, and accident-site studies concerning the impact of the road network on road safety are generally inconclusive when they under-estimate this. It is enough to be convinced of this if we note that, with the same traffic (and the same drivers), motorways return accident rates that are much lower than those for conventional roads— by a factor of four, or even more.

Similarly, many improvement schemes in urban areas (often at minor cost) have resulted in major reductions in accidents, either at a single spot or within a district or across an entire conurbation, whilst the drivers are the same drivers, with the same vehicles on the same road network. There are a number of conclusive examples in many Community countries: the report on 'integrated management of road safety in urban areas' (OECD, 1990) analyses a number of these and concludes that there is a benefit in a global approach to improving road networks in town areas.

The Experts Committee can therefore state that, contrary to the opinion too often widespread still, improving the road network is one of the most effective and long-lasting of exercises in improving safety.

First, it must be stressed that there is no intrinsic conflict between road-safety objectives and the need to handle substantial quantities of traffic and maintain a good flow. We might remember that the maximum theoretical vehicle capacity of a lane while maintaining safety separation is to be found not much above 50kph; and giratory-intersection lay-outs (which as a rule are conducive to safety) often give better capacity and flow than conventional intersections.

## French p.48

We should note that, at many places, there is still not enough attention paid to design, equipment and maintenance for road networks. This is a shocking state of affairs if we compare the effort put in here with work on safety in other activities where the danger is quantitatively much less (other modes of transport, high-rise buildings, places open to the public, etc) but where the procedures to enforce safety standards are very strict, whilst there are none for the roads, yet incomparably more dangerous.

There are therefore two aspects to the action that must be taken: firstly, identifying the technical provisions to be implemented to raise the level of safety afforded by road networks and, secondly, taking action to ensure that the technical provisions are actually implemented. Generally, there is a need to improve the position of road safety at all stages in road policy, from drafting long-term master plans for the road network, to day-by-day operations.

In this regard, it seems desirable that there should be an increase (and gradual harmonisation) in the Community Member States of the value of human life taken into account in cost-effectiveness analyses to appraise the return from capital spending on roads and to compare different upgrading schemes (Recommendation No.29). In this matter, in October 1988 the United Kingdom decided on a considerable increase (from £180,000 to £500,000) in the value attributed to an accident fatality. This is a decision whose consequence is to increase the priority given to road safety.

In particular, priority capital spending should be concerned with the removal of 'black spots' (zones in which accidents are frequent). But it must be stressed that there is a danger that such black spots will simply get shifted along if the improvements made create new disparities along the highway or encourage higher speeds. *The Experts Committee therefore recommend a priority policy of removing black points in the road network, but only provided that the improvements required are designed as part of a total process for the highways concerned (Recommendation No.30).*

## 2.1 Identifying Technical Provisions

The action required for road networks to afford the highest possible level of safety will be the same for all systems in some cases but, in others, will be different for each network.

French p.49

### 2.1.1 Technical Provisions Common to all Roads

A number of common principles are needed to guide all road improvements. First, it is important for the lanes on roads to be laid out in accordance with the volume and nature of the traffic flow and the use made of the lanes, and in accordance with their surroundings. *The Experts Committee consider it essential to safety that the characteristics used for every section of road or for every route should be homogeneous, and that there should be a clear hierarchy of roads within the network (Recommendation No.31).* Special attention must be paid to points where two differently-uniform sections meet and, consequently, to the provision of transition zones.

Improvements must encourage calm, slower driving and peaceful coexistence of the different types of users, and they must seek to express values reinforcing these aims. They must seek to *reduce the number of potential conflicts, hesitations or mistakes in behaviour and hence be readable, that is, easily understood by users (Recommendation No.32).* In this regard, particular attention must be given, for example, to the likely consequences of an increase in the number of elderly drivers on the design of road lay-out (for example, simplifying intersections and interchanges). The line and profile of a road, and the characteristics and state of the roadway and its surface must accord with the demands of vehicle dynamics. *But it is also important that, wherever possible, the road lay-out makes it possible in an emergency to avoid or remove vehicles and, as far as possible, limit the seriousness of any collisions which occur (clearing surroundings, removing or protecting lateral obstructions, especially trees) (Recommendation No.33).*

It is important to remember that positive results in road safety are often possible with low-cost improvements, particular those helping the most vulnerable users, such as pedestrians or cyclists.

The Experts Committee wish to point out the importance of quality and maintenance of road signing and markings, and the need to avoid an excess of signs that can only reduce their effectiveness. In this connexion, the Committee have expressed their interest in pilot projects to reduce the number of roadside signs now under way in the Federal Republic of Germany.

French p.50

It is also very important that improvements in road signs and markings, making driving more relaxed, do not lead to higher driving speeds: there is a need for such schemes always to be produced as part of a global approach to safety infrastructure along a highway.

Moves now being made at European level to standardise signing and marking products point in the right direction. *Further work is required, however, so that not only are the products uniform but also the actual signs across Europe (including variable-message signs) (Recommendation No.34).* That first requires definition of a corpus of knowledge, and of common reference material (see Part Two of this report).

Special attention must also be paid to the safety problems created by all the work carried out on the roads: *maintenance and construction sites must be scheduled, designed, protected and marked with maximum consideration for the safety of road users and the working personnel (Recommendation No.35).*

Finally, we must stress the benefit from *developing anti-skid surfaces and run-off coatings (Recommendation No.36)*, to improve adhesion and to limit splashing in rainy weather. These surfaces are of particular benefit on routes with substantial heavy-goods traffic.

## 2.1.2 Technical Provisions for Specific Road Systems

### 1. Motorway Networks

The technical provisions to secure maximum safety on motorway networks are well-known and well-disseminated and will not be described here, but we would reiterate that the best way of cutting the number and seriousness of motorway accidents lies in introducing speed limits (or reducing existing limits), provided this actually leads to lower driving speeds, and in cutting down the diversity of driving speeds. In any case, the difference in safety on motorway routes from that on ordinary roads is such that one of the best ways of taking long-lasting action against road accidents is to develop the motorway network.

French p.51

Thus, from the safety point of view it would be desirable that the decision should go to building motorways for long-distance inter-urban links, provided the traffic forecasts provide economic justification— attaching extra weight to the safety factor in the economic analysis, as we have said earlier.

### 2. Rural Road Networks

Most fatal accidents throughout the Community occur on the non-motorway rural road network. A range of measures is possible to improve safety here, and they cannot be enumerated fully within the space of this report, but some of them do deserve to be mentioned:

- *Gradual abolition of highways that can be perceived as motorways but do not have motorway characteristics (Recommendation No.37):* these give the user a false sense of security and generate more, and worse, accidents than other roads;
- Priority treatment of black spots (points and zones with frequent accidents), as part of global schemes for highway upgrading;

- Treatment of intersections, particularly by the adoption of roundabouts, which have the additional benefit of 'breaking' the speed of vehicles and therefore of encouraging safer behaviour;
  - Systematic treatment of points of entry into conurbations, to give a clear signal to drivers that they are going from country to town, and thus induce altered behaviour;
  - Treatment of road surroundings (eg, systematically locating safety barriers along sections edged with trees); and
  - Generally adopting improvement policies intended to restrain the use of excessive speeds, because this type of road is characteristically very dangerous.
- Of course, all such measures must only be implemented following special studies using in particular an analysis of the accidents occurring on the network.

French p.52

### 3. Urban Road Networks

THE EXPERIENCE ACCUMULATED IN RECENT YEARS IN SEVERAL COMMUNITY COUNTRIES HAS SHOWN THAT CONSIDERABLE SAFETY GAINS ARE POSSIBLE IN URBAN AREAS, PARTICULARLY THROUGH ADOPTING AN ENTIRELY NEW APPROACH TO OPERATION OF THE ROAD NETWORK.

As has been stated, this requires the establishment of a clear hierarchy of roads to replace the traditional relative lack of differentiation. The system recommended involves a number of distinct major categories of highway, on the understanding that specific lay-outs must be used for each of them:

- (a) **urban motorways:** their characteristics make them more similar to rural motorways than to the traditional urban roads. As a whole they provide a very high level of safety. They often have sharp bends and, in particular, the frequency and scale of traffic-flow conflicts (because of the short distances between interchanges and the number of movements at each) mean the top speed adopted is distinctly less than out of town. The chief safety problem here lies in the design of interchanges and in links into conventional highways.
- (b) **the majority of the network,** with a 50kph limit (as described earlier). Intersections and pedestrian crossings are the chief safety problems here. Within this largest network, further distinctions can be made between major roads (with priority) and others.
- (c) Additionally, for some trunks, generally to be found at the edge of the conurbation, some higher speed limit (generally 60 or 70kph) may be considered, as an exception, if traffic conflicts are strictly limited and properly handled.
- (d) **streets essentially for local use** (residential streets, town-centre shopping streets, etc) which would be restricted to 30kph, with pedestrians allowed to cross anywhere. These areas must be specially signed and laid-out, especially at entry points, in order to slow vehicles down and get different behaviour from drivers.
- (e) Lastly, in streets where vehicle traffic is only tolerated (the [Dutch] 'woonerf' zone), speed must be lower still (drive dead slow) and the lay-out must clearly tell drivers they are within an area not designed for motorists, but for the benefit of other street users.

French p.53

*In many ways, the generalisation across Europe of such a system of hierarchy for urban roads would be a profound change from the present traditions of many Member countries (Recommendation No.38): it could have considerable effects on safety and, as the motor car enters its second century of life, this would be a necessary adaptation in urban roads which are generally not designed for the motor car, but for needs originating in times when it did not exist.*

## 2.2 Machinery to Check Roads are Safe

As has already been said, it is not right that the fitness of road networks to afford their users the maximum degree of safety should not be systematically checked (as has long been the case in fields where the danger is much less), even though the German 'Verkehrsschau' practice has indeed been a useful step towards compulsory periodical examination of the road system as regards safety, even if it is not generalised.

*The Experts Committee recommend that every road network, regardless of the body responsible for it (National State, local authority or private company) should compulsorily be subjected periodically to a systematic external check of its safety level (Recommendation No.39), as is the rule in other sectors (air and rail transport, construction and operation of buildings open to the public, etc).*

It is essential that this check should not be made by the technical unit responsible for the network but by inspectors independent of such units, by preference belonging to outside bodies comprising specialist technicians.

*Such checks will require 'reference documents' (comprising all the rules on construction and maintenance of the safest-possible road networks) to be developed first (Recommendation No.40). There is no such reference material at present in any country of the Community; France started developing such material about a year ago. It would be essential to start on such work at the European level, so that all may benefit from experience accumulated in other countries, and so that a common way of building and laying-out roads (to make them as safe as possible), is adopted in the twelve Member countries.*

3 Action on Vehicles and certain User Categories
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### 3.1 Motor Cars

#### 3.1.1 New Vehicles

##### 1. Technical Standards

The Community has been very active in this field for several decades: in the war on barriers to trade, the Community has used standards from Geneva (ECE/UNO) or, with increasing frequency, proposals drafted by the Commission to issue Directives which are progressively imposed on the Member States; in this field, therefore, the Community is doing very important work.

Regarding new vehicles, it should be added that there is now Community-initiated research, particularly under the Prometheus and Drive programmes but these do also cover many aspects other than safety.

##### 2. Past Changes in Building Motor-Cars

In recent decades, the building of motor cars has seen two major developments:

- The first is in actual technical advances, where there have been undeniable advances in protection of occupants, comfort, tyres, road-holding, lighting. At the same speeds, today's vehicles are much safer than those of ten or twenty years ago, due to car manufacturers' efforts.

- The second major development has been in power and top speeds, which have both risen fast. In France, in 1972, 21% of vehicles had a top speed of over 150kph but, in 1987, 73% did. There are more and more which can exceed 200kph, a speed which does not relate to the speed regulations in force in nearly all Community networks (see Table in Annexe). And insurance-company figures show that the frequency and seriousness of accidents is rising with vehicle power. The danger is particularly high with certain models of light vehicles with very high-powered engines, especially with young drivers.

French p.55

In many cases, these higher top speeds have had direct repercussions in recorded travel speeds, where the increase has totally (or more than) cancelled out efforts made in other areas to improve the technical characteristics of vehicles as regards safety. The production of vehicles which encourage ever-faster driving (that is, against the current regulations in most Community countries), or incite nervous driving runs counter to spreading the habit of driving calmly and peacefully, which is one of the main objectives of road-safety policy.

##### 3. Desirable Changes in Building Motor Cars

###### ■ General Vehicle Design:

In order to improve safety, it would be very desirable as a first stage to have an end to the rush for power and top speed and later for them both to be reduced to more reasonable levels, but this is of course a medium- or long-term aim. *However, it seems desirable to encourage the makers to begin now to promote an approach to vehicles which encourages calmer driving (Recommendation No.41).*

In the shorter term, technical approaches may at least partly ease the drawbacks described above, and lead to safety-friendly behaviour. In particular we mean:

- devices of the cruise-control type, enabling drivers to select a motorway cruising speed and then not be exposed to exceeding permitted speeds;
- automatic-change gear boxes, which are conducive to more relaxed driving;
- air conditioning which, in the warmer countries or regions, may also encourage less aggressive driving.

It should be noted that these three items are fitted in the vast majority of vehicles in use in the United States, and thus assist more relaxed driving. *More generally, it seems desirable to encourage builders to favour the spread of all options and equipment which are actually known to improve safety, and devote considerable efforts to this approach (Recommendation No.42), rather than the approach of marketing vehicles of ever-higher power.*

French p.56

#### a Individual Technical Improvements:

On another line, a British study has estimated the potential gains from a number of steps to improve vehicles: here they are, with the yearly reduction in deaths and serious injuries for the United Kingdom:

- |  |      |
|--|------|
| • car fronts less dangerous to pedestrians | 3500 |
| • lateral protection for occupants         | 2500 |
| • less dangerous steering wheel            | 1000 |
| • better protection from frontal impact    | 6500 |
| • dipped lights on in daytime              |      |
| • improved rear lighting                   | 3000 |

In all, the British government have estimated that 25,000 deaths or serious injuries could be avoided each year in the United Kingdom through taking action on vehicles. Across the Community that would be 200,000 dead or injured.

The Experts Committee therefore recommend that in the longer term research should be conducted on *developing car fronts less dangerous to pedestrians (Recommendation No.43)* and on *improved protection of occupants in front or side collisions and on making steering wheels less dangerous (Recommendation No.44)*. It should also be repeated that (as indicated in the section on seat belts) it would be necessary to *require the fitting in all cars of comfortable and effective seat belts at all seats (Recommendation No.45)* and that *there would be great benefit from the fitting on the dash of a simple warning light to be activated if the driver's seat belt is not locked (Recommendation No.46)*. Everything indicates that this latter step (simple to put into practice—almost all manufacturers have long experience in it) would give a particularly positive cost-effectiveness return.

Then, *in order to give greater awareness to following vehicles that a vehicle is braking, it would be desirable to require all cars to be fitted with a third stop light, placed high. Experience in the United States, where this measure is common, has been fully conclusive (Recommendation No.47)*. Together with a new requirement to *drive with dipped lights in daytime, as recommended above, it would also be desirable in the longer term to adopt a device that automatically puts on dipped lights once the ignition is switched on (Recommendation No.48)*.

Lastly, we should stress the importance to road safety of the tyres, proper tyre pressures and tyre maintenance; the Community has already published a directive on worn-out tyres.

French p.57

#### 3.1.2 Periodical Vehicle Inspection

It is one thing to prescribe that vehicles are so equipped that they provide better safety, but it is another to ensure that the vehicles in use are actually fitted with them and that the equipment is kept in a state to meet safety standards.

*The Experts Committee therefore think it is necessary for all motor vehicles to be subjected to periodical technical inspection (Recommendation No.49). The Committee also agree with the proposals made by the Commission to extend to private vehicles the inspection requirement in force in all Member States since 1 January 1983 in respect of heavy goods vehicles, buses, coaches, trailers and semi-trailers, taxis and ambulances, under the Council Directive published on 18 February 1977.*

### 3.2 Heavy Vehicles

The proportion of heavy vehicles (lorries and buses and coaches) within the total of motor vehicles is different in each Member State (the average for the Community is about 12.5%), but their average mileage is three to five times greater than that for private vehicles. Heavy goods traffic is growing rapidly and the introduction of the single market in 1993 is likely to increase the trend further. The heavy-goods accident rate per kilometre covered is distinctly lower than that for private cars but the rate of deaths per kilometre twice as high, while the number of heavy-vehicle occupants is but a small minority of the victims occurring in accidents involving heavy vehicles. The heavier the vehicles, the higher the rate of fatalities, for heavy vehicles are very dangerous to other road users: more than 80% of the victims in accidents involving heavy-goods vehicles are other road users—motorists, two-wheeler users or pedestrians.

In all, heavy-goods vehicles are involved in about 15% of injury accidents and 25 to 30% of fatal accidents; that means that, throughout the Community, about 13,000 people die and 300,000 are injured in accidents with heavy-goods vehicles—a considerable proportion of the total.

French p.58

There are various types of action which can improve road safety as regards heavy vehicles:

#### ■ Design of Heavy Vehicles:

The main problem is their relative incompatibility with the other road users; this comes mainly from their actual weight, but also from problems with driving them and stopping them, dangers from turning over and inadequate driver vision to the rear. And the constructional requirements for heavy-goods vehicles often make them more dangerous to other road users if there is an accident.

*Systematic consideration should therefore be given to the active and passive safety of heavy vehicles (Recommendation No.50). On the matter of assistance for handling and control of safety devices, substantial spin-off may be expected from the Prometheus programme, but such a consideration needs to be extended to actual vehicle design: the distribution of axle loading, rigidity of the structure, building-in energy-absorbing zones, and the height of the centre of gravity.*

*Additionally the action undertaken to improve the equipment of heavy goods vehicles needs to be continued (side protection, over-ride bars, improved driver vision, night-time markings, etc) (Recommendation No.51).*

#### ■ Operation of heavy-vehicle fleets

Many safety measures are possible for the operation of heavy vehicle fleets, but these may encounter economic obstacles because the extra safety does not always seem to benefit the carrier.



However, many safety measures can produce lower insurance premiums, improved use of vehicle and driver and smaller losses or delays in deliveries and, therefore, may be justified if the carriers' interests are fully understood. *Road-accident risk-prevention contracts should therefore be developed between the carriers and insurance companies or public-authority parties (Recommendation No.52).*

Turning to the driver, the emphasis needs to be put onto training and selection; in particular, the principle of gradually progressing to driving articulated vehicles should be accepted. Emphasis also needs to be put on restricting driving hours and, more generally, on improved working conditions for drivers, and on enforcement of these.

French p.89

In the long run, that requires specific action by carrier companies, whose experience has shown that they can play a considerable part in reducing the accidents in which they are involved, through in-house accident-prevention policy.

#### ▫ Distribution among Transport Modes

As part of the policies for organising transport, it is desirable that more account should be taken of the economic and human costs of poor road safety and *where economically possible to promote the use of the railways or waterways, especially for very long distance transport of heavy goods (Recommendation No.53).* Policies which encourage the development of combined transport may also be helpful for the purposes of road safety. But we must have no illusions on the amount that can be transferred from the road to other means of transport: without doubt the best that can be done will be thus to restrict over-fast growth of road transport. Work to organise in-town deliveries (bulk-break centres outside the conurbation, final carriage by smaller vehicles) should be encouraged in this connexion.

#### ▫ Design of Roads

It also seems desirable to take more account of heavy vehicles in the design, equipment and use of roads. Without trying to be exhaustive, we might cite the development of highway surfaces with run-off coatings, or making allowance for the dynamics of HGVs when planning intersections, bends and gradients and in the settings of traffic lights (especially the timing of the amber).

#### ▫ Speed Limits for Heavy Vehicles

Lastly, regarding the speed limits applying to heavy vehicles, the Experts Committee consider it desirable (considering the weight of these vehicles, plus their braking, stability and handling characteristics) to assign them lower limits than the general speeds. They believe *it would be desirable to harmonise the speed limits for heavy vehicles among the Member States, and that the vehicles should be fitted with speed governors (Recommendation No.54).* In these, we are supporting the principles guiding the Commission in preparing the 'draft directive on speed limits for certain categories of vehicles' (carriage of freight, and buses and coaches); for each type of vehicle and highway, this draft specifies permitted maximum speeds. The Committee also hope for a speedy completion of the current discussion at the ECE/UNO on speed limits.

French p.60

### 3.3 Powered Two-Wheeled Vehicles

In the Community as a whole, users of powered two-wheeled vehicles account on average for 17% of fatalities (7.6% for mopeds, 9.4% for motor-cycles).

In all Community countries, it is motor-cyclists who characteristically face very high risks which rise fast as vehicles get more powerful. In the United Kingdom, motor-cycles account for only 2% of traffic but cause 13% of deaths and injuries; the risk that a young motor-cyclist (17 to 24 years) will be involved in an injury accident is five times greater than that for a male car driver of the same age, while the risk of being killed or seriously injured is 18 times greater!

We should also note here that Japan (which has a near-monopoly in world production of motor-cycles) has made it practically impossible there to sell the most powerful machines (over 750cc) and has imposed such heavy conditions on getting a licence to ride the others that the failure rate sometimes exceeds 90%. It needs to be stressed that with some motor-cycles it is possible to reach 90kph in first and, since their power (much greater than that of most cars) is so great, it is almost impossible to keep to the present speed limits on them.

Before discussing measures to be envisaged in Europe, the Experts Committee emphasise the paradox in this position, and are astonished that no member country of the Community has adopted the same policy as in Japan, which alone could really provide a remedy for the tragedies caused by the riding of these machines when experience shows every day that they offer unconsidered dangers, especially to the inexperienced young people they kill or maim without purpose.

The Experts Committee can only express the hope that this situation should be ended and that some country has the courage to be the first to take the proper decisions or, better, that the decisions be taken by the Community. For the time being, the Committee give their full support to the principles underlying the Commission proposals recommending only gradual progress to the most powerful vehicles, after an initial learning stage of some duration, on machines with relatively limited capacity.

French p.61

*The classifications of two-wheelers (powered) vary considerably between the Member States and it seems desirable to set a time for harmonisation in the matter (Recommendation No.55). There should be three distinct major categories: the least-powerful vehicles (mopeds), under 50kph and below 50cc; motor-cycles of under 400cc and those above 400cc; and the first two categories might themselves be split in two.*

There should be a number of guiding principles on permission to ride powered two-wheeled vehicles; firstly, it seems desirable:

- *to establish the principle that one cannot ride any motor vehicle without a minimum of training and ascertainment of skill or, at the very least, of knowledge (Recommendation No.56);*
- *to restrict access to motor-cycles of over 400cc by requiring a licence for the category immediately below, held for not less than two years (Recommendation No.57) as in the Commission's draft Directive;*

for the other categories, to examine the terms for imposing the principle of staged learning (Recommendation No.58) taking as an example the provisional licence used in the United Kingdom. The points to be settled must in particular cover the minimum age for using motor vehicles and whether to regard any experience in riding mopeds in the conditions for first riding light motor-cycles.

*The Committee also hope that research on protection for motor-cyclists' legs should speedily be put into effect by the makers and that protective devices should speedily be made compulsory, starting with motor-cycles above 400cc (Recommendation No.59). Research into the use of air bags for motor-cycles, and into any other device able to improve the safety of users, should also be pursued actively.*

### 3.4 Cyclists

However important any training schemes may be, in improving safety for the users of bicycles (one of the most vulnerable categories of road users), we have to look to upgrading of the network and cutting the speeds permitted to other vehicles.

French p.62

The machinery for systematically checking highways for their safety as proposed earlier should in particular make it possible to be certain that lay-outs take due account of the specific problems of the safety of cyclists.

Another problem is that cyclists are not visible to other users: *fitting cycles with reflectors should be developed and harmonised, especially by general use of the measure adopted in the Netherlands, requiring the wheel outline (tyre or rim) to be reflecting (Recommendation No.60) and it should be recommended that visible clothing be worn, especially for night-time, with reflecting pieces. We also repeat the recommendation in this report that young people wear a suitable helmet.*

### 3.5 Pedestrians

Although the need is great, it is not an easy matter to improve the safety of pedestrians; it is hardly possible to legislate to change the way they behave, but laws and regulations have to allow for the behaviour of pedestrians, and protect them.

Without doubt, the most important action is to work for lower speeds from powered vehicles, by working on infrastructures and the environment, as part of *comprehensive programmes to moderate traffic within conurbations, which need to be developed (Recommendation No.61)*, for most pedestrian accidents take place there.

Special attention should also be given to road equipment and design able to increase pedestrian safety, i.e. regarding pedestrian crossings, street lighting, etc.

Information schemes also can be undertaken, aimed at children and their parents, and also at drivers, to give them greater understanding and acceptance of pedestrian behaviour. And we can point to the effectiveness of reflective materials,

to make pedestrians more visible at night; there should be encouragement to use these, especially on children's garments, and similarly for walking to face the on-coming traffic on rural roads.

Of pedestrians, the elderly and those with reduced mobility are particularly vulnerable. In the United Kingdom, almost 30% of the pedestrians killed on the roads each year are over 60, and more than 4,000 elderly pedestrians were killed or seriously injured in 1988. Here it must be stressed that the rise in numbers of elderly people may in the long run make them the largest group of victims (as pedestrians or drivers) and it is increasingly important and necessary to develop policies which take account of them.

4 Action on Organising Assistance to the Injured
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After an accident, the seriousness of the consequences has to be reduced as far as possible, by the speed and quality of assistance. Assistance to the injured can be seen as a four-link chain: initial response, alert, action by the emergency services, and hospital services.

#### 4.1 Initial Response

This includes protection of the site of the accident, to prevent secondary accidents, and first aid for the injured. The statutory basis for a compulsion to assist is different in the Member States: there is a requirement to assist, for example, in Federal Germany and in France, but an ECMT study from 1983 shows that it is not so in Denmark, Italy, the Netherlands, Portugal or the United Kingdom.

The next problem relates to the dissemination of knowledge. First-aid training is a compulsory part of learning to drive in Germany and France, for example, but not at the same level in the two countries: in the Federal Republic there is complete and real training but in France only an exposition of elementary principles. There is no general requirement in the Member States. We can of course ask whether such training is effective, since it will rarely be put into practice, but a recent German study has shown that only in 2.1% of cases was the assistance rendered useless (or even harmful), whilst in 4.8% of cases, the assistance rendered by ordinary witnesses of the accident had saved lives.

*The Experts Committee therefore recommend that training in the elementary forms of first aid should be afforded at the same time as teaching to drive (Recommendation No.62) and, if possible, should be independently tested.*

French p.64

Information and awareness campaigns should also be developed on the subject.

It is compulsory (for example, in Belgium, or the Federal Republic) for vehicles other than two-wheelers to have first-aid material and, in some countries, they must also carry a warning triangle and luminous distress marker. Perhaps European harmonisation should be envisaged here.

#### 4.2 Alert

Reducing the time taken to alert an emergency centre may be of importance since, for half of the injured, the time elapsing before medical attention will affect the risk of death or how serious is the outcome of injuries. But we do not know exactly what is the effect from time saved here.

Accidents are generally reported by public or private telephones or from an emergency calling point. For a more effective alerting system, *it would be desirable:*

*to have a single emergency telephone number in Europe (Recommendation No.63): some Member States have this, but often there are several, eg, one for the police, another for the fire-brigade and a third for the emergency services. From a European point of view, it would be desirable to have just one number: we could no doubt work on the existing approaches in Denmark, Ireland or the United Kingdom;*

- to extend the possibility of no-charge emergency calls from public telephones (Recommendation No.64), as happens in several countries;
- to extend the emergency-call networks, already normal on motorways, on major inter-urban highways (Recommendation No.65).

But we should note that as mobile telephony spreads, that will considerably alter the position in this field, and to the good. Furthermore, the feasibility of mobile emergency-call system is now being studied under the European Prometheus and Drive programmes. A pilot project has already been tested in Federal Germany.

French p.65

#### 4.3 The Emergency Services

The organisation of the emergency services varies considerably in Member States and may include national or local public services and organisations such as the Red Cross. *The multiplicity of services responsible for assistance, and the competition there may be among them, requires them to be coordinated* (Recommendation No.66).

Looking at the resources available to the emergency services, there are many types of action vehicles: an ECMT report of 1986 identified eight. There seems to be a trend towards ever-more highly equipped vehicles, and there is discussion whether it is profitable to use helicopters more often— the usefulness of these increases as the hospital emergency network gets thinner, and we also have to have regard for the dangers of congestion on the roads, which may delay the arrival of help by road. And there are some benefits from the technique of calling out a doctor, particularly in under-populated country areas.

The Federal Republic of Germany has made some cost-benefit studies of the emergency services: these have borne out the level of costs, high though they are (DM1300 million in 1987) for running these services.

*It seems desirable for each Member State to set quantified targets for the time the emergency services take to be at the site of an accident in each type of area or road system* (Recommendation No.67)

#### 4.4 Hospital Services

Treatment of road-accident victims is of course just one aspect in organising emergency hospital services, but how they are organised is one of the most important aspects in setting-up treatment of the injured: on them (and especially on the proximity of intensive-care units) will depend what action is taken to organise the emergency services: which resources to use, which treatment to give to the injured while moving them, and so on.

□

Generally, there is a need to develop exchanges of experience in individual Member States on organising assistance.

PART TWO

THE ROLE OF THE COMMUNITY

## **PART TWO: THE ROLE OF THE COMMUNITY**

As we said in the Introduction to this report, road accidents cost the European Community and its citizens a human and economic price that it is difficult to grasp.

We also showed that preventing road accidents is primarily a collective responsibility and above all a matter for the public authorities to undertake. This public responsibility does not of course remove the part that may be taken by many others (insurance companies, motor-car manufacturers, non-governmental bodies and associations, etc), nor that which each user of the road can take individually. But it is mostly for those authorities which can affect road safety to become fully involved in this action, and to organise themselves for the purpose.

This applies to all the *local authorities* which comprise the system of territorial organisation in Europe: communes and districts, counties and départements, Länder and regions, and so on; they are often responsible for the majority of the road system and are often concerned in the training of drivers, in enforcement, local requirements on speed limits, organising assistance, and the like. And it applies similarly to the individual *national states*, which now are the source of the greatest number of decisions directly affecting road traffic and safety on the roads: laws, regulations, inspection, highway codes, the national road networks, etc.

But, because its rôle can be of especial importance, we need to identify the part that ought to be played by the Community in respect of one of the most serious social phenomena now confronting its citizens. One by one, we shall be looking at:

- the grounds for a Community road-safety policy;
- current activities undertaken by the Community;
- the new forms of activity which are desirable; and
- the machinery to be introduced.

■



## 1 Grounds for a Community Road-Safety Policy

There are strong, concurrent reasons for the Community to take a determined involvement in road-accident prevention.

### 1 Effectiveness of Community Involvement

The first argument stems from considerations of effectiveness: in many areas, Community involvement can produce a decisive acceleration in road-accident prevention, by the exchange of information, improving the knowledge available to national and local authorities, or making recommendations (or, if appropriate, Directives binding upon the Member States). Here, the Community has a central rôle to play which cannot come from its individual Member States alone, since they often only have the benefit of a limited, national experience. The Community can generate economies of scale by coordinated management of the resources of knowledge and experience within those Member States, whereas at present each State or authority too often seeks in isolation to solve the problems confronting it.

It is a considerable undertaking: as we have seen, if all countries of the Community could be brought onto a par with those Member States attaining the best results, it would practically halve the number of accident victims, and would mean 25,000 fewer killed each year. Even if such an outcome is not possible in the short run, there is plenty of room for progress.

From this point of view, the inhabitants of the less-favoured countries are entitled to benefit from the experience of the more advanced countries, within a shared framework. Conversely, the inhabitants of the safest countries should be able, when they travel out of their home territory on other roads in the Community, to meet the levels of safety to which they are accustomed. Here it should be noted that the road users of every country are having more frequent cause to use the roads of other Member countries, and that many accidents now occur outside the home country.

### 2 Harmonisation of Safety and Traffic Requirements

It is obvious that the present differences in requirements or in the design and marking of roads can lead to mistakes and, hence, accidents. At present, there are different ways of organising a crossroads in Germany, in the United Kingdom or in France (and elsewhere).

French p.68

And information given by the media to one country's drivers about the rules beyond their frontier (which can conflict with those they are subject to at home) leads to confusion and does not support compliance with national requirements.

More generally, public opinion sees differences in the rules and in the approach to road safety and traffic matters as conflicting with the announced objective of creating a European entity, within an area of daily life which, more than any other, is a matter of great interest to the entire European population. Gradually establishing a European 'Highway Code' would without doubt be desirable.

Of course, to attain totally-uniform rules on road traffic and safety is not an end in itself, nor is it entirely possible (if only because vehicles do not drive on the same side of the road in all Member countries), but a great deal of progress can be made in that direction. In particular, it seems essential to find a common approach by Member States to the essential safety rules, whilst keeping the way open for different rates of progress and for adaptation to local conditions. In particular, we must not hinder any Member State from taking fresh initiatives once these are clearly shown to be effective: rather we must consider how to make them general among all Member States.

### **3 Moral Grounds**

The civilisation of Europe has always been concerned with the individual, especially concerned with protecting the weak and unfortunate. It would be astonishing if its institutions were not involved in preventing a scourge which personally affects one-third of its inhabitants at some time in their lives. This involvement is the better grounded in that lack of safety on the roads is also one of the most serious health problems of our time. Since road accidents often strike at young people, the loss they cause in years of life is as great as, or more than, a disease such as cancer. But the resources devoted to improving road safety are much less than those devoted to cancer or other causes of mortality: it is a powerful incentive to act. Furthermore, at a time when the Community is paying great attention to improving the quality of life, it would be senseless for the preservation of life and the safety of citizens to be ignored.

French p.69

### **4 Economic Considerations**

The yearly cost of road accidents (as stated in the Introduction) is greater than the turnover of many top industries (aviation, textiles, etc) or the GNP of several of the Member States. Although in other areas, particularly when working towards 1993, everything is done to secure the best return from Europe's resources, this is a source of economic loss of considerable and unguessed extent, and that also justifies the involvement of the Community institutions.

Nor must we ignore the indirect economic implications of bringing in common measures on road safety, for example, on the car-making industry.

Lastly, the Community is implementing a common policy on transport: the Experts Committee consider that such a policy must clearly include road safety as one of its fundamental elements.

In conclusion, the Experts Committee wish to stress the very powerful moral, human and economic reasons for the Community to take strong action on road-accident prevention. We repeat that the Community can and must play a very important part in improving road safety both through its own actions and by encouragement, and through the European dimension which it can lend to action by the Member States or local authorities which at present have to act in isolation from each other.

*We express the hope that the Community institutions very clearly announce their intention of taking a very active part in this work and regarding it as one of their responsibilities by providing the resources needed (Recommendation No.68)*

Now we have to examine the forms of action open to the Community, distinguishing those already in use and those which could be added in the future.

## 2.1 Making Directives

The Community's most direct form of activity is to make Directives binding on Member States. This form of action is long-established in some areas relating to road safety: directives have been adopted on harmonising technical rules on construction or equipping of vehicles, technical inspection of commercial vehicles or introducing a Community driving licence (see list in Annexe).

The Commission have tabled some other important draft Directives with the Council. These mainly concern:

- compulsory periodical technical inspection of private cars;
- lateral protection on heavy goods vehicles;
- compulsory wearing of seat belts in front and behind in vehicles of under 3.5 tonnes.

In 1989, three new proposed Directives went to the Council of Ministers:

- draft for a new directive on the driving licence;
- draft directive on maximum alcohol level for drivers;
- draft directive on speed limits for certain categories of vehicles (carriage of goods, and coaches and buses).

But discussion on the Community's competence on driver behaviour has so far prevented examination of these proposals.

Without wishing to enter these constitutional discussions, *the Experts Committee stress the potential benefit to road safety of the Community authorities making use of this form of action for action of importance to road-accident prevention, where it has not been possible within a reasonable time to secure coherent decisions from all of the Member States solely on a voluntary basis (Recommendation No.69).*

## 2.2 Other Community Activity

The range is quite limited: we can cite certain research programmes (including DRIVE), in which road safety is one of the ends pursued, but the full range of road-safety research is very far from being covered. The Community also takes indirect action on road safety when it participates in the finance for certain road infrastructures.

*Here, the Experts Committee express the hope that, in such circumstances, the Community should tie its financial participation to such infrastructures complying with minimum standards of safety, which is not always so at present (Recommendation No.70)*

So it seems that hitherto, the Community has essentially only taken action by way of Directives binding on the Member States, for the purpose of supporting road safety. But other forms of action are possible, as is shown in particular by an examination of the current practice in a number of other (federal or confederal) countries.

### 3 Desirable New Forms of Activity

Under their remit, the Experts Committee have sought to find out how a number of federal or confederal countries approached the handling of road safety. The study for this was undertaken (for the Commission) in the United States, Canada and Switzerland and, although the situations were not the same, it revealed a number of interesting general findings.

This comparison (which will be reported on separately) is very instructive: behind substantially-different powers at federal or confederal level, it reveals considerable similarities in the forms of action taken in all three instances studied. There are two principal but separate forms of action:

1. action proper, taken by Federal Government or Confederation, legislating within whatever range of powers it holds, and in all cases including making regulations on vehicles.
2. technical actions, not binding on States, Provinces or Cantons but, by way of machinery for consultation and dissemination of reference material, leading to harmonisation of practices and the main requirements in areas outside the Federal or Confederal powers.

This second level of action is taken by agencies or committees created for the purpose and, in some fields, its effectiveness is very close to what would come from a direct decision at federal level. In the case of the United States, Federal Grants also support this effect.

It should also be noted that in all three of the cases studied, the Federal level is responsible for keeping statistics, affording it useful knowledge for steering the action to be taken.

These findings have supported the Experts Committee's belief that it is not right that there should be no coherent policy across the continent of Europe, and in their finding that it is proper to envisage new ways of involving the Community in road-accident prevention based on four chief aims:

- to improve knowledge;
- to produce technical reference material gradually;
- to establish a European 'Highway Code';
- to support road-safety policy.

French p.73

#### 3.1 Improving Knowledge

With this aim, the Experts Committee have identified four schemes:

- sharing individual member-states' experience;
- establishing a detailed database of road accidents;
- introducing more suitable instruments of measurement;
- identifying European research programmes to supplement those being run (inter alia) under the OECD.

### 3.1.1 Sharing Individual Member States' Experience

The Expert Committee's proceedings have revealed the extraordinary wealth of knowledge and experience available to individual Community countries in the area of road safety. But they have also revealed (although there are many international authorities, with limited action resources) the extent to which a great deal of such knowledge remains little known beyond the bounds of each country, and of no use to the other Member States. An initial form of desirable improvement therefore lies in *developing machinery to exchange information for all countries to benefit (Recommendation No.71)*

A number of fields could be covered by means of such machinery. As we have mentioned earlier, for example, information campaigns should be gathered together and known to everyone, for every country to be aware of the successes and failures of the others, without having to reinvent the wheel. And the same applies to experience accumulated in the other sectors of road safety: keeping statistics, training at school, training of drivers, regulations and laws, enforcement and penalties, road upgrading, equipment of vehicles, and the organisation of assistance, without forgetting the overall organisation of accident prevention.

### 3.1.2 Establishing a Detailed Database

A number of international organisations publish compendiums of road-accident statistics, but these are only global, aggregated figures (numbers of accidents, victims, fatalities, etc) and do not afford any explanations of the circumstances of the accidents or how to remedy them.

French p.74

The Experts Committee therefore support the 'CARE' project developed by the Commission in cooperation with the Member States, to *establish a Community database of road accidents in Europe (Recommendation No.72)*. The benefit from this project is that it covers the collection of non-aggregated figures (ie for each accident), which would gradually provide the matter for common methods of understanding; one first step could be to adopt a common form for analysing fatal accidents.

This will enable the Commission, the national, regional and local authorities, research institutions, makers of motor-cars and insurance companies to study, compare and evaluate in ways not possible with national data alone.

### 3.1.3 Introducing more suitable Instruments of Measurement

It must be possible to correlate road-accident figures with other figures, for roads, traffic, and vehicle or driver characteristics, in order to analyse the level of exposure to risk, and explain recurrent phenomena. But, in spite of the work already performed, the indicators in use at present do not allow a comprehensive judgement of the road-safety situation within any country, nor of the effectiveness of efforts to improve it. And the definitions in use often vary from one State to the next, and make comparisons among Community countries difficult.

*It would therefore be desirable at Community level to identify instruments for measurement and indicators which are more representative of the level of road safety (Recommendation No.73)*

### 3.1.4 Identifying European Research Programmes

Research has a natural place among the areas within which the Community could act. Largely, the Community's present concern with road-safety research has been limited to specific programmes in which road-accident prevention was not the primary end. But road safety is an area in which the sums currently spent on

research (and, hence, on research staffing) are very low by comparison with the extent of the problem.

Without ignoring the action taken by other authorities, *increased Community involvement in favour of research in this area would without any doubt be thoroughly justified, and welcomed* (Recommendation No.74)

French p.75

It must be stressed that there are a number of high-level research institutions within the Community Member States and that these institutions, at the invitation of the "Institut National de la Recherche sur les Transports et la Sécurité" (INRETS, of France), are increasing cooperation among themselves (and with institutions from non-Community countries). This initiative should be encouraged, and the undertaking of Community research programmes could not but strengthen that cooperation.

It has to be added that there is additional justification for some action at Community level (whether by way of simple information exchange, common exploitation of the results of local or national experiments, establishing databases or developing research) because Europe has no specialist profession organised across the Community like America's Traffic Engineers, with their powerful resources, efficient publications and long-established habit of sharing the fruit of their labours and their experience as the issue of the same universities.

As a contribution to bridging that gap, *the Experts Committee propose the periodical organisation at Community level of a major conference on road safety, at which researchers and decision-makers from individual Member States might meet to monitor changes in accidents and the effectiveness of remedial action* (Recommendation No.75). The aim of this conference would be to encourage the emergence of a common European approach in this subject and to mobilise forces for effective action on road safety.

### 3.2 Producing Technical Reference Material; Gradually Organising a European 'Highway Code'

To enable each Member State to make faster progress, the logical outcome of exchanging experience, studies and research (described above) would be to produce technical reference material which would gradually constitute a common corpus of knowledge. There is a considerable field to be covered here, since it includes all the areas of road-accident prevention which were discussed in Part One of this report.

These are:

- organising road-accident prevention;
- driver behaviour (training, information, laws and regulations, enforcement and penalties);
- vehicles (rules on construction and inspection);
- the road network (standards for upgrading, marking and enforcement);
- roadside assistance.

French p.76

There would be no compulsion on Member States or their constituent authorities to implement the schemes proposed in this material but we might well believe that— if they are of the quality needed— they will gradually be adopted on a voluntary basis. It is striking to see that the great similarity of policies and practice on road safety and traffic within the individual United States largely stems from voluntary adoption of the 'Uniform Vehicle Code', the first version of which was produced in 1926.

*The production and dissemination of such technical material in the form of guides of 'good practice' would make it possible gradually to identify a common corpus of knowledge and, in particular, in the longer term to develop a 'European Highway Code', which is lacking at present (Recommendation No.76)*

It should be noted that all this material could be useful not only to the Member countries but also to the countries of Eastern Europe where the number of vehicles is likely to grow in coming years, leading to greater danger.

### **3.3 Supporting Road-Safety Policy**

At present, developments in road accidents within the Community are not covered by any voluntary policy: no targets have been set, accident monitoring is simply a record of the figures, and no operational conclusions are drawn from the changing pattern. Community-level action could be taken to remedy that situation under a number of headings.

#### **3.3.1 Setting Multi-Year Targets**

*The Experts Committee consider it would be necessary for each Member State to set itself quantified targets for medium-term improvements in road safety within its territory (Recommendation No.77)* The aggregate of these would give a total target for the whole of the Community.

In the light of our earlier discussion of the Community's slowness in road safety, the Experts Committee have estimated that such a target might be to cut the numbers of deaths and serious injuries from road accidents by 20 to 30% by the year 2000, as we stated in the Introduction to this report.

French p.77

#### **3.3.2 Monitoring the Changing Pattern in Accidents**

In the light of these targets, a yearly survey should be made of the numbers of accidents and victims, to include also the principal schemes implemented by the Community and each of the Member States (*Recommendation No.78*). The survey could be submitted to the Council of Ministers and the European Parliament.

#### **3.3.3 Making Recommendations**

A comparison between targets and outturns would provide a basis for *drafting recommendations on action to take either across the Community or within each country or group of countries (Recommendation No.79)*.

On this subject, we may note that for a long time the European Conference of Ministers of Transport has been making general recommendations on road safety, but it would be desirable to go much further, with detailed operational recommendations addressed to the various Member States. That practice would be similar to the practice of the OECD regarding the economic policies of its constituent countries.

#### **3.3.4 Assistance to Member States**

In similar vein, there is at present no Community or other machinery whereby countries so desiring could have a diagnosis of their road-safety situation and receive assistance, either general or on specific points, from qualified bodies with appropriate competence.

*It would be right for such assistance to be available at Community level (Recommendation No.80)*



### **3.3.5 Sustained Encouragement and Support for Road-Accident Prevention**

More generally, it seems necessary to set up machinery to give sustained support to road-accident prevention through the Community, to encourage action by the authorities of individual Member States and to mobilise public and private bodies able to contribute to the target of cutting the number of road-accident victims in Europe. In short, to replace passive accident recording with a voluntary, active approach.

#### 4 The Machinery to be Introduced

We must give consideration to the new machinery required to grasp the very difficult question of road safety, with its considerable implications and open to such varied forms of approach, and to carry out the new activities described above. The first question that come to mind is— could the existing structures of the Community institutions cope with the task?

The Experts Committee's answer is 'No': although clearly we cannot avoid Commission involvement, equally clearly it is not for the Commission itself to acquire the technical resources required for a problem of such difficulty and extent. Even more does that apply to the Council and the European Parliament. The Experts group have therefore considered that first of all we must establish a Community specialised body.

##### 4.1 The Community Specialised Body

The body to be established would be essentially technical, with no powers of decision, but it would be the keystone of the machinery: without it, it would probably not be possible to operate the coherent and lasting policy which is lacking at present. Its *raison d'être* would be to assist the Community and the Member States to attain their selected road-safety targets, internationally, nationally, regionally and locally.

Its remit would cover the three types of activity just described and would in particular cover the following aspects:

- to analyse experience and action implemented in individual Member States, in order to reveal the lessons of common benefit;
- to initiate new research programmes or take a part in existing programmes;
- to publish periodical surveys, information material and technical works aimed at the public or specialists;

French p.79

- to compile and monitor developments in road safety, making use of a corresponding network of bodies in the Member States;
- to prepare recommendations for general use or addressed specifically to each of the Member States;
- if relevant to produce opinions or advice at the request of Member States or constituent authorities;
- to prepare Community decisions or recommendations at the request of the Commission, the Council or the European Parliament;
- to give support to groups and bodies working on road safety.

All of its activities would be conducted in close liaison with the Member States and the existing bodies working on road safety, to which it would serve as a European reference point.

The structure to be set up would include a management board, an executive and a consultative council of independent experts. For individual aspects of road safety, it would have also to consult extensively with the many social and economic circles concerned in the matter. Concerning the budgetary and staff resources required,

caution advises a gradual build-up, starting from initial staffing of some twenty persons. The cash required (of the order of 5 million Ecus for the first year of operation) should be seen against the extent of the problem, particularly the yearly economic cost as described in the Introduction to this report, probably 70 billion Ecus, ignoring the human aspect of its object, which remains the most important.

The Experts Committee are convinced that, if properly implemented, this would be a highly-beneficial use of Community funds: unless there is a permanent body for this matter, we do not think it possible to implement a really effective, coherent and lasting policy.

*In conclusion, the Experts Committee therefore recommends the establishment at Community level of a small-scale permanent body responsible for supporting and encouraging European road-safety policy, from the technical side. (Recommendation No. 81)*

French p.80

#### 4.2 Community Authorities

The Specialised Body would by definition have no regulatory or legislative responsibility, and its existence would of course leave the prerogatives and duties of Commission, Council and Parliament intact but, in view of their competences, it would facilitate their action.

So, the Commission could relinquish some of the tasks it has itself at present (collecting data, technical studies, etc) to this Body and better devote itself to its own work, including taking action in favour of road safety, and preparing Directives (with technical support from the Specialised Body if needed). The Commission would also, in liaison with it, take a major part in the drafting of objectives for common road-safety policy and for contacts with international organisations and non-Community States.

The Council of Ministers will have to continue, in particular through issuing Directives, to produce common regulations in favour of road safety improvement.

The Parliament could receive periodical reports of the Body's activities (and respond to them), while the Body could also act as a technical adviser for it. The Parliament would allow the Body the financial resources needed to operate and, more generally, would vote on Council proposals for other funds to support specific road-safety activities (research, pilot operations, incentives to Member States, etc).

Finally, given the interest it has constantly shown for road safety, the Parliament would have a major rôle to play in increasing public awareness and impulsing an ambitious European policy to fight road accidents.

■  
■

For the reasons set out above, the Experts Committee consider that conducting a resolute action at European level could give birth to much faster progress than at present in road-accident prevention across the twelve Community countries, where the Member States too often are acting in extended order against a common scourge. We therefore consider it the Community's duty to identify an active, coherent policy in this area, ignoring none of its individual aspects and organising itself to operate the policy effectively.

Support for this conviction (if any is needed) comes from the observation that the Community has decided to take a direct involvement in adjacent fields: environmental protection and consumer safety. These are major matters and, indeed, water quality and protection from accidents in the home do deserve sustained attention. But is not the lack of safety on the roads by far the greatest and the worst of the risks facing the 340 million European consumers?

The time has come, therefore, to introduce and manage an active policy against a scourge bringing pointless suffering and death to such a large number of Community citizens.

■  
■

## LIST OF ANNEXES

1. List of members of the Committee of Experts
2. Comparative Statistics on road safety in Community countries, Canada, the United States and Japan:
  - 2.1 Numbers killed in road accidents in 1970, 1975, 1980, 1985 and 1989;
  - 2.2 Population, density and fatalities per million inhabitants;
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  - 2.4 Fatalities per million vehicle/kilometres travelled;
  - 2.5 Distribution of fatalities by category of road user.
3. Changes in the rate of motorway fatalities according to speed limits:
  - 3.1 France;
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5. Maximum alcohol level in each Member State.
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7. Changes in top speeds of vehicles.
8. List of Community Council Directives on road safety.

**LIST OF MEMBERS OF THE COMMITTEE OF  
EUROPEAN EXPERTS ON ROAD SAFETY**

Mr Christian GERONDEAU      Chairman      France

Mr Dieter ELLINGHAUS      German Federal Republic

Mr Enrico FERRI      Italy

Mr J.E. HANNIGAN      United Kingdom

Mr Matthijs J. KOORNSTRA      Netherlands

Mr Antonio VALDES GONZALEZ-ROLDAN      Spain

Mr Bernard DURAND      Rapporteur      France

**2 Population, density and fatalities per million inhabitants**

	POPULATION (1)	DENSITY (2)	FATALITIES PER 10 <sup>6</sup> INHABITANTS
B Belgium	9876	324	199
D Germany	61140	246	134
DK Denmark	5130	119	139
E Spain	39078	77	211
F France	55510	102	207
GR Greece	9990	76	169
I Italy (1986)	57505	191	129
IRL Ireland	3543	51	130
L Luxembourg	370	143	215
NL Netherlands	14804	357	92
P Portugal	9744	109	335
UK United Kingdom	56930	236	94
<b>AVERAGE EEC</b>	<b>323620</b>	<b>143</b>	<b>157</b>
CDN Canada	25796	3	158
USA United States	237491	26	190
<b>AVERAGE N.AMERICA</b>	<b>263287</b>	<b>14</b>	<b>192</b>
JAP Japan	122260	322	100

(1) thousands

(2) inhabitants per km<sup>2</sup>

**ROAD SAFETY STATISTICS**  
**EEC, United States, Canada & Japan**

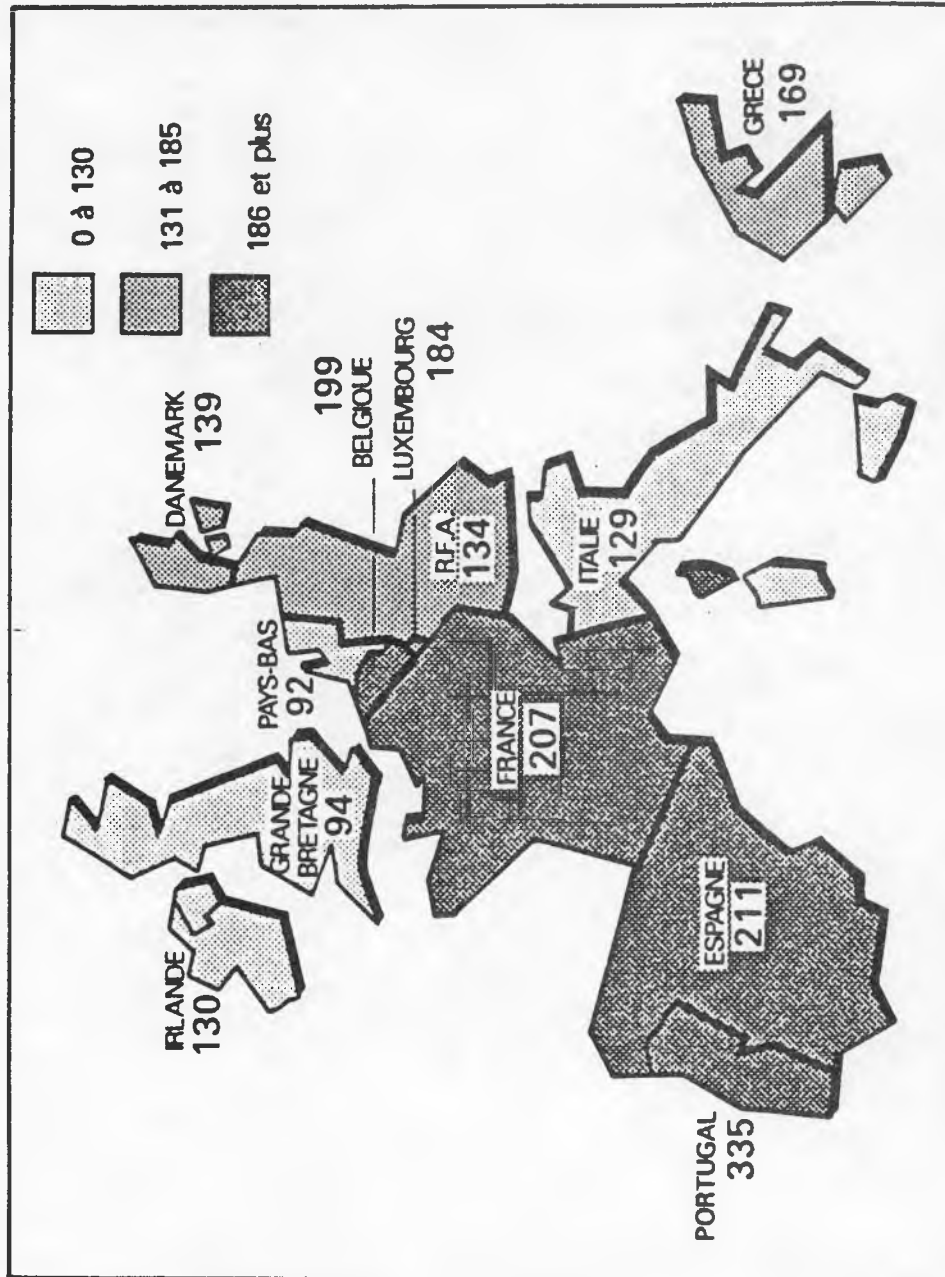
Source: CEMT  
(+ provisional figures 1989)

**1 Numbers killed in road accidents (at 30 days)**

	1970	1975	1980	1985	1989	89/80%	89/75%
B Belgium	2949	2346	2396	1981	1973	- 17.6	- 15.9
D Germany	19193	14870	13041	8400	7995	- 38.7	- 46.2
DK Denmark	1208	827	690	772	714	+ 3.5	- 13.7
E Spain	5456	5833	6522	6374	9333	+ 43.1	+ 60.0
F France	16387	14166	13499	11387	11475	- 15.0	- 19.0
GR Greece	1043	1187	1372	1908	1902	+ 38.6	+ 60.2
I Italy	10923	10177	9135	7629	7011	- 23.2	- 31.1
IRL Ireland	540	586	564	410	477	- 15.4	- 18.6
L Luxembourg	132	124	98	79	75	- 23.5	- 39.6
NL Netherlands	3181	2321	1997	1438	1456	- 27.1	- 37.3
P Portugal	1842	3479	2941	2438	3067	+ 4.3	- 11.8
UK United Kingdom	7771	6679	6239	5342	5423	- 13.1	- 18.8
<b>TOTAL EEC</b>	<b>70625</b>	<b>62685</b>	<b>58494</b>	<b>47978</b>	<b>50907</b>	<b>- 13.0</b>	<b>- 18.8</b>
CDN Canada	5080	6061	5461	4365	4280*	- 21.6*	- 29.4*
USA United States	52627	44525	51091	43825	46386*	- 9.2*	+ 4.2*
<b>TOTAL N.AMERICA</b>	<b>57707</b>	<b>50586</b>	<b>56552</b>	<b>48190</b>	<b>50666*</b>	<b>- 10.4*</b>	<b>+ 0.2*</b>
JAP Japan	21795	14206	11752	12039	12151*	+ 3.4*	- 14.5*



# FATALITIES PER MILLION INHABITANTS IN THE EEC

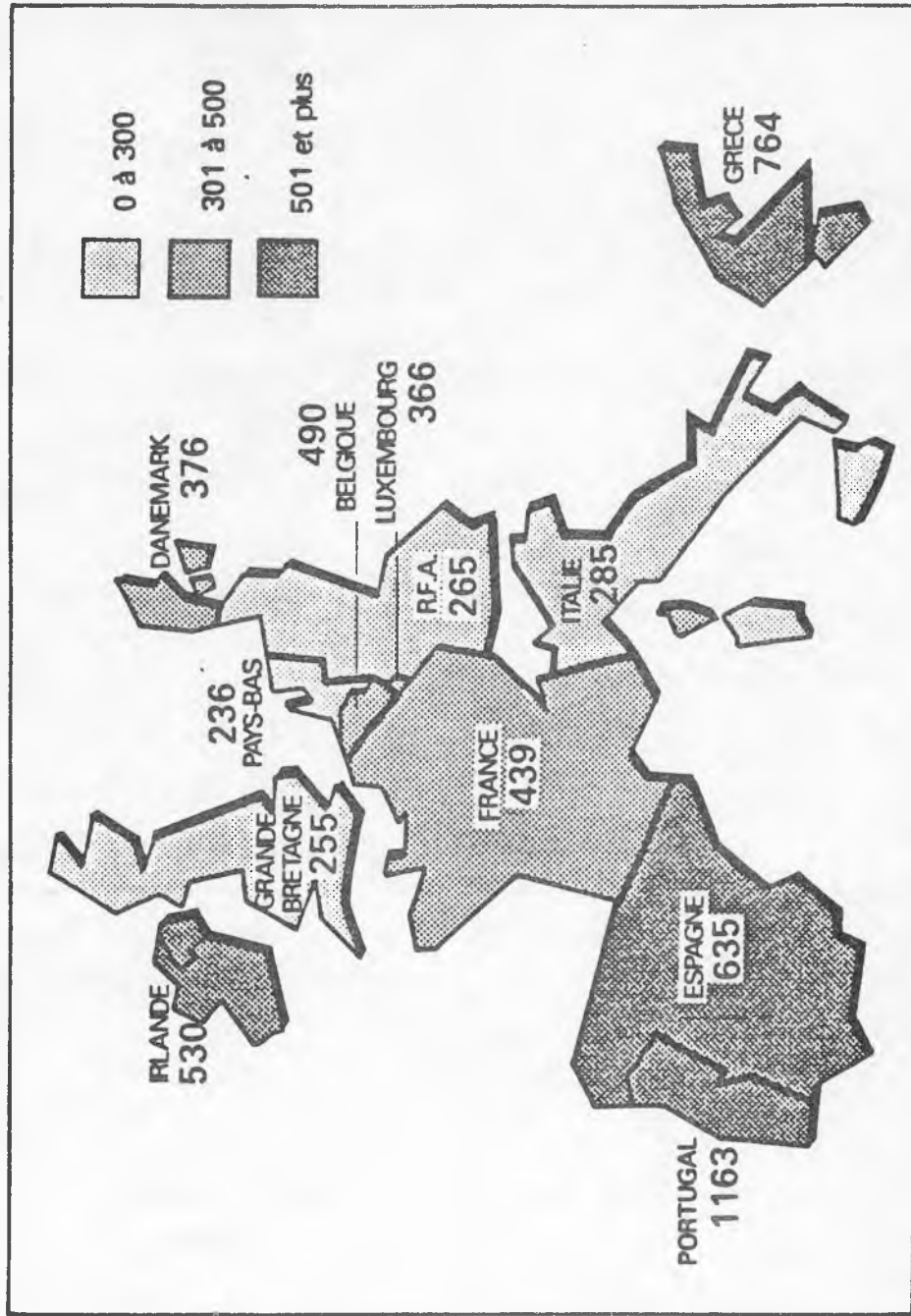


## ANNEXE No. 2

## 3 Density of vehicles and fatalities per million vehicles

	NUMBER OF ROAD VEHICLES PER THOUSAND INHABITANTS	NUMBER OF FATALITIES PER MILLION VEHICLES
B Belgium	406	490
D Germany	506	265
DK Denmark	370	376
E Spain	333	635
F France	472	439
GR Greece	222	764
I Italy (1986)	453	285
IRL Ireland	245	530
L Luxembourg	503	366
NL Netherlands	391	236
P Portugal	288	1163
UK United Kingdom	368	255
AVERAGE EEC	417	377
CDN Canada	572	290
USA United States	762	256
AVERAGE N.AMERICA	743	259
JAP Japan	409	243

FATALITIES PER MILLION VEHICLES IN THE EEC



2-4 Fatalities per Hundred Million  
Vehicle - Kilometers

	POPULATION (millions)	Millions de véhicules- Kms parcourus	TUES	Taux de Morta- lité (1)
B - BELGIQUE	9 876	54 600	1 967	3,60
D - ALLEMAGNE	61 238	427 400	8 213	1,92
DK - DANEMARK	5 129	35 011	713	2,04
E - ESPAGNE	38 914	99 159	8 252	8,32
F - FRANCE	55 784	399 000	11 497	2,88
GR - GRECE	10 010	24 000	1 738	7,24
I - ITALIE (1986)	57 391	288 000	7 494	2,60
IRL - IRLANDE	3 538	21 847	463	2,19
L - LUXEMBOURG	372	2 956	84	2,84
NL - PAYS-BAS	14 715	94 090	1 366	1,45
P - PORTUGAL	9 778	31 200	3 294	10,56
UK - ROYAUME-UNI	55 487	363 102	5 052	1,39
MOYENNE CEE	322 330	1 840 365	50 133	2,72
CND - CANADA	25 950	275 000	4 200	1,53
USA - ETATS-UNIS	245 785	3 240 938	47 093	1,45
MOYENNE AMERIQUE DU NORD	271 735	3 515 938	51 293	1,46
JAP - JAPON	122 783	575 558	13 447	2,34

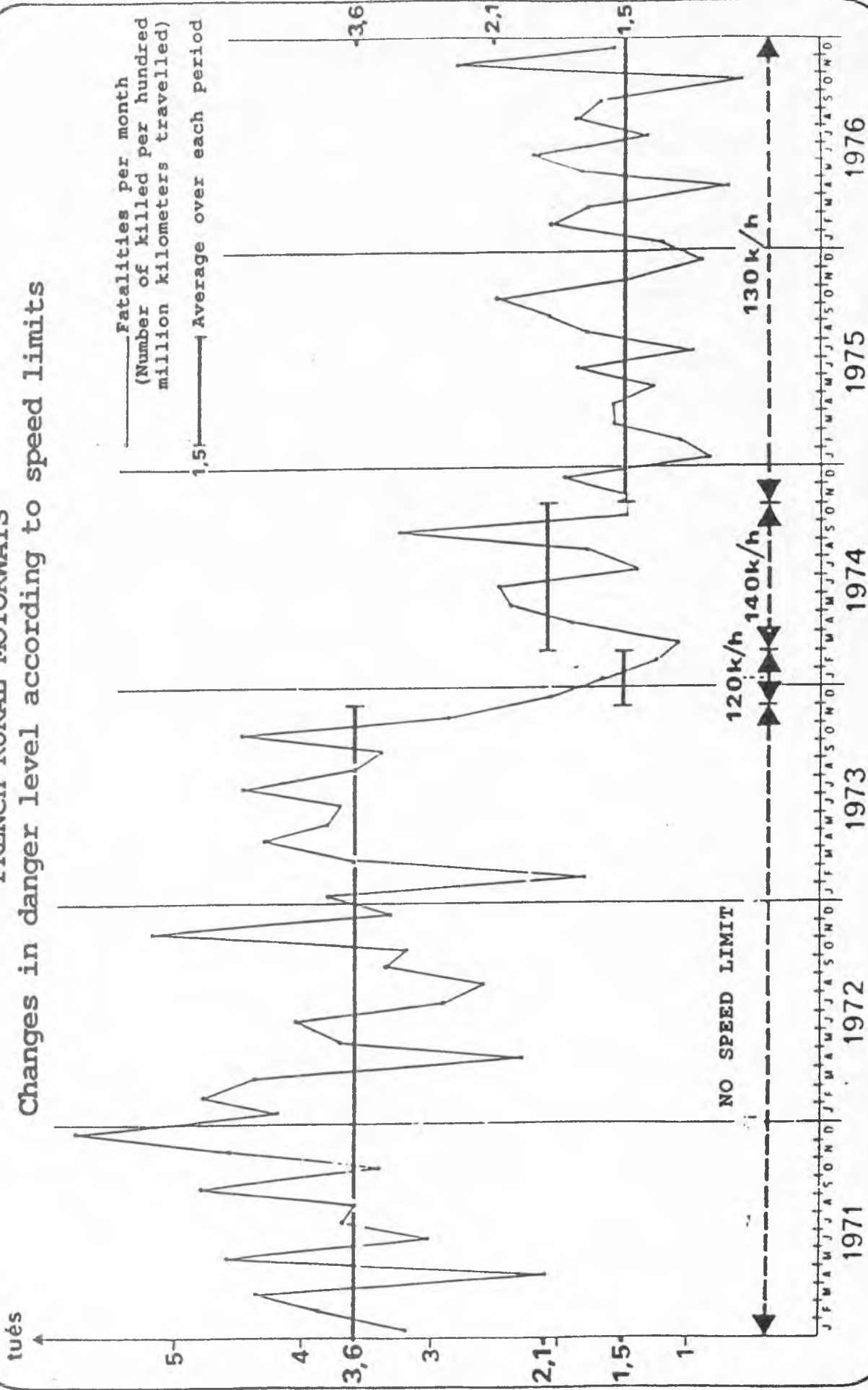
(1) par Cent millions de Kms parcourus

## 5 Distribution of fatalities by category of road user

		PEDESTRIANS	BICYCLES	P/A CYCLES	M/CYCLES	MOTOR-CARS		OTHER + UNKNOWN
						driver	pass'r	
B	Belgium Total	17.0	9.9	5.5	6.2	39.1 57	17.9	4.3
D	Germany Total	21.2	9.2	2.6	11.0	35.9 53.3	17.4	2.7
DK	Denmark Total	20.2	12.5	4.7	6.3	35.4 51	15.6	5.3
E	Spain Total	18.4	1.8	6.6	5.5	31.5 58.1	26.6	9.6
F	France Total	15.0	4.3	6.9	8.0	38.7 60.9	22.2	5.0
GR	Greece Total	24.4	1.4	8.1	11.5	18.5 35.7	17.2	18.8
I	Italy Total	16.7	6.1	8.8	10.5	31.5 50.5	19.0	7.4
IRL	Ireland Total	30.8	7.8	> 15.2	<	22.1 39.5	17.4	6.5
L	Luxembourg Total	8.8	2.9	1.5	2.9	57.4 83.9	26.5	0.0
NL	Netherlands Total	11.6	21.0	8.6	3.9	34.9 51.8	16.9	3.2
P	Portugal Total	28.1	4.9	27.0	2.5	15.2 28.7	13.5	8.7
UK	United Kingdom Total	33.3	5.5	1.1	12.8	25.9 43.2	17.3	4.2
AVERAGE EEC								
CDN	Canada Total	15.0	2.8	>	8.8 <	46.2 73.1	26.9	2.1
USA	United States Total	14.5	2.0	0.2	8.4	35.9 54.1	18.2	20.7
AV. N.AMERICA								
JAP	Japan Total	29.9	9.8	9.4	16.3	25.2 35.7	10.5	0.4

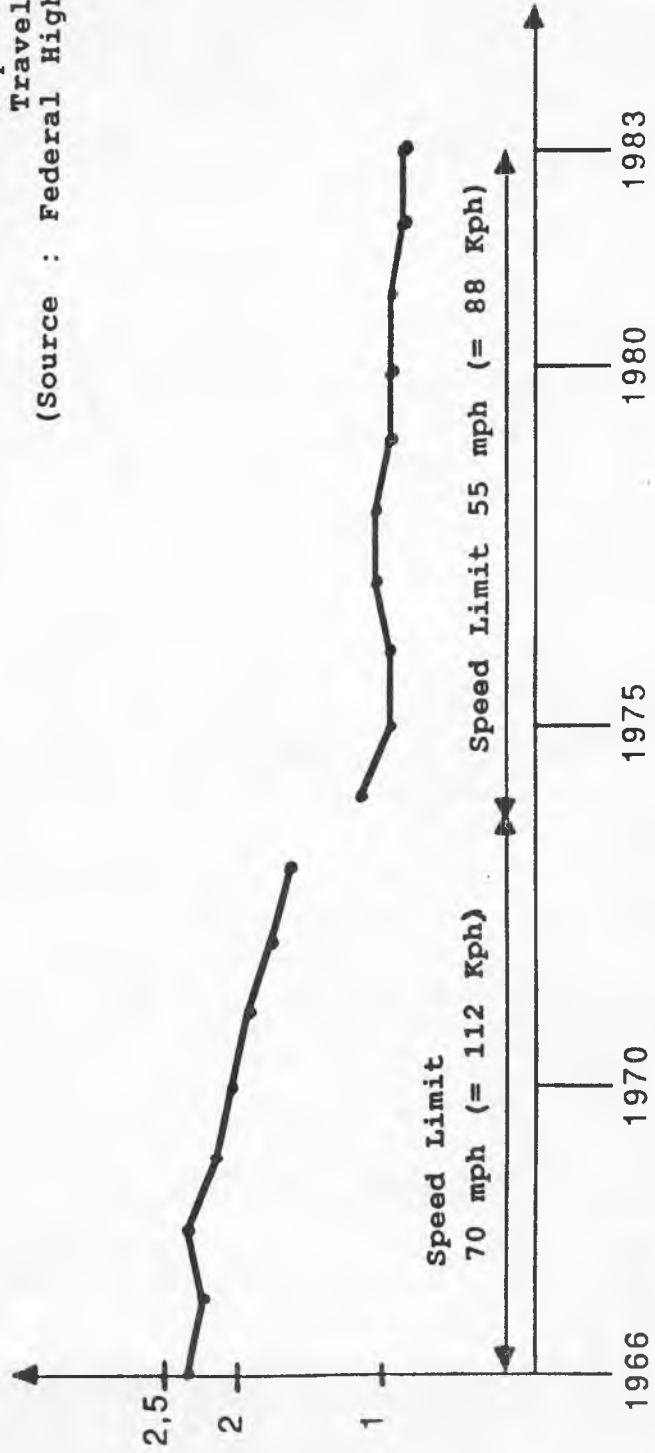
FRENCH RURAL MOTORWAYS

Changes in danger level according to speed limits

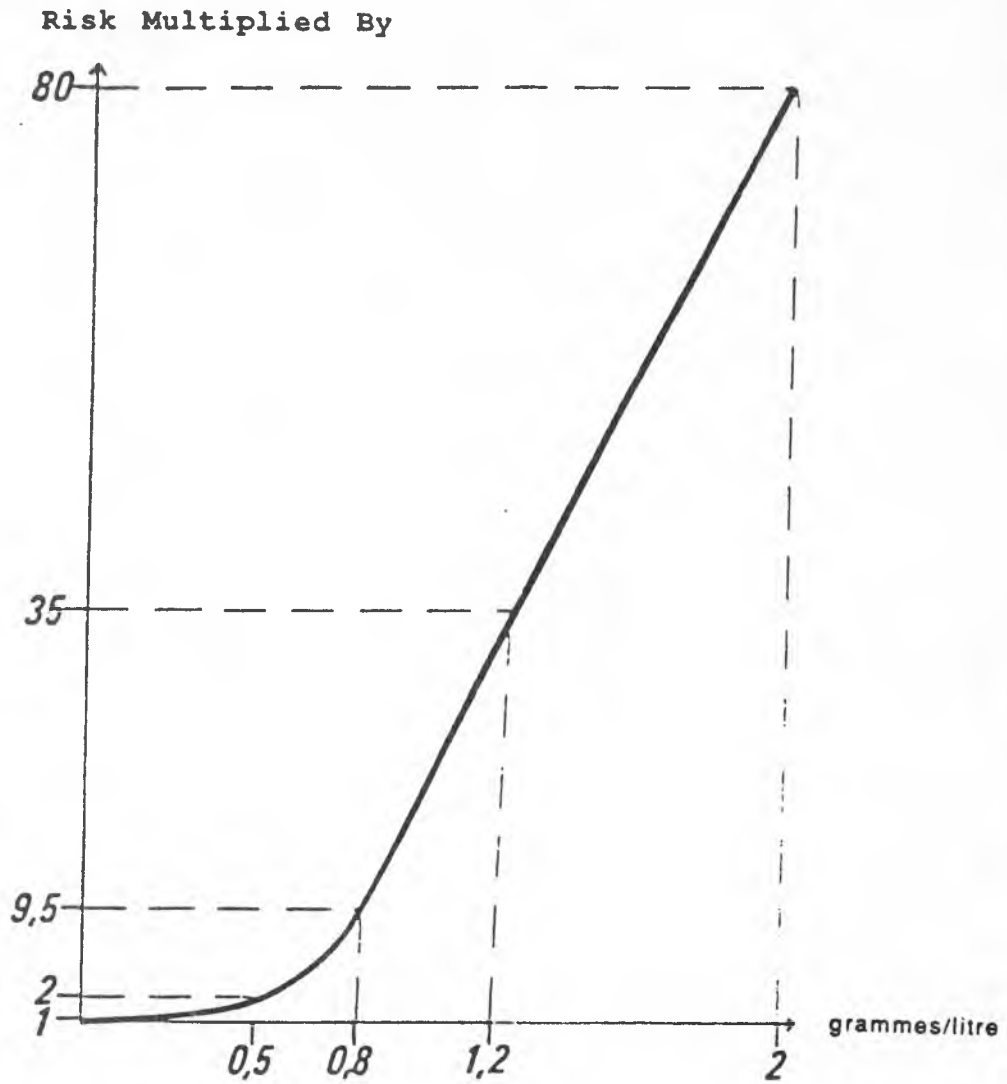


### RURAL INTERSTATE FREEWAYS: CHANGE IN DANGER LEVEL ACCORDING TO SPEED LIMITS

Annual Number of Killed per Hundred Million Kilometers  
Travelled  
(Source : Federal Highway Administration)



### ALCOHOL AND THE RISK OF ACCIDENT



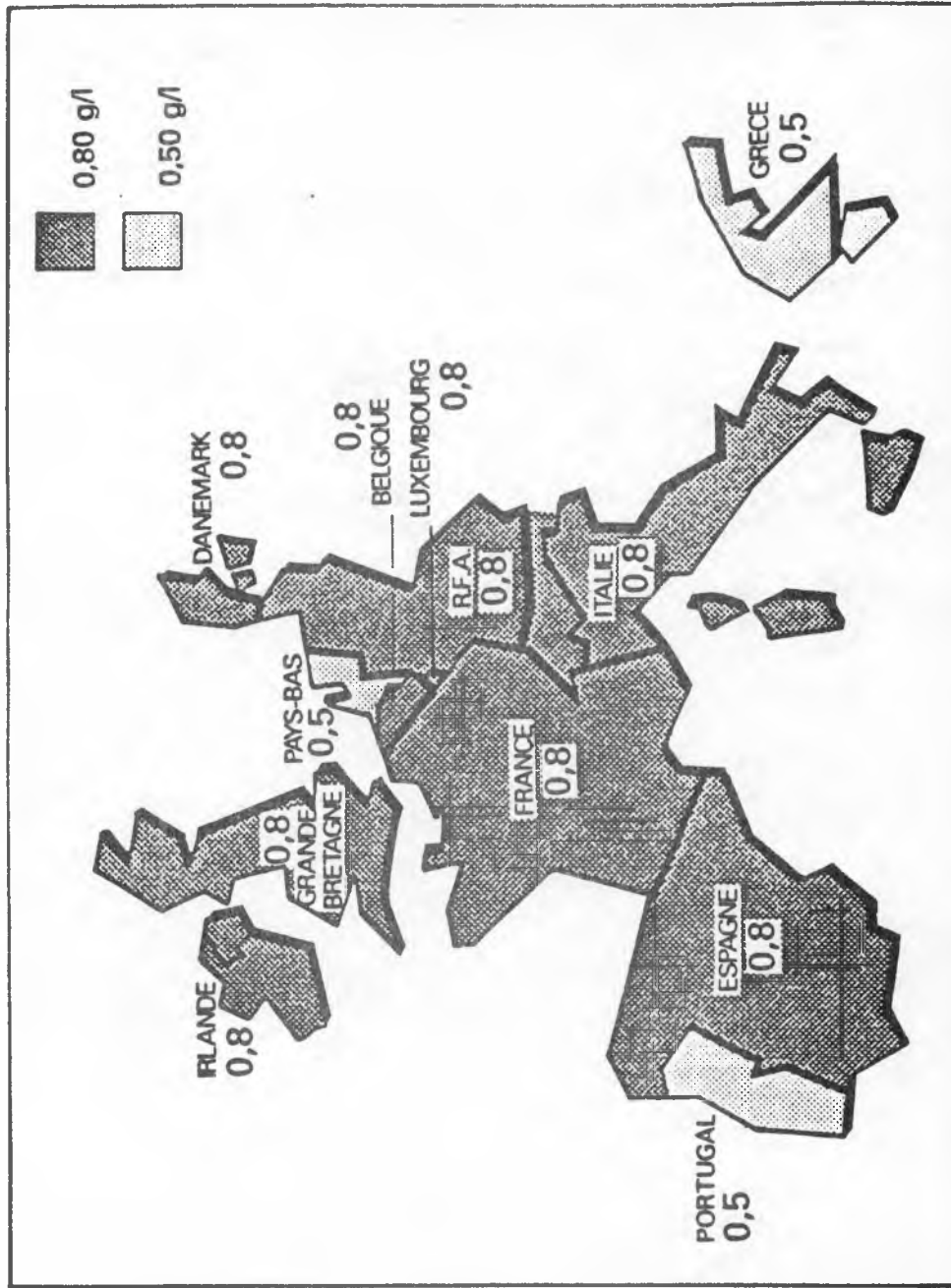
Source : Direction de la Sécurité et de la Circulation Routière (France)



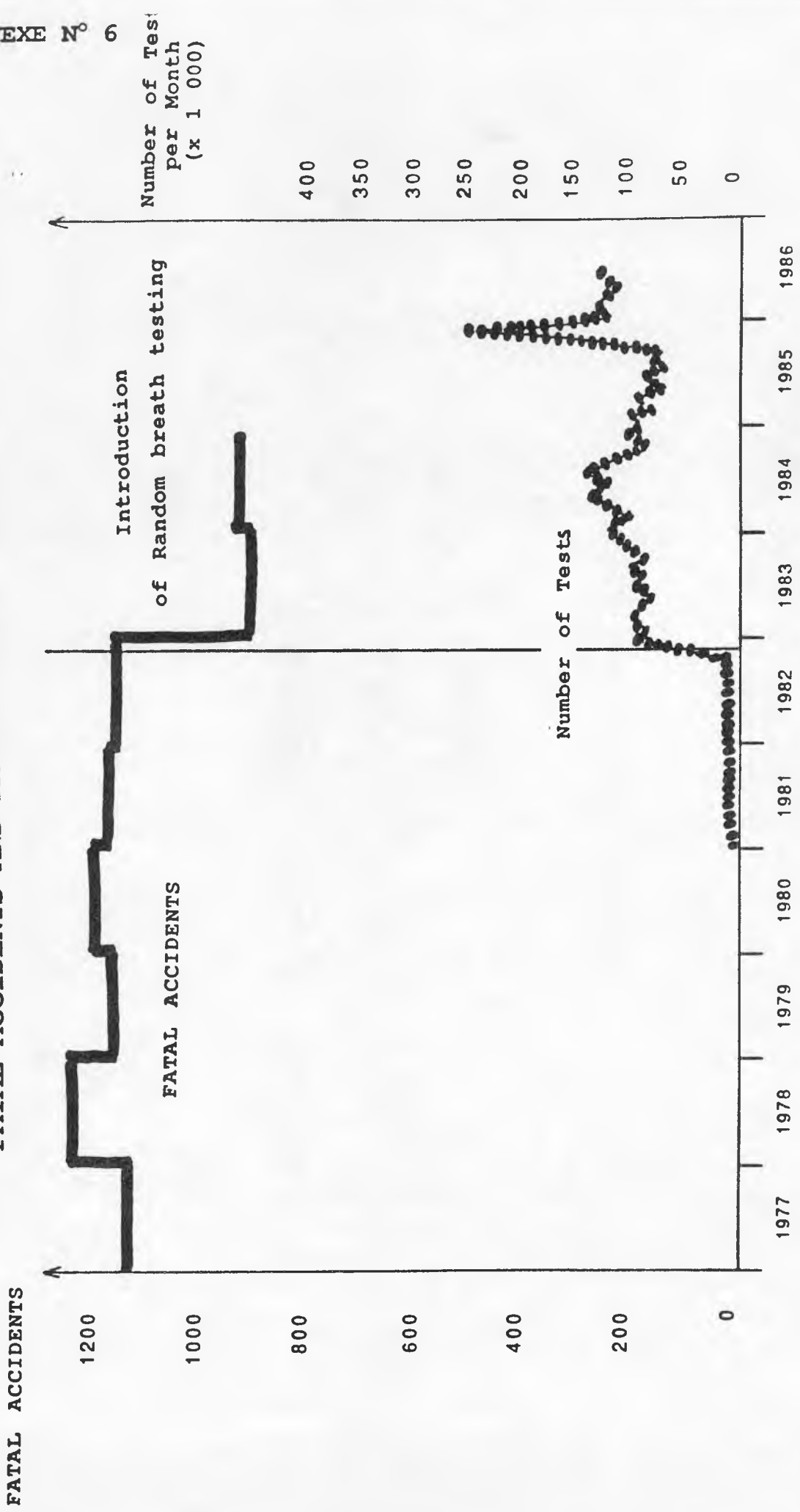
**Alcohol Level in Drivers:  
Maximum Permitted in each Member State (mg/l)**

Belgium	0.80
F Rep Germany	0.80 (0.30 in an accident or if driver shows other signs of diminished faculties)
Denmark	0.80
Spain	0.80 (0.50 for drivers of vehicles carrying dangerous goods)
France	0.80
Greece	0.80 (0.50 if driver shows other signs of diminished faculties)
Ireland	0.80
Italy	0.80
Luxembourg	0.80
Netherlands	0.50
Portugal	0.50
United Kingdom	0.80

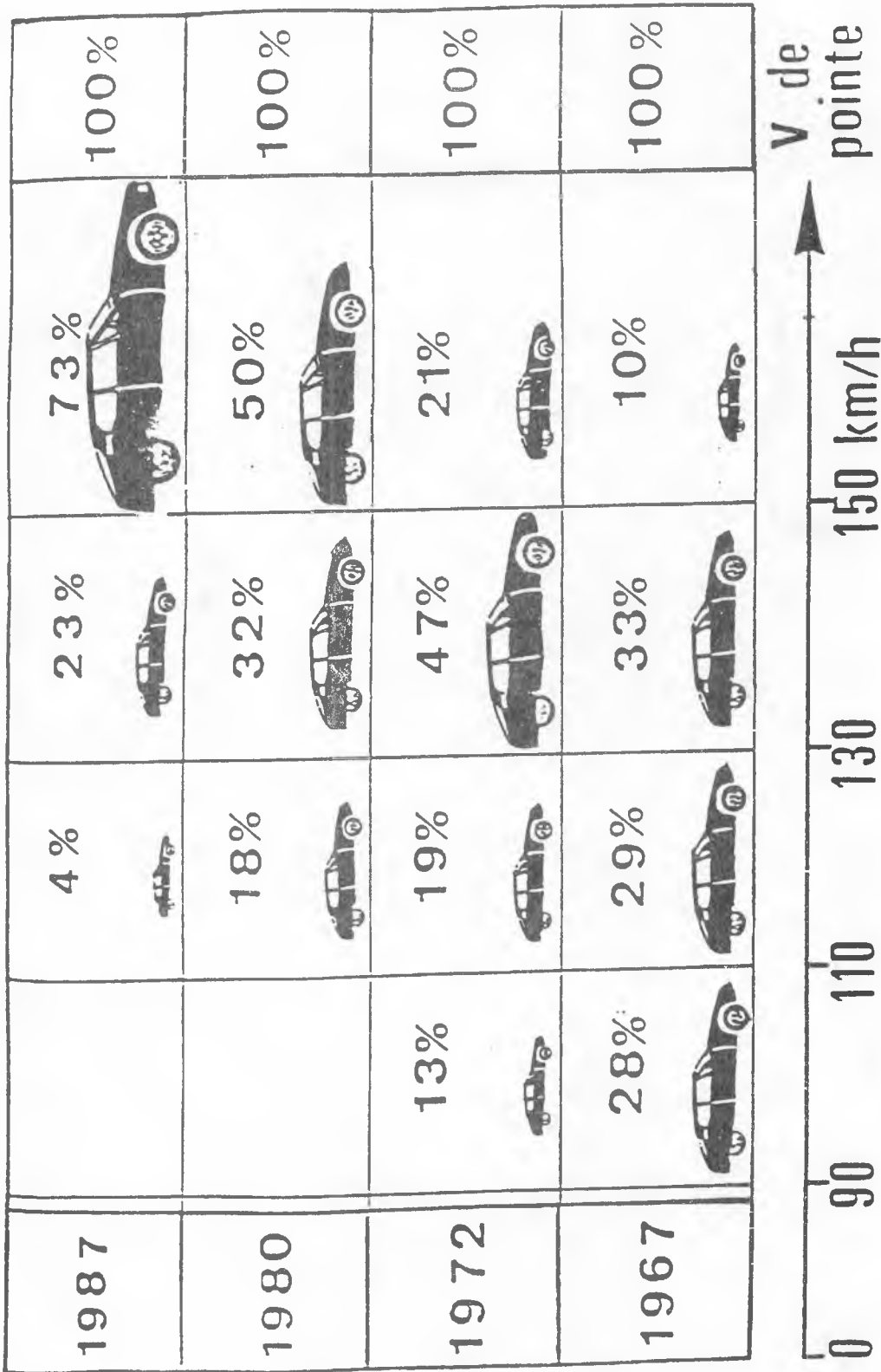
ALCOHOL : PERMITTED LEVELS IN EUROPE



NEW SOUTH WALES  
FATAL ACCIDENTS AND RANDOM BREATH TESTING



The introduction in 1983 of high density random breath testing led to the immediate and permanent result of reducing by 20 % the TOTAL number of fatal accidents



TOP SPEED OF FRENCH MARKET CARS  
BY FIRST YEAR OF REGISTRATION

**LIST OF COMMUNITY COUNCIL  
DIRECTIVES ON ROAD SAFETY**

1. **Harmonisation of technical requirements on construction or equipment of vehicles (recent directives chiefly concerned with road safety)**
  - Directive 88/194/EEC requiring all vehicles over 16 tonnes, all buses and coaches over 12 tonnes and all trailers over 10 tonnes to be fitted with an anti-locking braking system (ABS) from 1991.
  - Directive 88/321//EEC requiring all vehicles over 7.5 tonnes to be fitted with additional wide-angle and parking rear-view mirrors from 1 October 1988.
  - Directive 89/459/EEC on approximation of Member-States' legislations on the depth of tyre-treads.
2. **Technical inspection of vehicles**
  - Directive 77/143/EEC on technical inspection of heavy goods vehicles, coaches, buses, trailers and semi-trailers (over 3.5 tonnes), taxis and ambulances.
  - Directive 88/449/EEC modifying the above and extending the inspection requirements to all commercial vehicles (including those under 3.5 tonnes).
3. **Driving licences**
  - Directive 80/1263/EEC on introduction of a Community driving licence.