

Communication in Road Safety

EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT

COMMUNICATION IN ROAD SAFETY

INTERNATIONAL SEMINAR
Warsaw, 2-3 October 1997



EUROPEAN CONFERENCE OF MINISTERS OF TRANSPORT (ECMT)

The European Conference of Ministers of Transport (ECMT) is an inter-governmental organisation established by a Protocol signed in Brussels on 17 October 1953. It is a forum in which Ministers responsible for transport, and more specifically the inland transport sector, can co-operate on policy. Within this forum, Ministers can openly discuss current problems and agree upon joint approaches aimed at improving the utilisation and at ensuring the rational development of European transport systems of international importance.

At present, the ECMT's role primarily consists of:

- helping to create an integrated transport system throughout the enlarged Europe that is economically and technically efficient, meets the highest possible safety and environmental standards and takes full account of the social dimension;
- helping also to build a bridge between the European Union and the rest of the continent at a political level.

The Council of the Conference comprises the Ministers of Transport of 39 full Member countries: Albania, Austria, Azerbaijan, Belarus, Belgium, Bosnia-Herzegovina, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, the Former Yugoslav Republic of Macedonia (F.Y.R.O.M.), Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Moldova, Netherlands, Norway, Poland, Portugal, Romania, the Russian Federation, the Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine and the United Kingdom. There are five Associate member countries (Australia, Canada, Japan, New Zealand and the United States) and three Observer countries (Armenia, Liechtenstein and Morocco).

A Committee of Deputies, composed of senior civil servants representing Ministers, prepares proposals for consideration by the Council of Ministers. The Committee is assisted by working groups, each of which has a specific mandate.

The issues currently being studied – on which policy decisions by Ministers will be required – include the development and implementation of a pan-European transport policy; the integration of Central and Eastern European Countries into the European transport market; specific issues relating to transport by rail, road and waterway; combined transport; transport and the environment; the social costs of transport; trends in international transport and infrastructure needs; transport for people with mobility handicaps; road safety; traffic management; road traffic information and new communications technologies.

Statistical analyses of trends in traffic and investment are published regularly by the ECMT and provide a clear indication of the situation, on a trimestrial or annual basis, in the transport sector in different European countries.

As part of its research activities, the ECMT holds regular Symposia, Seminars and Round Tables on transport economics issues. Their conclusions are considered by the competent organs of the Conference under the authority of the Committee of Deputies and serve as a basis for formulating proposals for policy decisions to be submitted to Ministers.

The ECMT's Documentation Service has extensive information available concerning the transport sector. This information is accessible on the ECMT Internet site.

For administrative purposes the ECMT's Secretariat is attached to the Organisation for Economic Co-operation and Development (OECD).

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FOREWORD

Detailed analysis has shown that in the vast majority of road accidents, human error is the main cause or, at least, a key contributory factor. It is thus necessary to focus on the human factor. While it is now considered much easier, in principle, to change technology than human behaviour, there are still several ways of influencing human behaviour in direct or indirect ways. This can be done primarily through education, training and information, but also through checks, controls and penalties.

The ECMT has done a great deal of work during the first stage - education and training. ECMT continues to endeavour to ensure that road safety education occupies the place it deserves in school curricula, starting right from kindergarten with a comprehensive approach, the aim of which is to prepare young people for an active life in a society in which cars have a central role.

Another line of approach starts with the principle that road safety is not the exclusive reserve of central government but an issue concerning all levels of administration, as well as social/occupational groups and associations which have a role to play alongside the state in promoting road safety. It is, of course, necessary to take great care to ensure that measures taken within an increasingly complex comprehensive strategy are consistent with one another.

Once this is done, however, a genuine shift in outlook is underway: people are no longer thinking in terms of individual, technical, regulatory, legislative or even educational categories but are trying to integrate all of these into an overall scheme. This is entirely in keeping with the ECMT's role since the Conference seeks to promote innovative solutions.

In this context, communication has a key role, whichever policy is chosen.

A Seminar on Communication in the Field of Road Safety took place on 2 and 3 October, 1997 in Josefow, near Warsaw, at the invitation of the Polish Authorities. For the first time, within the framework of ECMT, an event concerning Road Safety took place in one of the Conference's more recent Central and Eastern European Member countries. Road safety development in these countries has proven to be of particular concern as the use of cars is increasing.

Many actions are used in the field of communication using different media, such as television advertisements, press articles, education manuals, stands at public events, interventions in Parliament and by other policy-makers.

The Seminar first defined the main objectives of communication: to spread information in order to influence behaviour. Starting from the different actors in the communication process, the Seminar then defined the added value of new and more efficient strategies in communication such as social marketing.

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**WELCOME BY THE MINISTER OF TRANSPORT AND MARITIME
ECONOMY OF POLAND**

Mr. Boguslaw LIBERADSKI

Ladies and Gentlemen,

On behalf of the Prime Minister of the Republic of Poland and in my own name, I would like to welcome all of you and to express our satisfaction that you replied to our invitation. I hope that this Seminar will make a major contribution to improving road safety in our country.

We are very honoured that this Seminar is being held in Poland, a country in transition. It all started in the second half of 1989. We have a population of 39.3 million. Last year, 3.3 million vehicles and 7 million people crossed our borders. The number of vehicles entering Poland is rising by 8 to 10 per cent every year. 1 percentage point of Gross National Product corresponds to an increase of 1.5 percentage point in traffic on Polish roads. Over the past two years, Poland has been one of the countries with the largest increase in the number of vehicles. 500 000 new vehicles were sold last year in Poland. This year, 500 000 new vehicles have already been sold, which means that Poland has the most rapidly growing car market in Europe. In terms of car sales, Poland ranks 6th or 7th in Europe.

The number of accidents has risen in line with the growth in car use: more than 4 000 people were killed in road accidents last year. Tens of thousands are injured. Last year, 900 children were killed on Polish roads. All of them were schoolchildren. This is a very important issue, which the Seminar should address.

I had the pleasure of reading some of the papers for the Seminar in advance, and what is striking, and positive, is the wide range of subjects and issues raised; the manner in which they are addressed is, to a large extent, in line with my own thinking. Firstly, it is of paramount importance, as Mr. Horn points out in the OECD document, that road traffic, accidents and the desire to travel be treated, at least in this country and this region, not just as a desire for mobility but also as a sign of civic liberty. We are free to travel and to cross frontiers, and people want to take advantage of this freedom to travel. At the same time, there are new aspects of mobility which have hardly been studied. In the 1980s, road traffic was limited primarily by the shortage of vehicles on the market. There were shortages of all kinds of things, shoes, sugar, etc. Today the shops are full of all these products, cars are available, but traffic is steadily rising and its characteristics are very different, since they derive from a new lifestyle.

I am particularly glad to be able to attend this meeting and to address my staff and the representatives of bodies responsible for promoting road safety. Road safety has to be sold and promoted. It is for that reason that we must consider what is meant by marketing in general. Social marketing is something entirely new. The various papers talk of effective means of communication

between the person transmitting the message and the person receiving it. To a large extent, I agree with what is said in the background reports. I have in mind particularly the first report, which points out that the main cause of road accidents is our behaviour. It states very clearly that 95 per cent of all accidents are caused by road users' behaviour. To a very large degree, we would go along with this. Some people say: "We are free and we want to travel freely, it is our basic right". If there is an accident, very often one hears that it was caused by the poor state of the roads or that it was somebody else's fault, but never, or almost never, does one hear that it is the person's own fault. If we want to develop communication with society, policy-makers and journalists must first learn how to get the road safety message across. We must learn how to conduct road safety campaigns.

What practical measures should be taken? In two months' time, we are going to prepare a new Road Safety Act which will bring our legislation into line with that in the European Union. We also have some experience of relations with parliamentarians and journalists, some striking examples of which are given in the reports of the Polish Research Institute. We should mention in particular the government's proposal to slash the speed limit to 50 km/h in built-up areas. The initial reaction from both journalists and parliamentarians as well as the public was negative. They were against the proposal because they said such a low limit could cause traffic problems. Another example is the minimum age for a driving licence. Up to now it has been 17. The government proposed that the driving licence be issued at that age only after the person had had one year's practice. The proposal was unfortunately rejected because elections were coming up, and young people vote. It was only after the proposal was rejected that everybody suddenly realised that the voting age in Poland was in fact 18 not 17 but the bill had already been brought before Parliament so nothing could be done about it.

A third important example concerns the role of the different age groups. There was a plan to make it compulsory for the elderly to take a medical examination every year, but it was rejected. It was considered that an 80-year-old is in the same state of health as a 25-year-old. Electoral and social considerations, electoral slogans, were all rolled out. We have to learn how to communicate with society. We have to learn how to communicate road safety messages to those who have not yet got into bad habits. I am thinking, of course, of children. In particular, I would like my staff to give close attention to what the French and Spanish representatives have to say about communicating with children about road safety. At the beginning of the school year, we organised, in close co-operation with the police, discussions, lessons and presentations in schools on the subject of road safety, and especially on good road behaviour on the way to school. Schools situated on busy roads were targeted in particular and some improvement has been noted, but there is still a long way to go.

To finish, I would like to touch upon the presentation by the representative of the United Kingdom, namely the importance of life styles and alcohol consumption in particular. It is fact that the latter is a way of life in Poland. There is a certain social acceptance of the fact that people break the speed limits while under the influence of alcohol and escape being booked. Indeed, it is seen as an achievement. It is important to change this scale of values, this whole life style, since only 25 per cent of road accidents are caused by people who are not in a state of inebriation.

Lastly, I would like to thank you all for coming to our country. For us, this is a very important Seminar and I hope that the discussions will be fruitful. I would like all the participants to derive some benefit from taking part in the Seminar, and the benefit will be all the greater if you also have a pleasant stay in Poland and feel at home.

OPENING SPEECH BY THE SECRETARY GENERAL OF ECMT

Mr. Gerhard AURBACH

Ladies and Gentlemen,

I am particularly happy to take part in the opening of this Seminar, which marks an important and quite significant phase in the process of adjustment by our organisation to the geopolitical realities of the new Europe, that is to say, the real Europe stretching across the entire continent, and in our co-operation with our host country, Poland. When the ECMT was set up almost 45 years ago, who could have said at the time that such a joint meeting would be held one day in Warsaw by the Ministry of Transport and our Conference? Who could have even imagined that Poland, which is now well integrated in the pan-European transport system, would be taking over the Presidency of the ECMT next year?

To show how far we have both come, it must be said that the origins of the European Conference of Ministers of Transport, or the ECMT as it is usually known, can be traced back to -- among other factors -- the initiatives in the western Europe of the early 1950s which sought to promote solidarity in certain sectors. Among these, the transport sector obviously had to meet especially urgent demands, reflecting the necessity of reconstructing the system and then adjusting it to the new needs of rapidly developing economies.

Since, in addition to the usual delegates who are quite familiar with the ECMT, quite a few participants in this Seminar probably know nothing or very little about our Conference, I should like to describe very briefly the organisation which is holding this Seminar.

Simplifying things somewhat, I should say that there are three main aspects to the ECMT, since it is:

1. a body specialising in transport, and more particularly in inland transport,
2. a policy co-operation forum at the service of Transport Ministers, and
3. an organisation whose direct activity is in theory limited to Europe, although this has not prevented it from opening its doors to many major non-European countries belonging to the OECD, to which we are attached for administrative purposes.

Although the ECMT was to be, initially as I have just said, and then for a number of decades to come, a forum for co-operation within the traditional group of 19 Western European countries, its statutes have never reflected any ideological preference, so that as long ago as 1991, it had no difficulty extending membership to the new Central and Eastern European countries during their transition towards a market economy. The process was spontaneous and rapid. Our Conference now

has 36 fully-fledged Members, meaning virtually all the European countries, as well as a number of non-European countries which are Associate Members or Observers.

Owing to its institutional form, the nature of its activities, its structure and its working methods and environment, the ECMT has contributed fully since its creation to the implementation of transport policy at pan-European level. More precisely, it now serves as a policy bridge in the transport field between the European Union and the other countries in Europe. It is thus even a kind of anteroom, so to speak, for some of our new Member countries pending their entry into the European Union. In any case it is along these lines that the ECMT has worked in every sphere of its activity, thereby contributing to the development, streamlining and harmonisation of the structures governing transport at European level, including those relating to safety.

In this respect, special attention should obviously be given to road safety. All too often, the increase in car ownership has been accompanied by an increase in traffic accidents. In response to this situation, the Conference initially tried to give the necessary lead so that joint decisions would be taken by Ministers on the technical and regulatory changes which could break that correlation. It focused on speed restrictions, for example, or on the wearing of safety belts, that is on measures which in theory were unpopular but involved basic aspects of road safety.

Despite these initial measures, the fact remains that, in the vast majority of cases, human error is at least a basic contributory factor if not the main factor in road accidents. It therefore still seems that the attention of Ministers and all those concerned should be focused on the human factor.

It is now considered that although technical characteristics are in theory much easier to change than human behaviour, there are still many ways of more or less directly influencing this behaviour, mainly via education, training and information, but also via surveillance, monitoring and penalties.

The ECMT has devoted much of its work to the first approach involving education and training. In particular it has tried hard, and will continue to do so, to ensure that road safety education has its rightful place in school curricula, that it starts in the nursery school and is included in an overall scheme to prepare young people properly for the day when they will take their place as drivers in our car-based societies.

A complementary approach is based on the fact that road safety is not exclusively the responsibility of central government but one that also concerns the various levels of administrative authority and that can also be shared with socio-professional groups and associations which all have a role to play and can in this case work in partnership with government. Such partners could be the medical profession, insurance companies, car manufacturers, road safety bodies, automobile clubs, business firms, etc.

Why then not make the most of the possibilities provided by these potential partners to extend, disseminate and consolidate road safety policy through decentralisation and diversification?

Great care must obviously be taken to co-ordinate the action of the various parties within what has become a complex strategy. But, from then on, there is a real change in approach, for the technical, regulatory, legislative and even educational aspects are no longer seen in isolation, but an attempt is made to integrate them, on a lasting basis, within a comprehensive scheme. It is an approach which is perfectly consistent with the role of the ECMT since its action is aimed rather at the promotion of innovative solutions.

In this context, the development of the Conference's membership to Europe as a whole raises the issue of the current relevance of ECMT's work on road safety. Quite a few of the Resolutions already adopted by the older Member countries will, if they are adopted in "the East", have a positive influence on road safety in the more recent Member countries.

But we still have to communicate, be able to do so and do so effectively.

This two-day Seminar should be an opportunity to review the various structures for facilitating communication which have been set up by the ECMT Member countries, and to identify the aspects which should be taken further and those on which joint action by our various Member countries is necessary.

Lastly, ladies and gentlemen, I do hope this meeting will be a great success, in the interests of Europe, our Member countries and especially their road users.

Thank you for your attention.

WORKING SESSION NO. 1

PURPOSES AND STRATEGIES OF COMMUNICATION

1. PLACE OF COMMUNICATION IN ROAD SAFETY POLICY

1.1 Role and objectives pursued by communication

Mr. M. Ledru (France)

Does communication aimed at the general public really improve road safety?

Do we have proof? What are the characteristics of this effective communication?

Such are the basic questions we must ask ourselves.

To the first question, that of the real effectiveness of communication campaigns, we can give two very different types of answer. The first is unfortunately negative. We have never had proof, in France or abroad, that a communication campaign *in itself* -- this “in itself” is very important -- has been able to improve road safety, except very briefly as during the French “white flag” operation of All Saints 1988. On the other hand we have statistical proof that a combined national action such as the announcement of a new regulation, well covered by the media, and especially if accompanied by the announcement of new controls or sanctions, leads almost mathematically to a reduction in road accidents. It must therefore be noted that communication *alone* is not sufficient. It can only accompany or amplify other measures.

This observation -- all in all rather disappointing -- must be qualified, relativised, because there is another answer to our question on the effectiveness of communication campaigns. The sometimes spectacular results obtained in the short term are one thing, while broad tendencies seen over the longer term are another, and the trend may be different. What is the position in France? We all know that accident rates and death rates have been falling on all networks every year virtually without interruption for almost 20 years.

This favourable trend is not good enough however, and it is clearly less marked than in some neighbouring countries. But it exists and it is real. And the question with no reply arises -- what part is played in this by communication? Since there are no studies which permit an answer, we shall try to approach the problem differently by asking a second question: What is good communication?

First of all, what do we mean by this? Generally speaking, we can say that good communication is that which provides information or advice and which leads to the adoption of good behaviour or the positive modification of behaviour which was previously bad.

We know, of course, that road user behaviour is by far the most important factor, as it appears in 95 per cent of death accidents.

For some years, roughly for the 15 year period between 1973 and 1987, national campaigns were thematic, mainly concerned with such things as drink and driving, the use of seat belts or helmets, respect of the main rules and, to a lesser extent, speed.

A general stocktaking of all these campaigns carried out in 1988 showed their limits. I shall not dwell on them, but the main findings were that they were poorly remembered and were confused with one another. In interviewees' minds they seemed more to do with the ineluctable than with accident prevention. Each of the themes aroused a phenomenon of non-involvement: the problem was rejected or transferred to others. The only positive point was the generally increased awareness of the seriousness of the road accident situation.

There was thus a major change in the tone and content of national campaigns in 1988. The main characteristics, which still govern our present activities, are as follows:

- We now address the whole population, and no longer specific publics. It is in fact a matter, through a new concept of "using the roads together", of trying to break down the driver's egocentricity and the myth of his being all-powerful at the wheel, in favour of a notion of belonging to the community of motorists who necessarily have to show solidarity and respect for others. The aim is thus to bring about a change in behaviour and identity from drivers seeing themselves in their own little worlds to their realising that they are interdependent.
- In this context, we now associate all the partners concerned with road transport: manufacturers, oil companies, insurance companies, and, of course, the associative movement. It is a matter of demonstrating that solidarity in favour of road safety really does exist on the part of institutions and enterprises.
- The tone has to be right, neither moralising nor dramatising. Misplaced humour or violence must be avoided. The messages must be handled so that there can be no misunderstanding in their perception. There has to be a clear separation between information on facts and advice on behaviour, using for each axis a well differentiated code: a journalistic code for the one, an advertising code for the other.

The results of the post-tests now systematically carried out after each campaign, and a new general study carried out at the beginning of 1991, show that this new communication, while still imperfect, is on the right lines, going in the right direction. It is seen, understood, retained and accepted, and road users frequently say that these campaigns have provoked very positive changes in their behaviour. But the essential question again arises: are these declarations confirmed by real (not just stated) behaviour on the roads? What part does this new communication play in the improved results?

It no doubt plays a humble part in the overall movement by amplifying measures. This is already a great deal: improving road safety is a long and difficult job, and only a global policy can achieve results. In this organised framework, the "new formula" national communication, with all its partners and allies, very naturally finds its place.

1.2 Actors in the communication process: transmitters-receivers

Mr. W. Klemenjak (Austria)

The use of commercial marketing strategies in traffic safety work has been discussed and planned by specialists for quite some time now. This subject has also been discussed at various conferences and, in particular, was examined by an OECD expert group in a report on the "Marketing of Traffic Safety" published in 1993. This report gives a comprehensive review of objectives, methods and possible errors when applying marketing principles in the non-profit sector and especially in the traffic safety field. It also provides a good general survey of the concepts in use, such as social marketing, market analysis, marketing mix, communication, market segmentation, etc., and refers to case studies which to a greater or lesser extent exemplify marketing principles. Although this report is already four years old and the discussion has been going on for even longer, commercial marketing strategies, in my opinion, have still not made sufficient inroads in activities to promote traffic safety. Despite good approaches in many cases, uniform standards are not applied in the planning and implementation of communication campaigns, thereby resulting in marked differences in quality.

More attention should be given to marketing techniques when financial resources are being allocated. In this respect serious attempts are being made precisely by the European Commission to find the best solution. However, the problem in any campaigns on a European scale is national or regional identification with the objectives of such ambitious exercises. In the individual Member States, there are marked differences in the number and kind of accidents that reflect different ways of life, mobility needs and basic social conditions in general. For example, a communication strategy may be quite suitable for the cool North and its problem drivers but have no effect at all in the warm South. Communication with regard to traffic safety must be adapted to regional factors. As far as the European Union is concerned, it therefore seems that the promotion and monitoring of regional initiatives are much more effective than conducting a campaign throughout Europe.

Communication processes play an important role in marketing and public relations, and it is most important that the transmitters and receivers of safety messages are clearly identified. The transmitters in a communication process are, for example, traffic safety bodies, automobile club representatives, TV, radio and press journalists, politicians, the authorities, teachers, insurance firms, the police and, last but not least, parents. Road users are usually included among the receivers, who can be broken down into different groups by type of locomotion: pedestrians, cyclists, car drivers, professional drivers, etc. This list or breakdown is by no means exhaustive, and whenever a publicity campaign is planned, the target group and also the senders and receivers must be accurately defined. Some of the transmitters may also be receivers. For example, parents who receive information from journalists or transport safety bodies on, for instance, the use of infant car seats, are expected to transmit this information to their children. It can therefore already be seen that communication has to be an interactive and not a one-sided process. Only if transmitters and receivers understand one another and are also able to exchange roles can information reach the end user.

The following are important factors in effective communication:

- the transmitter's image;
- reconciling what the experts want and what the target group needs;
- communication by using the target group's idiom;

- study of possible opponents;
- checks on results.

As regards the transmitter's image, it should be pointed out that messages from a transmitter that is not accepted and has a negative impact will not reach their target and may even have the opposite to the intended effect. It is therefore very important for a traffic safety body to have a positive image in the eyes of the target group. If a change in image is not possible or not desired, appropriate transmitters should be used and an attempt made to put over the message indirectly via these mediators.

Road safety or road safety products do not always allow for the target group's needs. For example, they restrict pleasure-seeking behavioural patterns associated with fast driving and are therefore more likely to be rejected. Campaigns which do not take these needs into account certainly cannot be successful. The safety experts' wishes and target group's needs must be reconciled as far as possible so that an exchange of information can take place. The receivers' needs must be accurately assessed for this purpose.

As not every product is automatically ready for sale, profit marketing techniques can be used. With appropriate packaging and placing methods, there is a better chance of making products which do not seem very attractive at first sight more presentable to the final consumer. Here the kind of language used is important. For example, it is frequently pointless to express oneself in very technical terms or work with those who use complicated texts when dealing with problem road users who are obviously all too willing to take risks. In this case enlisting the help of "street workers" or co-operating with peer group leaders would be much more effective.

Even the best communication strategy serves no purpose if the "opponent" is too powerful. Especially in road safety, the relatively limited resources of the bodies active in this field are no matches for industry's tremendous advertising budget. It is therefore advisable to make friends of enemies wherever possible, and it should be remembered here that some joint action has already been taken with carmakers, breweries and motor racing organisations to improve road safety.

In safety campaigns the checks on whether and how the messages which have been sent out have been understood are often forgotten in safety campaigns. The transmitter must check whether he has been understood by the receiver, meaning that communication should not only be one-way, but that replies and feedback must also be obtained. The results of an operation obviously can not be checked unless precise objectives have been defined for it. Here it is important to make the distinction between whether the aim was simply to inform or whether the message was also directed at behaviour.

A frequent problem in campaigns is that rigid, top-down communication methods are used. With such methods there is little scope for participation by the receiver. In this case communication is rather an inflexible, one-sided process with little possibility for the receiver to reply to the transmitter. For example, if the transmitter -- a traffic safety body -- has an information brochure distributed or pays for a TV advertisement, communication is a one-way, top-down process. When campaigns to promote safety awareness are being worked out, the aim should be to take more frequently creative rather than top-down approaches to communication. The advantage in this is that general living conditions and personal circumstances can be taken into account much more easily and safety messages are not isolated from their context. In particular, we can thus get through sooner to problem groups -- our actual target groups -- and the need for safety in these groups can be gradually

developed after the seeds have been sown. An example of this type of communication is the “Filming Life on the Road” project, which forms part of the Transport Safety Committee’s “Go Cool -- Go Safe” programme. In this project, groups of schoolchildren were invited to try their hand at making a film. In special workshops supervised by professionals, the pupils were able to produce stunt films on road safety. They were also shown feature films on the same subject. The central message was that road traffic and safety were directly connected with the quality of our lives. An interesting medium was thus used to put over a safety message to schoolchildren.

It is obvious that this type of communication can not work without very close supervision, careful preparation and the proper staff. However, it can be assumed that it will have a better long-term effect than by distributing brochures or by lecturing on transport safety. The brochures will not be read, and the safety messages will not be heard or not understood. Top-down forms of communication are less effective. The evaluation of “Filming life on the road”, for which a group of schoolchildren was also made responsible as part of the project, produced satisfactory results.

Communication is of capital importance in road safety campaigns, and new and professional approaches must be taken in this area. A significant step forward would be to use specialist know-how, including communication techniques, for work in the road safety field. At any rate there can be no real communication unless transmitters and receivers know and understand one another perfectly well.

1.3 Tools and aids for communication

1.3.1 *Mr. E. Prediger (Czech Republic)*

Communication is one of the basic tools for achieving safe road traffic environment. According to the research results it is well known, that influencing road users' behaviour through the forms of enforcement has its limits. On the other hand, only communication itself has its limits as well. The only one solution of the problem is to combine those two basic tools together.

Under the term "communication" we can understand various topics related to the road traffic, e.g.:

- Road safety campaigns, including:
 - TV and broadcasting (spots, films);
 - Leaflets;
 - articles in newspapers and magazines;
 - billboards alongside roads both out and inside built-up areas.
- Information for drivers through road signs and signals, including variable message signs as a part of telematics systems, where the following points are crucial:
 - information capacity;
 - priority;
 - conditions of effectiveness.
- RDS-TMC systems.

All the above mentioned topics can be taken as the basic tools for communication with the road user. The certain tool for reaching a certain target has to be chosen at least according to:

- road user type;
- road user age group;
- result we would like to achieve;
- budget available for implementation.

As a representative from the Ministry of Transport and Communication of the Czech Republic at this Seminar, I would like to mention in depth issues regarding road signs and signals as tools for communication with road users with special attention to drivers. In this respect, the driver has to be taken as the most important actor in most of the systems.

The most important parameter of communication towards road users is the effectiveness of the measure used. It is clear that ineffective measures make no sense. According to various survey results it is necessary to check use of measures taken during the whole process of communication with regards to their effectiveness in terms of road traffic safety and improvement of traffic flow we would like to achieve. We have to take into account, that most of tools used in the telematics communication systems are still very expensive ones, not only for countries of Central and Eastern Europe, but for Western countries as well, so the process of cost benefit analysis has to be of the most importance.

The success and effectiveness of the measures and aids used depends to a large extent on ability of driver to understand well and to interpret well the messages sent to him and it depends on co-ordination amongst all media (tools) used for communication with road user. This is the reason why we have to unite road signs and information tables which will be chosen for basic application of telematics and communication with road user in real time. This can be done on the international level, of course. The ECMT and its working groups, and working parties of ECE/UN, where most of our countries are involved, have to play the fundamental role in this respect in the whole of Europe.

Information sent to drivers has to be at least in accordance with:

- basic rules given by Vienna Conventions, especially with those parts of the Conventions speaking about pictograms;
- agreed definitions with regard to warnings and information on traffic flow, advice and traffic management information;
- recommendations with regard to information transmission of traffic information in real time with respect to receiver's mother tongue.

The Czech Republic, because of its position in the middle of Europe, is a typical transport transit country of Europe, and it is expected that this position will be increased in the near future due the extension of the international market and the decrease of capacity of the North-South road network on European Union countries territories. This brings a new challenge for the Czech authorities to be prepared to introduce all possible measures helping driver to drive well and safely on the Czech road network. Those measures are including tools and aids for communication, prepared not only for Czech road users, but for foreign drivers too.

The development of the information systems on the road network of the Czech Republic is beginning now. The technical standards of the systems are in accordance with the international ones, namely with those prepared by CEN 278 Technical Committee. The Ministry of Transport and Communications of the Czech Republic is basically responsible for all technical aspects of road traffic and road traffic safety. Our Ministry has the task to approve all the systems for driver information which will be possibly used alongside Czech road and motorway networks, including systems used in urban areas. This task needs namely:

- changes in the Czech legislation, started since 1996 and still continuing. The three new laws will be in accordance with amendments to Vienna Conventions and they will take into account all the recommendations made especially by ECMT in this field;
- increase of funds available -- this is one of the most problematic issues because as you probably know, the problems of transition countries can result in the lack of funds for this purpose;
- co-ordination with similar systems in neighbouring countries, especially with those used or to be used in Germany, Austria, Poland and Slovakia. Once more, international co-operation, both on the level of international organisations and on bilateral level, is of the most importance.

Last year the Czech Government decided that all issues regarding transport, including road traffic safety, will be moved from the Ministry of Interior under the responsibility of the Ministry of Transport and Communications up to 1999. This decision, which is part of the State Transport Policy Strategy up to year 2000, will bring much more work to our ministry with respect to communication with drivers and other road users. This change will create needs for human resources and funds at our

ministry, which will be partly covered by the Ministry of Interior, but partly from the budget of the Ministry of Transport and Communications. It is always dangerous to speak about budget if you have no guarantee. And it is valid for communication systems in road traffic too.

According to my knowledge, due the economical situation in the Czech Republic it is not expected that the up-to-date communication systems will be introduced in the Czech Republic to a large extent in the near future. We expect that up to the year 2000 variable message information systems will be introduced in Prague on two spots -- the first one in the Strahov Tunnel, the second one on North-South Magistrale. The navigation system using variable message signs for international road haulage is planned to be introduced on D5 motorway near Czech-German borders. Last but not least the Central Information System (CDI) using RDS-TMC system has been introduced by the Czech Police Force since 1996. This system is based on information centralised by Traffic Police Units at the Centre in Prague and sent in the form of short messages through "Green Wave" Radio Broadcasting. For the purpose of obtaining necessary information, the Police Force also use the services of police helicopters in rush hours on Fridays and Sundays. According to our experiences, the system works very well and the information reaches the driver in real time. The effectiveness of the system can be determined by wider use of relevant receivers in cars.

During my intervention I wanted to give you brief and overall information on what is going on in the introduction of one of the most recent and fashionable tools for communication with road users in the Czech Republic. This type of communication needs to be implemented as a part of the information process and has to be co-ordinated with other tools and aids which will be mentioned by my two colleagues from the Czech Republic at this Seminar. Telematics, as a mean of communication is one of the most important measures in this and will be of more importance in the near future, not only in Western countries, but in Central and Eastern countries as well.

1.3 Tools and aids for communication

1.3.2 Mr. R. Trottein (France)

The French Minister of Transport agreed, on the basis of a Convention with the European Road Safety Federation (ERSF), to second me to that Federation to assist with the drawing up and implementation of its programmes. The ERSF was set up four years ago by six founding members: The International Touring Alliance (AIT), the International Automobile Federation (FIA), the International Road Safety Organisation (PRI), the International Road Transport Union (IRU), the International Road Federation (IRF) and the Association of European Car Manufacturers (ACEA). In 1996, six other organisations joined the Federation: the International Driving Tests Committee (IDTC), the European Driving Schools Association, the European Insurance Committee, the European Road Safety Equipment Federation (EUROADSAFE), the International Motorcycle Federation (FIM) and Motorcycle Industry in Europe. The European Federation of Road Traffic Crash Victims recently joined. The Federation thus comprises private, industry and voluntary bodies which wish to contribute to the policies implemented by the European Union or, at national level, by the Member States of the European Union, in the area of road safety. In conjunction with the programme and strategy being drawn-up by the European Union for the period to 2001, I was put in charge of preparing a medium-term programme for the European Road Safety Federation. The initiatives of the ECMT, the European Union and European Road Safety Federation in this area are all convergent. They all stress the importance of communication as a means of changing road users' behaviour. In practical terms, and more specifically, we are organising an international film festival on road safety in about six month's time, i.e. in April 1998. The aim of this festival is to provide a forum where the people who plan or who are in charge of road safety initiatives and commit resources to them, can meet, discuss and exchange views. It will also give producers and users of videos and CD-ROMs an opportunity to meet and discuss. The festival will be organised around various major road safety themes: education, training in the workplace, new technologies, the problems encountered by young people on a Saturday evening, and number of other themes. The video products, CD-ROMs and films will be presented as integral parts of a strategy or a programme. Over a period of three days, there will be presentations of films and videos, exchanges of views on strategies, the reasons for making the films and an evaluation of their effectiveness. There will also be an audio-visual resources centre because we would like there to be such a centre at European level. In my own case, for example, we have a resources centre containing 280 videos and films produced over the past eight years. The CD-ROMs are slightly more recent.

In view of what Mr. Aurbach said in his introduction, in which he underlined the convergence of the ECMT's work with that of the ERSF, I would like to express publicly my wish that the ECMT be involved in the committee organising the international film festival on road safety. I invite you all to Lille in the North of France on 1, 2 and 3 April 1998, and I would be glad to provide any further information you may need.

2. NEW STRATEGIES OF COMMUNICATION

2.1 Added value of social marketing

Mr. Horn (OECD)

Latest work (1) within the OECD focuses on two separate but complementary approaches:

- Developing the theoretical underpinning of practical road safety work, i.e. generate advanced safety principles, assess existing safety theories and improve safety models.
- Developing the implementation process of safety measures, i.e. facilitate the application of research-based and innovative safety concepts and technologies.

In managing traffic safety and implementing strategies, social marketing has come increasingly to the fore (2, 3). As highlighted at the recent Second Conference on Asian Road Safety in Pekin in October 1996, “marketing should be considered systematically at all stages of the implementation of safety programmes and co-ordinated actions” (4).

There is nothing as practical as a good theory

Many Central and East European countries -- being in the early stages of a transition from a public transport focused society to an individual transport market economy -- are in an advantaged position to tap the full benefit from a sound scientific foundation of future road safety policy. An upgraded comprehensive R&D role will provide ample leverage over fragmented efforts that apply individually derived safety features.

Clearly, the lack of a theoretical basis has been more common in road safety research than in many other research areas. Results have therefore frequently been difficult to interpret, summarise, compare and synthesise. The results have often been very specifically related to the situation studied. Frequently they do not create any new hypotheses and are difficult to transform into general countermeasure principles. The lack of a sound theoretical basis is therefore one of the main problems especially in the past, but also in present road safety research and implementation (1).

OECD safety analyses undertaken over the last 30 years (5) and sponsored by the leading safety institutions of North America, West Europe and Asia-Pacific, indicate that much more effort is needed to systematically structure the implementation process of safety measures. The ultimate objective of road safety research is to find and implement the countermeasure strategies and actions that establish a safe road system and to effectively reduce the negative impacts of road safety failures. It is now recognised that the increased use of safety models in the implementation process will

facilitate the application of research recommendations and avoid impediments to the implementation of safety measures.

Research concerning implementation problems and related modelling approaches is a key challenge for future success in road safety work. There is an abundance of road safety research results available, both at national and international level. Most of these results, however, are not fully used, as practitioners cannot ascertain appropriate applications. It is unfortunate but this problem rarely attracts the interest of researchers.

Life can only be understood backwards, but it must be lived forward

Traffic and transport are a social and economic reality. This must be kept in mind. Experience, attitudes and technical progress are important. Historical perspectives will open a vision for the future. Saying it with S. Kierkegaard “Life can only be understood backwards, but it must be lived forward” (6). A systematic reflection on the main ideas and scientific views prevailing during the past periods of the motor age was therefore undertaken by a recent OECD Expert Group (1).

The Table proposes four “paradigms”. During this century, periodically new ways of thinking have been accepted. Earlier paradigms have, however, left permanent traces in development. They seem to continue in the minds of ordinary road users, and even in the minds of politicians, even though researchers and experts of road safety have adopted a new paradigm. In research, the arrival of new paradigms adds new dimensions to earlier ideas, the newest paradigm gaining a dominant position in expert thinking.

Politics, economics and technology evolve in phases. No wonder that the science of road safety is no exception. Four phases can be distinguished: The vehicle control phase (what is happening?). The traffic situation phase (why is it happening?). The traffic system phase (how is it happening?). The transport system phase (what should we do about it?). These phases were of central strategic value. They can be described in a simplified way as follows:

- Paradigm 1: Control of the automobile was seen to be the problem. There was no real research but more a description of what was happening.
- Paradigm 2: Control of traffic situations was the main issue. The countermeasures and the research were centred round the classical three E’s: Engineering, Education and Enforcement. Here systematic road safety research was born. A number of new disciplines came into road safety research.
- Paradigm 3: Management of the road traffic system was the new aim. In this systems approach, mathematical models for description and prediction of traffic accidents were developed. Cost/benefit ratios were calculated.
- Paradigm 4: Management of the transport system as a whole is seen to be the problem. The scope is widened; the road focus is replaced by an emphasis on the transport system. Sociology, communication and marketing are not only slogans but have become realities and major factors of leverage for successful implementation of programmes and projects.

Development of road safety paradigms*

| ASPECTS | PARADIGM I | PARADIGM II | PARADIGM III | PARADIGM IV |
|--|--|---|--|--|
| Decade of dominating position | 1900 - 1925/35 | 1925/35 - 1965/70 | 1965/70 - 1980/85 | 1980/85 - |
| Description | Control of motorised carriage | Mastering traffic situations | Managing traffic system | Managing transport system |
| Main idea and focus | Use cars as horse drawn carriages | Adapt people to manage traffic situations | Eliminate risk factors from road traffic system | Consider exposure of risks, regulate transport |
| Motor Vehicles/ 1 000 people | Less than 25 | 25 - 250 | 250 - 500 | >500 |
| Main disciplines involved | Law enforcement | Car and road engineering, psychology | Traffic engineering, traffic medicine, advanced statistics | Advanced technology, systems analysis, sociology, communications |
| Organisation of vehicle production | Craft-production, craftsmen's manufacturing | Mass-production workers assembling | Lean production, group assembly on sub-contracting | Recycling materials |
| Terms used about unwanted events | Collision | Accident | Crash, casualty | Costs, suffering |
| Role of persons using motor vehicles | Ownership of vehicles: "Car owner" | User of motor power: "Motorist" | Active part of the system: "Driver" | Social partnership: "Road user" |
| Attitudes towards automobiles | Fearful curiosity | Blind admiration | Prudent tolerance | Calm consideration |
| Ideas concerning unsafety | Transitional problem, passing stage of maladjustment | Individual problem, inadequate moral and skills | Defective traffic system | Risk exposure |
| Data ideals in research | Basic statistics, answers on "What" | Causes of accidents: "Why" | Cost/benefit ratio of means: "How" | Multidimensional |
| Organisational form of the safety work | Separate efforts on trial and error basis | Co-ordinated efforts on voluntary basis | Programmed efforts, authorised politically | Decentralisation, local management |
| Typical countermeasures | Vehicle requirements and inspection, school patrols | The three E's doctrine, Screening of accident prone drivers | Combined samples of measures for diminishing risks | Networking and pricing the transport costs |
| Effects | Gradual increase in both traffic and health risks | Rapid increase of health risk with decreasing traffic risk | Successive cycles of decrease of health and traffic risks | Continuous reduction of serious road accidents. |

* Table originally elaborated by Valde Mikonnen, Finland

The task for the coming years may be characterised as a fifth paradigm, where the long-term goals on environment and traffic safety will have to be balanced (7). An environmentally sustainable system should not use renewable resources at a higher rate than they are regenerated, or use non-renewable resources at a higher rate than substitutes are being developed. The present transport network's carrying capacity for traffic, with respect to the flow of traffic as well as the impacts of the surroundings, is a limitation that should not be exceeded in such a system. Parallel to the demands for an environmentally sustainable system, the goals for traffic safety within the fifth paradigm should be formulated as not causing irreversible injuries. It is the synergy between environmental and safety programme that should be targeted in the future.

The shift into consumer orientation is the essence of marketing traffic safety

A new mind-set was envisioned by launching the OECD review on *Marketing of traffic safety* (2) published in 1993. The marketing of countermeasures and programmes can stimulate road safety work in two ways:

- As a strategic principle that can be applied before the most suitable instrument is chosen.
- As a specific method for improving communication.

The application of social marketing in road safety contains distinct elements, many of which are new in product promotion: (i) it focuses much more on the target road user and his/her perceptions and motivation; (ii) it requires the road safety expert, practitioner or policy maker to adapt set objectives to the perceived requirements, costs and benefits of the target group; (iii) it encourages promotion of remedial measures and communication with the public on the anticipated benefits and socio-economic costs to be incurred.

Marketing should be applied as a strategic principle not solely when comprehensive programmes are planned, but also -- and perhaps especially -- when only modest financial resources are available. The social marketing plan (see box) is first based on an analysis of the market. This requires a situation analysis, which provides information about the problem to be addressed, the operational environment, the people who are involved and whom one is targeting. Furthermore the market is divided into sectors and target groups, (drivers or pedestrians; town or country; young people or senior citizens). Finally, clear objectives are established to ensure consensus regarding the progress of the work and the evaluation of the results.

Marketing Approach and Plan

A marketing plan begins with an analysis of the situation one wishes to improve. Once the market has been segmented and the target group identified, objectives are set and the marketing strategies to achieve them are formulated. These strategies often require a sensitive balance of marketing elements -- product, price, promotion and place -- before an effective social/marketing initiative can be undertaken. And after its implementation, monitoring and evaluation can feed in information on results that will guide future road safety initiatives. At all points of this process, indeed, market and consumer research is facilitating the exchange of information and thus allowing substantial improvements in effectiveness and acceptance of safety measures.

The analysis of the situation enables a strategy to be developed, based on the four main elements which constitute a marketing-mix, these being:

1. Product (the safety potential).
2. Price (the cost of achieving safety).
3. Place (distribution channels).
4. Promotion (the means of communication).

Social marketing can be effectively used as an instrument in road safety programmes and as a method of reinforcing conventional approaches, e.g.:

- in the preparation of regulatory measures;
- as a support of safety initiatives by private insurers;

- in assisting school traffic education;
- in implementing road safety publicity measures.

The potential and limits of attitudinal research in underpinning innovative road safety initiatives were investigated by the OECD Safety Research Group on *Improving Road Safety by Attitude Modification* (8). The study shows how motivating attitude change can play a useful role in improving road safety. The “producer” -- the road safety agency -- must understand the attitudes as well as the motives of the “consumer”, the road user. Still, attitudes of road users cannot be analysed properly without taking account of political, cultural, economic and technological factors and influences. On the one hand, these add to the complexity of behavioural controls and attitude modification; on the other hand, there are ways to use these influences more constructively.

It is recognised that specific and operational information and messages focusing on attitude modification will be effective. A case in point is the application of employer-based programmes which can constructively use the company’s influence to prescribe employees to use seat belts or to avoid speeding. Also, the teaching and introduction of road safety principles from an early age in homes, kindergartens and schools will be beneficial and long lasting.

There is ample potential to further develop, promote and apply marketing in accident prevention and road safety work. Pilot evaluation projects could be useful for particular case studies of major interest, novel safety measures and selected target groups such as young/new drivers, school and/or small children, elderly people, drunk drivers, professional groups such as truck drivers, policemen, etc.

Nevertheless, it is realised that marketing road safety is in its infancy. Knowledge about what constitutes the major obstacles in the implementation process of safety measures is limited and must be based on additional research. The acceptance process of safety initiatives and how to influence it are good examples where innovative models should be developed. Road safety marketing probably has much to learn from other areas of research such as the work for a better environment and commercial market analysis.

If you do not know where you are sailing, every wind will take you where

This is a pivotal moment in the fight against traffic accidents in CEECs. The still growing demand for mobility and exceedingly high accident rates require a fresh set of strategies.

In response to the economic revival of Central and East Europe, a structured approach to road transport and safety is necessary. Road safety is a prime example where research and policy must be intimately associated.

The OECD marketing concept has been very well received by safety professionals. It was presented at several national and international meetings and promoted especially by private sector associations and the automobile industry.

Social marketing is a relatively new instrument. By joining forces with commercial marketing for automobiles, petrol, equipment, insurance companies, transport industry, automobile clubs, user groups, etc., public (governmental) agencies can break loose from the conventional approaches focusing on regulations and enforcement. A bridge for co-operation with the motoring public must be built.

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2.2 Strategies in function of the level where transmitter is situated: local, regional, national or international

2.2.1 Promotion of road safety in the European Union

Mr. Preston (DGVII, European Commission)

I flew here to Warsaw yesterday. An uneventful flight in a standard medium-haul jet, carrying about 120 people. Nothing unusual in that. Thousands of people make similar journeys every day. And because air travel is so safe, when there is an accident, it is headline news.

So imagine if a passenger jet carrying 123 people were to crash today, killing all on board. We would be shocked and saddened at the loss of life. But we would keep on flying.

Then imagine another plane crashes tomorrow. A horrible coincidence. Then another crash on Saturday. A sort of panic sets in. What's wrong with the planes. People cancel flights.

Now imagine that a passenger plane carrying 123 people crashes every single day for a year. Would anyone still fly? Would you fly?

123 fatalities a day. That's just under 45 000 deaths a year. That happens be the number who died on Europe's roads last year.

And yet there is no public outcry. No demand that cars be banned. We accept this carnage as a consequence of modern mobility. We assume it will never happen to us.

But recent events in Paris -- the death of Lady Diana -- have shown us that death from a traffic accident is something that can happen to any of us. No matter who you are. We await the details of that accident but it seems a combination of alcohol, medicines, excessive speed, and not wearing seat belts all played a part.

The European Union is about more than trade and commerce. It is about benefiting the lives of its 320 million citizens, and, in the context of transport, few things can bring greater benefit than reducing the toll of death and suffering caused by traffic accidents.

Let's go back to 1993. In some ways it was a good year for road safety. The Treaty on European Union -- the Maastricht Treaty -- which was ratified in 1993, required for the first time that the Common Transport Policy should include measures to promote transport safety. At the same time the White Paper on the future development of the Common Transport Policy went beyond a modal approach to transport policy and introduced general objectives, one of which was enhanced safety. In 1993, the Commission launched its first action programme on road safety.

This programme was fully implemented and indeed even exceeded its objectives in the areas of type approval and the transport of dangerous goods.

These were positive developments. They came too late however for the 48 993 people who were killed in road accidents that year.

I make no apology for talking about numbers killed. The only objective indicator of the scale of the road safety problem are statistics on accidents and their consequences.

The number of fatalities is declining year on year, but there is absolutely no room for complacency. Based on the most recent figures we can still predict that about 1 in 80 of Union citizens will die, on average 40 years too soon, because of a traffic accident. 1 in 3, yes, 1 in 3, will require hospital treatment as a result of a road accident.

Let's be brutal and talk about cost. We have calculated the "direct" costs of road accidents per year are 15 billion ECU for medical treatment, police time, vehicle repairs, etc., and 30 billion ECU for loss of economic output from those killed or injured. This gives us 45 billion ECU per year, which when divided by the present figure of 45 000 fatalities per year gives us a crude net cost of 1 million ECU per fatality. That is to say the economic benefits to society of the avoidance of one death -- and the corresponding injury and damage only accidents, would be one million ECU.

There are those who say you cannot put a value on human life or pain and suffering. They are right. But there are those who say we cannot afford certain safety measures. They are wrong.

The "One Million ECU Test" provides a useful starting point for developing road safety policies, and the Commission intends to use this basic approach as one of the elements for the future development of our road safety policy.

Clearly, a cost benefit analysis cannot be the only criterion as political and social considerations need to be taken into account. However, we have identified several areas where we feel action is justified as the costs involved are significantly less than one million ECU.

For example, there would be 15 per cent fewer victims if the wearing of seat belts throughout the Union matched the best compliance level, which is 95 per cent for front seats and 80 per cent for rear seats.

We could save another 15 per cent of deaths if all cars were made to the best level of passive safety in their size category, and a further 7 per cent if pedestrian-friendly car designs were introduced.

5 per cent less fatalities simply by using day time running lights. 25 per cent fewer deaths if we could just reduce average speeds by as little as 5 kph.

These are impressive reductions, but pale against a possible 5 to a massive 40 per cent reduction if by legislation, enforcement, telematics, or education the estimated 1 in 20 of drivers who drink and drive could be convinced or compelled not to drive with a blood alcohol content greater than 5 per cent.

I should add here that we also believe an important but not quantified reduction would follow from drivers not driving while under the influence of drugs or medicines.

We believe that if these and other low cost measures were implemented it would be possible to reduce the annual number of road fatalities by at least 7 000 by the year 2000, progressing to 18 000 by 2010.

Let me turn now to the Commission's strategy for promoting road safety.

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

Therefore the Commission will monitor and report regularly on the safety of the Union's roads. Such a regular assessment would have an influence on Europe's citizens by highlighting the magnitude and international character of the problem and would also serve as a catalyst for road safety actions and give them a greater priority, notably as regards the allocation of resources.

As well as monitoring the general trend the Commission will also increase its activities in gathering, interpreting and disseminating information on all aspects of road safety. This includes the CARE desegregated database, the implementation and enforcement of legislation, the effectiveness of road safety campaigns, and the results of studies and research.

If the Union as a whole could have an accident rate the same as the best performing Member State, the results would be spectacular. However, we do not believe that this can be achieved by simply transferring best practice from one country to another without taking account of specific national circumstances.

Therefore we intend to also serve as a transfer point for best practice throughout Europe, seeking to avoid delays and duplication, and putting measures in their proper context.

It is now recognised that the traditional division of road safety measures into infrastructure -- vehicle -- and road user, does not allow for a holistic approach. Some measures which are "good" in their own right may have overall negative consequences. For example, improved infrastructure which allows drivers to take more risks, or ABS braking giving a feeling of over confidence. Other measures, like seat belts, are good but useless if not worn.

Road accidents occur when there are failures in complex systems of human decision making and actions, a variety of infrastructures, and vehicles. Reducing the number of casualties means improving these systems so that failures occur less often and/or can be compensated for within the system, or, in the case of an accident happening, creating an environment which reduces its consequences.

The key element in safety is the human factor. 99 per cent of all accidents could probably be avoided if the right action had been taken at the right moment. Only accidents caused by a totally unexpected and unforeseeable collapse of systems are unavoidable, and, fortunately, such occurrences are very rare.

An integrated approach to road safety should therefore be based on the human factor, both to improve behaviour in traffic, and create circumstances which make human error less likely.

When an accident has occurred measures must be taken to reduce its negative effects. While much has been achieved in recent years in improving vehicle standards there is still great potential in designing accident friendly infrastructures.

Regarding vehicles we believe that consumers should be provided with accurate and reliable information on the safety standards of the cars they buy.

Although European type approval standards ensure all cars put on the market meet strict standards, models still, obviously, vary in many respects. Some of these differences are easy to

assess, for example, price, comfort, but others, such as safety are not so evident. For this reason we believe that consumers need to be informed about a vehicle's safety performance in different accident situations, assessed on the basis of objective tests.

Consumer and motoring organisations in some countries have recently devised test programmes to establish safety ratings for vehicles in a particular class, the NCAP or New Car Assessment Programmes. However, these tests do not involve all vehicles from a particular class and there are variations in test procedures.

To avoid confusing information to consumers and distortions to the car market, the Commission will co-ordinate and support these test programmes taking into account the existing regulatory test procedures. In doing this the Union is following the examples of the United States, Australia and Japan, all of which have had rating systems for some time. Our wish is to create a market for road safety enabling consumers to make purchase decisions based on vehicle safety.

We intend to develop rating systems which are based on sound and objective rules for testing which will include the performance of active measures so as brakes, ABS systems, lighting and road holding. Obviously we will require that all vehicles of a category are tested.

To summarise, the Commission's road safety programme for the period 1997/2001, is structured around three fields.

Firstly, the gathering and dissemination of information. We will monitor the development of road safety as a whole as well as target groups and target issues, such as the implementation and enforcement of legislation. We will also ensure a rapid transfer of information and best practice.

Secondly, we will initiate and support measures to prevent accidents with an emphasis on the human factor and its interface with the environment. These measures will include legislation, pilot projects, and campaigns to improve the awareness, skills and the physical condition of road users.

Thirdly, we will initiate and support measures to reduce the consequences of accidents when they occur. This will include the greater use of seatbelts and helmets to provide physical protection, higher resistance of vehicles to impact, and developing guidelines and standards for increased security-orientated infrastructure.

The action programme on road safety is a prime example of the subsidiarity principle in action. Actions taken at the European Union level in this field will have a higher added value than if they were taken at national level alone. As Commissioner Kinnock said when addressing the European Parliament, we can make a difference, and because we can, we must.

2.2 Strategies in function of the level where transmitter is situated: local, regional, national or international

2.2.2 *The role of communication in road safety activities in Hungary*

Mr. G. Csaszar (Hungary)

Information and communications – as indispensable tools of development and improvement – belong to the most frequently mentioned terms of our days.

Road safety activities are multifactorial, therefore information and communication have some special importance here.

As a person who is responsible for development, I speak first about the appearance and role of information and communication in the field of road safety improvements. The five main phases of road safety improvements are the following:

- recognition of the problem;
- specifying of the diagnosis;
- defining the therapy;
- implementation of the therapy;
- impact analysis.

Various circles and organisations are concerned by the different phases, therefore a real flow of information and communication between them is the condition of efficient development. Information channels have to provide for continuous communication between the various phases of development. This communication is hierarchic, -- due to the defined order of the phases of development, -- therefore it can be designated as “vertical” communication.

The “horizontal” communication, required between the various organisations of the activities carried out in parallel, has a significant role in road safety activity. For example, communication between activities aimed at development of vehicle, pavement and of human factor should be mentioned. Horizontal communication is the basis of co-operation between the different professional fields.

One of the most important fields of communication is ensuring contacts between the various players of the traffic safety, which may be also designated as communication “between players”. From these the most important are the communications between the:

- participants in traffic – police;
- legislators – society;
- drivers – pedestrians;
- state organisations – social organisations;
- authorities – media.

Goals of international communication are:

- exchange of experience;
- laying the foundation of co-operation;
- collation of results;
- preparation and implementation of the international regulatory work.

Its most important for a are the following:

- ECE/UN, mainly the working groups of SCI, WP1, WP15 and WP29;
- the Brussels Commission of the EU;
- ECMT working group on traffic safety
- IRTAD accident data basis
- PRI
- IRU

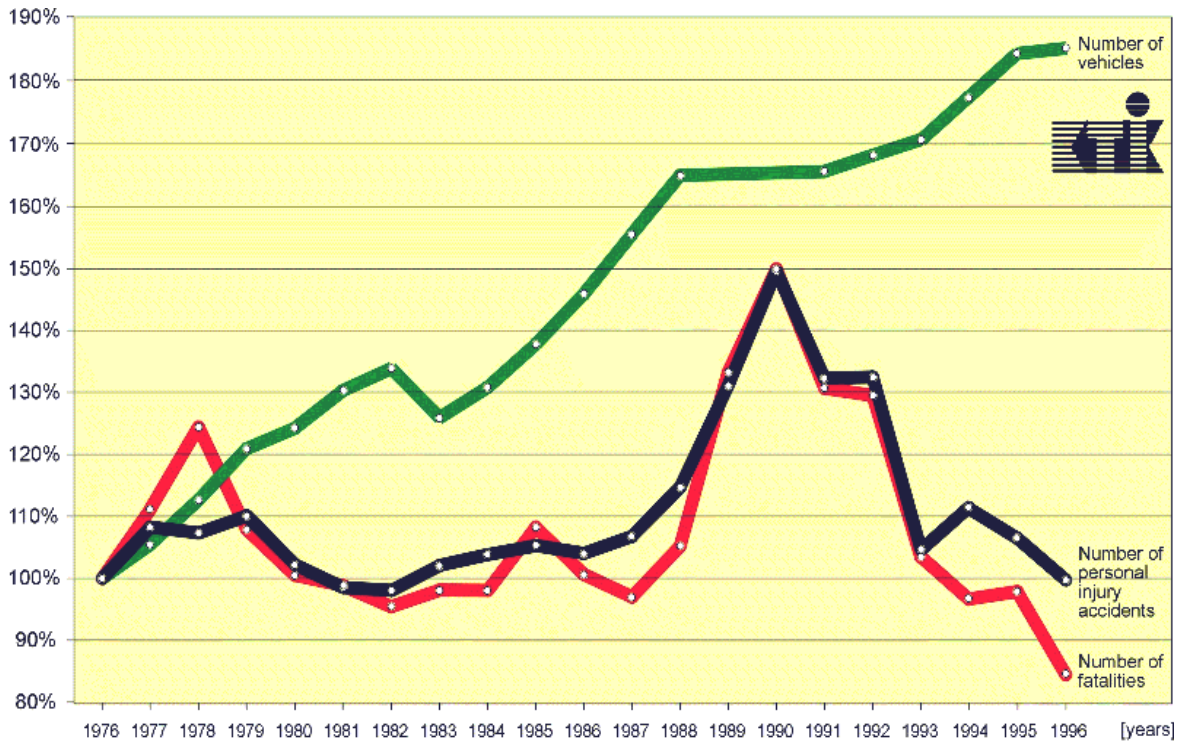
Communication demands appearing in the different planes and projections of the traffic safety form a multidimensional matrix. In order to continue an efficient traffic safety activity the formation and optimal exploitation of this communication matrix are necessary.

For a long time now, Hungary has emphasised the importance of the development of its communication channels and the exploitation of their possibilities:

- Since 1960 we have participated in work on standardisation – to be accomplished in accordance with the 1958 Geneva Agreement – of the safety parameters of vehicle construction;
- in 1968 negotiations on Vienna Convention on Road Traffic were accomplished under Hungarian direction;
- our organisation of information and propaganda is in operation as of 1972;
- since 1993 the traffic safety activity, as a government task is co-ordinated by an interministerial committee headed by the administrative secretary of state;
- since the change of regime, we increasingly use international information channels and communication systems which are becoming more available.

All activities are evaluated on the basis of the achieved results. Hungary's systems of information and communication used in traffic safety are reflected in the national traffic safety improvements. Here are some figures illustrating the formation of the domestic situation.

Figure 1.

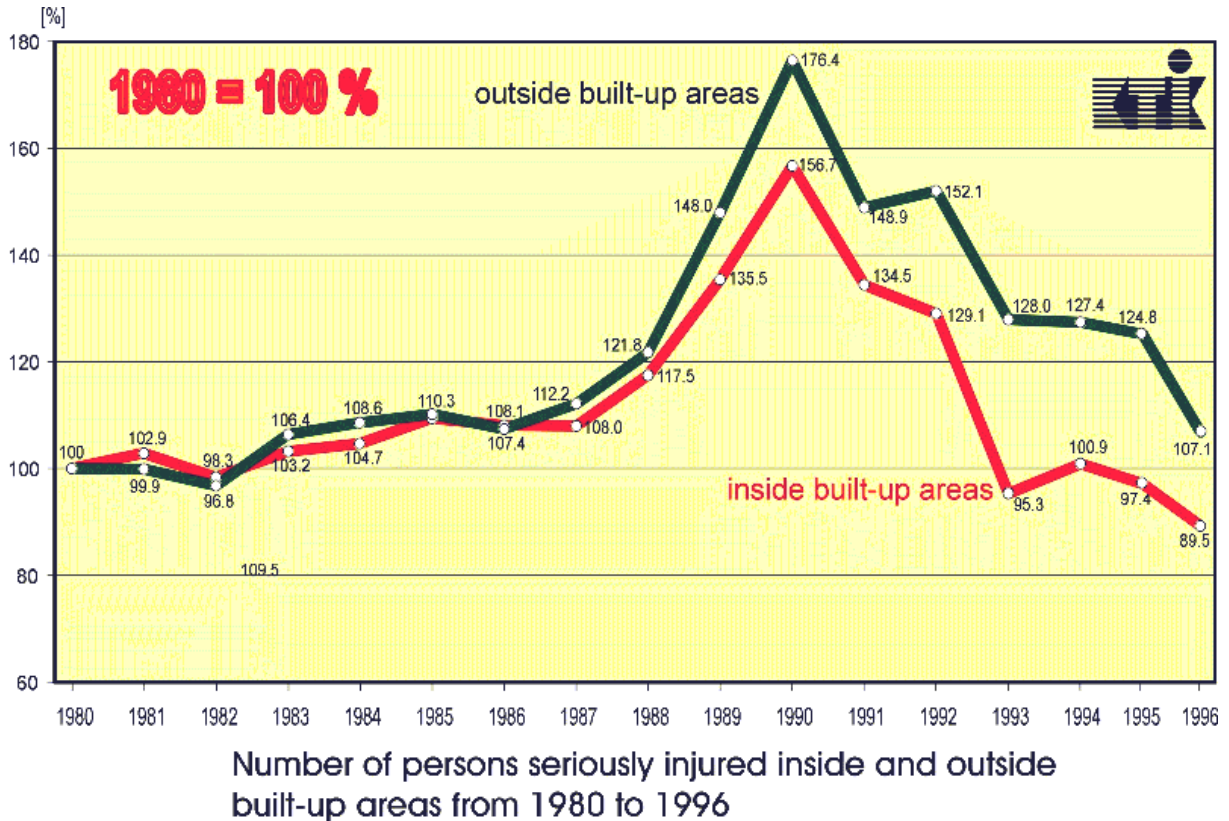


Changes in the number of vehicles, personal injury accidents and fatalities due to them between 1976 - 1996

Source: Ministry of Transport, Communications and Water Management, Hungary.

Along with the continuously growing vehicle fleet, during the first 10 years the number of accidents stabilised, then after the catastrophic deterioration experienced at the end of the 1980s, the most successful period of gradual improvement followed.

Figure 2.

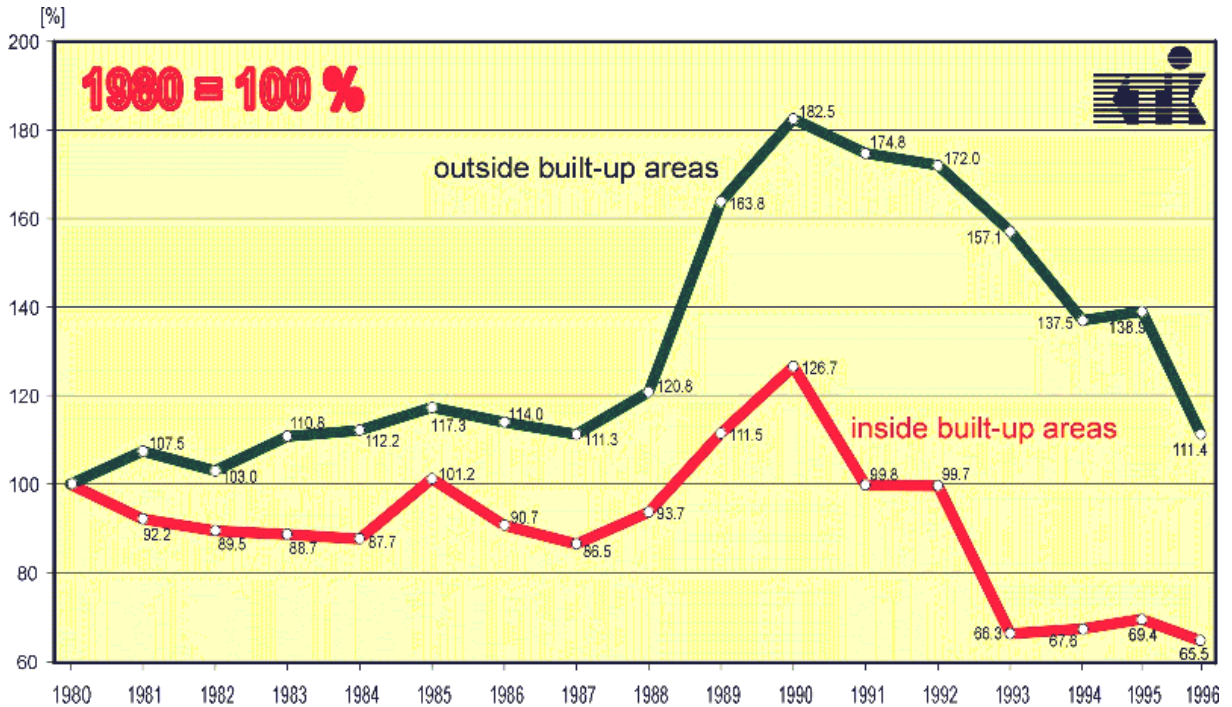


Source: Ministry of Transport, Communications and Water Management, Hungary.

Figure 2 shows the change in the serious personal injury accidents inside and outside built-up areas as compared with the 1980 basis year. On both curves the biggest decrease occurred in 1993. The main reasons were:

- introduction of compulsory use of dipped headlights outside built-up areas;
- introduction of a 50 km/h speed limit within built-up areas.

Figure 3.

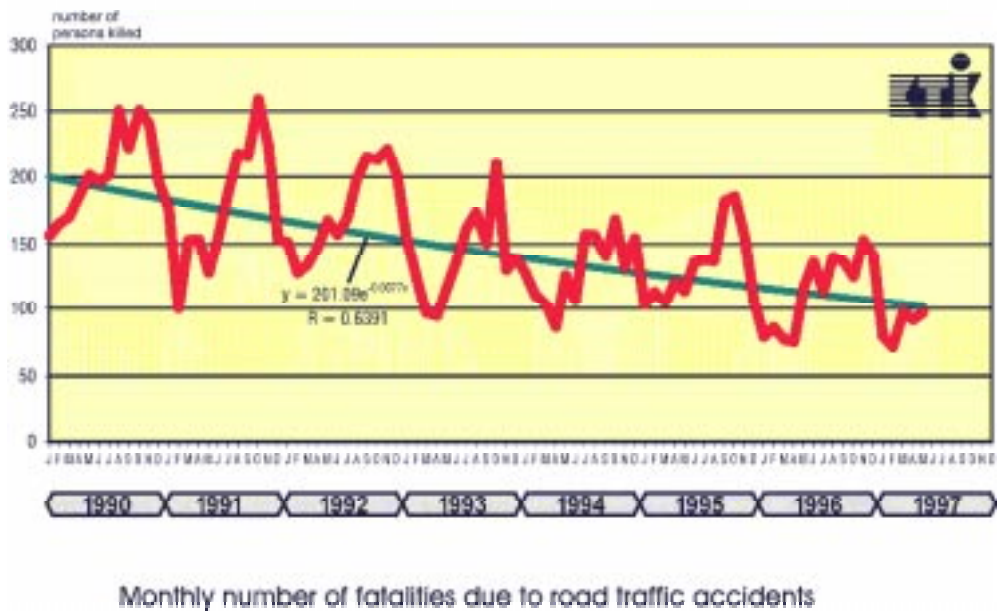
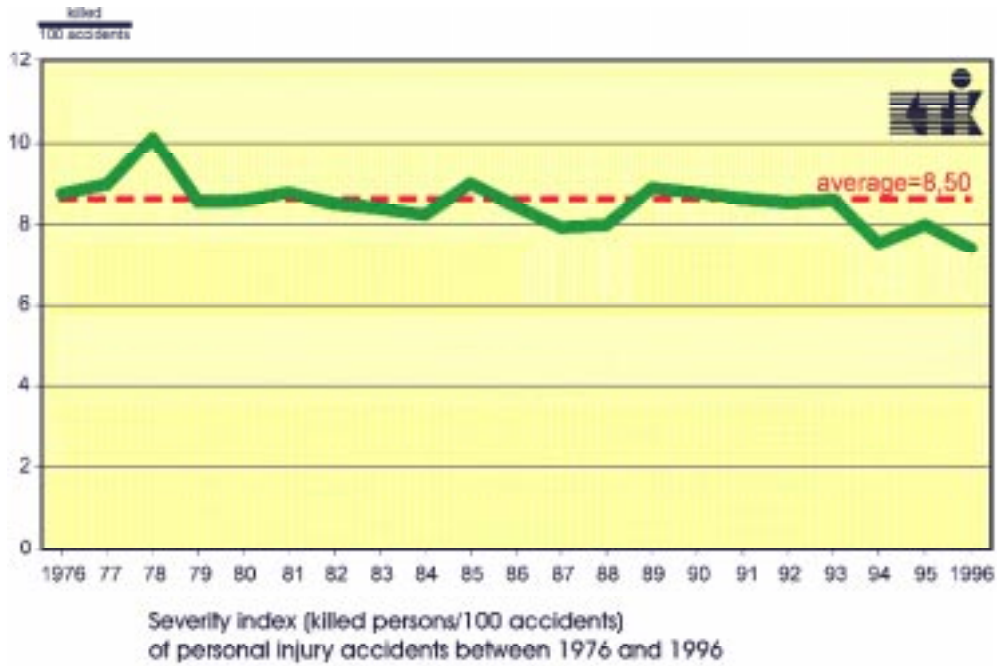


Number of killed persons inside and outside built-up areas from 1980 to 1996

Source: Ministry of Transport, Communications and Water Management, Hungary.

Figure 3 shows the change in the number of accident fatalities as compared with the 1980 basis year. The decrease in the number of fatalities is significant, especially within built-up areas, and this underlines the outstanding importance of the reduction of the speed limit.

Figures 4 and 5.



Source: Ministry of Transport, Communications and Water Management, Hungary.

Figure 4 illustrates the change of the severity index (victims killed/100 personal injury accidents) between 1980 and 1997. In spite of the slowly improving tendency it is evident that there is much to be done in order to cope with the EU average (4 victims killed/100 accidents) or with the countries having the best rate (2 victims killed/100 accidents).

Figure 5 shows the change in the monthly number of fatalities between 1990 and 1997. According to the average curve adjusted to dispersion and to the trend, we succeeded in reducing by half the number of fatal victims within seven and a half years. This achievement is outstanding in the history of the Hungarian traffic safety, and is also significant if compared to European standards.

What next?

In the achievements listed above, the development of traffic safety informatics and communication played a significant indirect role. Nevertheless, reduction in the number of accidents is linked to the effect of operative measures (50 km/h speed limit within built-up areas, use of DRL, police enforcement, sanctioning of offences, drivers' training, its updating and introduction of driver improvement, initiation of traffic safety education in schools, etc.). Professionals have many further recommendations for the improvement of traffic safety; and implementation requires:

- social acceptance;
- political support and
- financial means.

These conditions need primarily the development of efficient informatics and communication with convincing force.

2.3 Communication strategies adapted to defined groups of receivers

2.3.1 Children, teenagers, adults

2.3.1.1 How to communicate on road safety with children

Mr. V. Bartulis (Lithuania)

The statistics show that, although older people account for a larger share of the population, most accidents are caused by children and young people who then become casualties in such accidents.

The table below provides a breakdown of the road accident statistics for 1996.

| | Accidents (%) | Killed | Injured |
|---|---------------|--------|---------|
| Accidents resulting in death or injury to children: | | | |
| -- total number | 20.4 | 7.4 | 18.4 |
| -- pedestrians | 12.7 | 3.9 | 11.0 |
| -- cyclists | 2.4 | 9.0 | 2.0 |
| Accidents caused by drivers under 25 years of age | 36.4 | 34.5 | 49.7 |
| Accidents caused by motorcyclists | 33.8 | 14.5 | 3.9 |
| Accidents caused by tractor drivers | 1.2 | 19.5 | 1.2 |

Many countries around the world have carried out numerous studies and put forward many different recommendations and methods of instruction aimed at inculcating the principles of road safety in children from the very earliest age and at teaching them to exercise care and avoid putting themselves in danger. Some countries have achieved good results in this area. The number of road accident fatalities in Sweden, for example, amounts to 500-600 out of a total population of 8.6 million, whereas in Lithuania, which has a population of merely 4 million, some 700-800 people die on the roads every year.

The process of European integration, by allowing exchanges of information with more developed countries, offers Lithuania a good opportunity to benefit from the experience of the latter. At the same time, Lithuania is currently attempting to standardise the rules of road safety, the methods used to educate the actors involved and raise their awareness of the problem, and the organisation of the road safety system as a whole.

The road safety system in the Baltic States

The road safety commissions in the Baltic States (Lithuania, Latvia and Estonia) are customarily chaired by the Minister of Transport and consist of representatives of the Ministries of Transport, the Interior, Health, Building and Town Planning, Finance, Science and Education, Communications and Information, Government Reform and Local Government, together with representatives of the Highways Department, the Road Traffic Police and Road Transport Inspectorate as well as other government officials.

The role of these commissions is to implement road safety policy, to co-ordinate the activities of government bodies and to prioritise the allocation of resources to road safety; the commissions are therefore the main administrative body for road safety.

The Highways or Road Safety Departments attached to Ministries of Transport are responsible for collecting information as well as for drafting standards and other documents relating to road safety.

Road safety activities are funded under the national budget, by municipalities or out of a special Road Safety Fund (as in the case of Lithuania) administered by the Ministry of Transport.

Each country has its own particular road safety system. The Lithuanian government set up and approved a road safety system, in which the functions of the road safety authorities were clearly defined, in 1994.

Road safety education for children and adults

The Ministry of Science and Education is responsible for road safety education. The Ministry therefore organises and oversees basic instruction in road safety in pre-secondary and secondary schools, draws up the requisite programmes and teaching manuals, oversees the publication and supply to schools of teaching materials, organises the training of road safety instructors and promotes basic rules on observance of the highway code in collaboration with the Ministries of Transport, the Interior and Government Reform and Local Government.

In 1996, the Lithuanian government approved a budget for road safety for the period 1997-2000 and made a number of provisions with regard to road safety education:

- preparation and implementation of the system with regard to the facilities available for road safety instruction in pre-secondary schools (preparation of teaching programmes, methods, aids, publication of specialised manuals, training of teachers specialised in road safety), development of programmes and organisation of the training of road safety specialists;
- organisation of public resources in order to improve children's road safety, begin work on the initial design of road safety programmes for schools and proceed with the implementation of such programmes in major cities and towns (by developing the technical and educational bases for such programmes);
- supervision of awareness and information programmes relating to road safety (preparation of specialised TV and radio broadcasts, rapid transmission of information on driving conditions, accidents, preparation of signs and brochures, production of video clips, promotion of road safety information in pensioners' clubs, organisation of road safety courses for the general public, etc.);
- organisation of measures to promote road safety on roads in urban and suburban areas;
- improvement of the system of driving instruction;
- measures to ensure that standards covering driving instruction are properly drafted so that driving instruction and driver testing are made more rigorous;

- introduction of a new certification and approval system for driving schools through amendment of existing standards;
- introduction of a training and certification system for driving schools and driving instructors;
- drawing-up of manuals based on the new driver classification system; drafting and revision of educational programmes for the different levels of instruction.

Obviously much work has already been done in the area of road safety: special courses for children are now available in major cities and towns throughout the country; road safety competitions are regularly organised and special programmes are broadcast on TV and radio providing the latest news on road and traffic conditions (e.g. “01, 02, 03”, “Roads, Cars, People”); the major newspapers carry special weekly sections for motorists (“Lietuvos rytas”, “Lietuvos Aidas”).

The deployment of sleeping policemen and traffic humps has forced motorists to curb driving speeds (particularly in the vicinity of schools). Both before and after lessons, pedestrian crossings near schools are supervised by older pupils.

Driving instruction

The number of vehicles in the Baltic States is rising rapidly. Unfortunately, many of these vehicles are purchased second-hand. Due to limited financial resources, most members of the population can only afford to buy cars that are at least ten years old. The condition and safety of such cars are therefore far inferior to those of new cars. As the number of cars on the road has increased, so too has the number of drivers and new drivers in particular. This has undoubtedly contributed to the increased number of road accidents.

The statistics show that in 1996 the number of cars on the road increased by 3.9 per cent and the number of accidents by 10.5 per cent; the number of people killed on the roads, however, fell by 0.7 per cent. This might perhaps be explained by the fact that cars imported from the West are intrinsically safer. In addition, newly qualified drivers tend to drive more slowly and the consequences of a collision at low speed are less severe than those at high speed. Young drivers lack experience and even, in some cases, basic knowledge.

Driving schools place greater emphasis on technical aspects than they do on safety. In countries with higher levels of car ownership, driving schools pay greater attention to road discipline and the ability of drivers to make an objective assessment of traffic conditions and to anticipate danger. Lithuania is the only Baltic State to have retained the old system of driving instruction. Both Latvia and Estonia have already introduced systems meeting European standards and have a new type of driving licence with four categories (A1, A, R1, R), a 20-minute practical test (in Latvia the test for category A1 and A licences lasts for 5 minutes) as well as a written examination on theory.

The practical test in Lithuania lasts for 5 minutes and the written Highway Code examination is marked by computer. The minimum age for a driving licence is 18 years. A category A driver spends 132 hours studying theory, of which 94 hours are devoted to road safety. There are twelve hours of practical instruction. Category B drivers have 190 hours of instruction on theory, of which 108 hours are devoted to road safety. Practical instruction amounts to 30 hours. However, we are now confronted with a problem that did not exist previously: instruction for tractor drivers. The training course for tractor drivers used to last a whole year. When Lithuania regained her

independence, a large number of tractors on the kolkhoz remained at the disposal of their former drivers. But now a new generation of farmers is buying tractors. These farmers do not have a tractor-driver's licence and consider that a year of specialised instruction at a professional school is too long; besides which, driving schools are not interested in providing instruction for tractor drivers.

At present, there are several government bodies involved in driver training:

1. The National Road Transport Inspectorate:
 - co-ordinates driver training and advanced qualifications;
 - verifies compliance with standards applicable to driving schools;
 - carries out assessments in connection with the approval of driving schools.
2. Ministry of National Education and Science:
 - approves driving schools;
 - and oversees teaching activities.
3. Road Traffic Police (Ministry of Internal Affairs):
 - holds examinations;
 - issues driving licences.

Regular inspection (every 2 years) at the Ministry of Transport testing centres is a mandatory requirement for all vehicles.

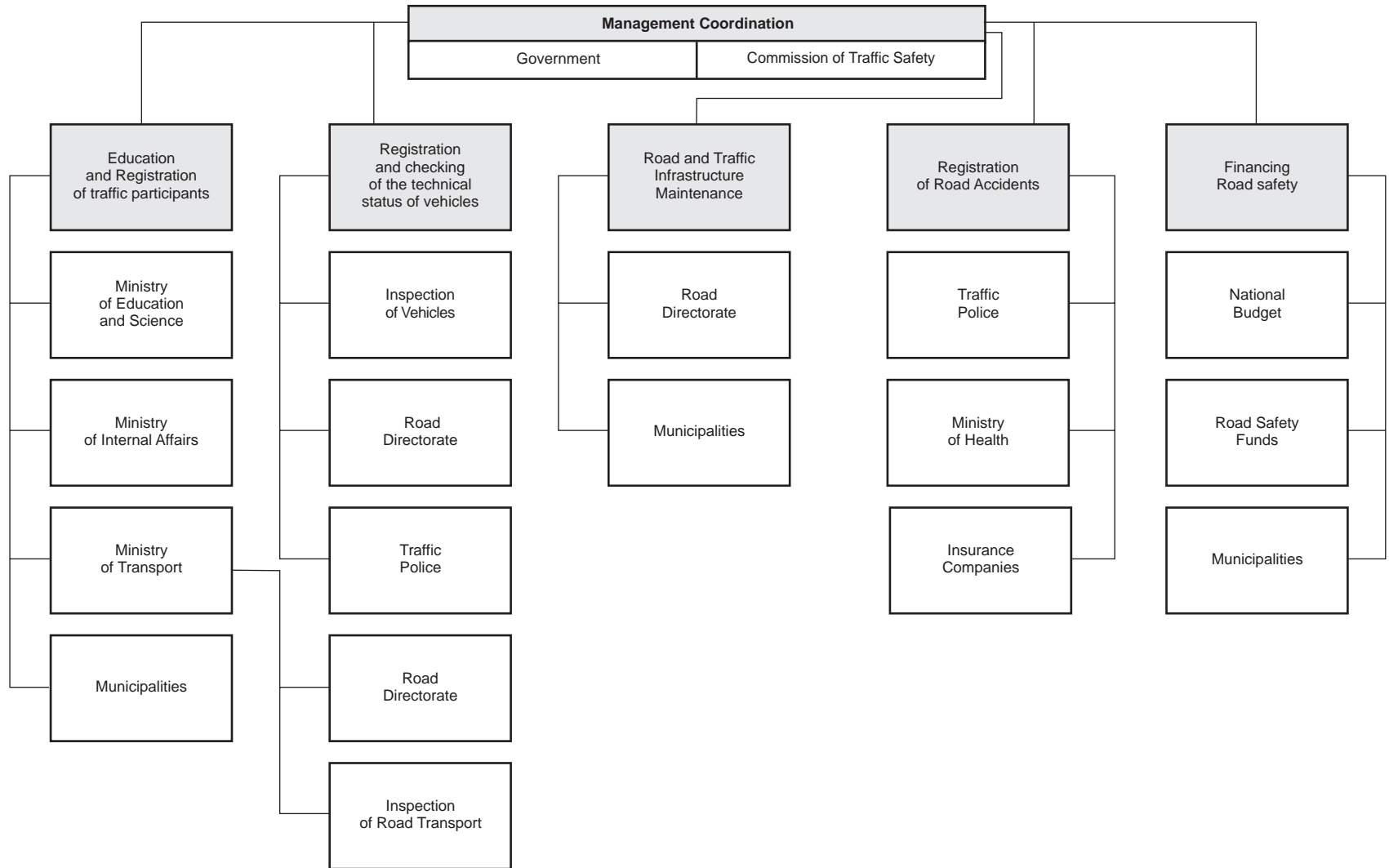
The Road Transport Inspectorate, who is responsible for co-ordinating and overseeing driver training, is currently developing a new driver training system. In accordance with an order issued by the Ministry of Transport, the new European categories of driver are to be introduced in Lithuania in 1997 once the new driver training system has been put in place.

In the future, co-ordination of driver training will be assured by the Highways Department.

The Faculty of transport engineering at Gediminas Technical University has recently introduced a new training programme for teachers of transport engineering and road safety. The technical and methodological bases of this course still require further work, however.

Nonetheless, the first step has now been taken and we hope to be able to play an active part in the teaching of road safety to young people.

Figure 6. Road safety organisation in Lithuania



2.3 Communication strategies adapted to defined group of receivers

2.3.1 Children, teenagers, adults

2.3.1.2 Mrs E. Libraire (France)

The purpose of the study

Since 1991 the French Road Safety authorities have produced three television programmes for children which were broadcast on the state TV channel France 3. They were:

- “*Les amis de Barnabé*” in 25 three-minute episodes, targeted at 6-8 year-olds on the theme of pedestrian safety;
- “*Les vélos de l’aventure*” in 24 three-minute episodes, targeted at 8-11 year-olds, on the theme of safety for cyclists;
- “*Max dans la rue*” in 20 2 1/2 minute episodes, targeted at 3-5 year-olds on the theme of the child pedestrian. Four books based on the programmes were also published.

These three initiatives were organised by a working group comprising Road Safety officials, a representative of the Government information service, a representative of the Ministry of Education, a psychologist specialised in road safety for young children, a member of a marketing firm specialised in communication with young people, a representative of the Youth Programme Unit of France 3, and a film producer.

These programmes were all put out to tender, and several bids were received. A short list of those that matched the specifications most closely was then drawn up. Each time preliminary tests with one or several projects were carried out to guide the working group in its choice and to optimise the project selected. An evaluation was carried out after the programmes were broadcast to measure their impact, the degree to which children understood and liked them, and their possible influence on behaviour.

We thus have a body of studies to draw on which, when added to the know-how of the working group, makes it possible to tailor programmes more and more closely to our target public and to the specific objective of teaching road safety.

It seemed useful to summarise these studies and this experience, and to draw the lessons of six year’s work targeted at a public which we did not know much about at the start. We shall also outline a few simple ideas about ways to communicate better and more effectively with young children.

Characteristics of the 3-11 year-old age group

1. Although there are big differences between a 3-year-old and an 11-year-old, there are also similarities:
 - they have very similar interests (friends, sport, play),

- they are highly receptive to messages about accident prevention,
 - they do not question what adults say (unlike teenagers),
 - they are eager to discover new things,
 - they are confronted by two contrasting worlds (the over-protected one of the home and school, the other, very dangerous one, of the street).
2. To communicate with young children it is necessary to allow for a number of psychological traits specific to them:
- at that age, the boundary between the imaginary and real world is not clearly drawn; play has an overwhelming place in their lives. To teach road safety, it is therefore necessary to draw a clear distinction between play and the street,
 - the concept of risk is not properly understood,
 - the sensorial faculties are not fully developed,
 - the attention span is short; in addition it is easier to keep children's attention if there is a play element involved,
 - they are very keen to understand and discover the external world, which facilitates greatly the teaching task. The downside is that their curiosity is often impulsive and can expose them to serious danger,
 - this surprising ability to adapt and to take in new knowledge stem largely from the fact that children are impatient to become adults; they should thus be spoken to as responsible persons and not be infantilised.
3. Between the ages of 3 and 11, the ties between parents and children are usually very close. Parents, educators (and all those who provide support to the child, who cannot be totally independent in all circumstances) need to be involved in the communication process.

Communicating with the target group

The adults who design teaching materials for children must stop thinking like adults and think more about the impact their message will have on children. This entails:

- relating ideas to the real world and eschewing imaginary or unreal situations. To get the message across to the child, it is necessary to draw upon simple, real-life situations, using characters and decors that are close as possible to the child's world;
- showing the risks and consequences involved, resorting to dramatisation if necessary;
- using psychologically credible characters (avoiding caricatures and anthropomorphized animals) and daily situations that every child can relate to, bearing in mind that anything extraordinary in the situation described, the decors or characters is likely to monopolise the child's attention to the detriment of the road safety message;
- stating clearly that the purpose of the programmes is accident prevention, since children are entirely receptive to this kind of message;
- treating the child as a responsible person since children are impatient to grow up and eager to learn. They are more likely to retain a message or a way of behaving that they have discovered themselves, i.e. actively, by making mistakes. A message handed down by an adult to a passive, infantilised child will have no impact;
- giving a step-by-step presentation, first illustrating the wrong type of behaviour and then demonstrating the right behaviour simply and clearly.

- using simple, short messages (a maximum of ten minutes for films), a concise style and simple language;
- teaching the child to use their senses, in particular that of hearing, this being very important. Audio-visual materials should make extensive use of sound to get the message across;
- avoiding references from the past since they belong to the world of adults and seldom that of children. Likewise, references to fleeting children's fashions or games should be avoided in order not to distract attention from the message being conveyed.

2.3 Communication strategies adapted to defined group of receivers:

2.3.1 Children, teenagers, adults

2.3.1.3 Mrs T. Bernacer Sales (Spain)

Everybody in today's developed world is continually bombarded with information of all kinds aimed at persuading us to buy a specific product, wear the clothes that fashion dictates, or adopt certain values. As this mass of information is so confused, we should think hard about a new communication strategy -- not to sell a product but simply to encourage people to adopt certain attitudes and obey certain rules, which would at least prevent an increase in accidents if not reduce them. The first step in this direction must be to know exactly how to address the target population, in this case children. In this paper we shall distinguish between two groups: children aged up to 7, who are entirely dependent on their parents, and those aged 7 to 11, who are more independent.

There is nothing new in the statement that the values of society are acquired in the course of childhood education. Children must be given a sound basis enabling them to identify with the habits and behaviour that are necessary if they are to be members of the stable community which, with all its rules and controls, has been universally endorsed by society at any given time. Lastly, it must be recognised that traffic rules are only a part of the regulatory framework of civil society.

It is extremely difficult to draw a dividing line between road safety education and strategies for communication with children, for the two are closely connected, as we shall see throughout this paper.

Road safety, as we all know, is primarily the product of three factors: the road, the vehicle and the human factor. Our concern is the human factor as seen in the child, and it is in this area that we can do most and still have the most to do.

As an official body, Spain's DGT (Dirección General de Tráfico) has to meet an ongoing demand for road safety by communicating with all road users. Here we shall very briefly review the latest developments in Spain as regards strategies for communication with children.

The statistics for road accidents in EU Member States clearly show that one of the main groups at risk consists of children and youngsters between 5 and 17 years old. According to the same data, most of the accidents involving them occur when they are on foot, although the accident rate for those riding cycles and mopeds gradually rises, particularly from the age of 14 onwards.

Section 7 of the Spanish Highway Code of 1934 already stated that schools must provide instruction on traffic rules and draw attention to road safety. As a result of the constant concern expressed in educational legislation, road safety was finally incorporated on a cross-disciplinary basis in teaching in 1991.

Great emphasis is now being placed on the kind of cross-disciplinary activities which society wants schools to provide. They are expected to have a very strong educational impact by laying the foundations for orderly community life and comprehensive training for citizenship, and to develop in

pupils the moral values associated with a peaceful existence, respect for others and protection of the environment.

Before discussing some examples of strategies in my country, I should like to stress the extent to which games and manual activities help children to understand, for we must not forget that their interpretation is quite different from ours when they read messages.

First phase: Acquiring positive habits

In this initial phase children depend entirely on their parents and on adults in general. How do children receive information? In all circumstances through the example set by their parents as road users (crossing a street with traffic lights, the use of pedestrian crossings, attaching seat belts and wearing a helmet, changes in behaviour and aggressiveness when driving, etc.). At this stage, we therefore must pass on our messages to parents and stress the importance of the example they set.

In this first phase we basically try to create positive habits. For years the DGT has worked on the various aspects of road safety by means of programmes that make use of games and audio-visual or written educational materials.

But more recently we have been publicising restraint systems for young children by means of posters, leaflets and two manuals: one for parents and one for paediatricians. Why one for doctors? Studies conducted by the DGT have shown that the paediatrician can play a vital role as a counsellor, for it is through him that we can pass on our messages to sometimes unreceptive parents.

It is this new communication strategy which is to be given precedence in the light of the results published in a "Preliminary report on studies concerning the safety of children as car passengers".

Second phase: Learning the rules of the road

Starting with the rules for children's games, teachers try, little by little, to get children interested in the rules of the highway code, and to encourage them to learn and obey those rules. This knowledge will be useful to them as cyclists, pedestrians and passengers, and later when they are old enough to take driving lessons.

Examples of our long experience of road safety education include the following materials:

"Hello! I must cross the street carefully, because if I don't"

This poster was used in a campaign to prevent accidents at pedestrian crossings at traffic lights. The campaign was for children aged 8 to 12 who were given stickers on how they should use pedestrian crossings.

"Holidays in the country!"

This is a story about children as car passengers and their road safety problems in a rural environment. The story stresses how children should behave when cycling or out walking and draws attention to the importance of giving proper signals.

“The adventure of living in town”

This is a story of two children and a dog who go to live in a town for the first time. There is a series of incidents, which show how they learn to find their way around the town in complete safety. The illustrations stress the most interesting parts of the story.

“Drawings on road safety education for children”

Road safety in a rural environment is taught by means of drawings which are completed simply by asking the children to identify and stick in the missing parts in each drawing. The teacher also hands out two other sheets containing exercises on basic knowledge, finding one’s bearings, etc.

Preliminary report on studies concerning the safety of children as car passengers

In the light of this report, we firstly state the facts concerning existing methods of informing parents why they must use restraint systems.

Secondly, we use the findings from a survey conducted in nursery schools to illustrate the current situation in Spain.

A) *Facts to be taken into account when passing on information about children’s safety*

- The studies showed that paediatricians can influence parents and encourage them to use the various restraint systems.
- The effect on parents of TV programmes and educational campaigns based entirely on leaflets and posters is very limited and lasts only a few days.
- The studies show that it is very difficult to change older people’s habits and that it is therefore preferable to work with parents who have just had a baby.
- Parents usually make the greatest use of car seats for babies during the first two months after the birth of a child, but unfortunately the habit starts to wear off after the fourth month, and the seat is hardly used at all by the time the child is a year old.
- The effort to promote the use of restraint systems must be made during the pre-natal and post-natal periods and when the paediatrician subsequently examines the child.

As all the studies show that it is very difficult to change habits and behaviour, a wide range of techniques and methods must be used.

B) *Survey findings*

- Women are still in most cases responsible for bringing up children and ensuring their safety.
- The most popular of the restraint systems used by parents is the bucket seat.
- It is only in the last ten years that parents have started to buy restraint systems.
- On the birth of another baby, the restraint system bought by the parents is automatically passed on to the new member of the family.
- There is no correlation between household income and the use of restraint systems. The problem is therefore one of attitude and not money.
- The data show the advantages of briefing parents on restraint systems, the ages at which each system should be used and the importance of using approved systems.

- Parents must be familiar with the technical, legal and practical issues as well as the current trends involving road safety so that they can act accordingly.
- Even if parents buy restraint systems, they do not always use them, particularly if they are on a short trip or driving in town or when the child gets bored on a very long trip. This danger must be avoided.
- According to the studies, advice on road safety can be passed on most effectively by the DGT and its regional representatives.

To sum up, the data obtained from the studies show that drivers must be given more information on how to make it safer to transport children in their cars. In Spain, the public's attitude to this issue is positive, for in about the last 10 years parents have become more aware of the need to improve safety and keep the number of accidents and their effects to a minimum.

According to the DGT, safety belts should be used to attach children if there is no restraint system, even if a case cannot be made out for or against their use owing to the lack of studies on this subject.

The DGT also points out that even if parents believe that it is safe to carry children in their arms, it is in fact very dangerous, for studies have shown that an adult cannot hold on to a child if an accident occurs at over 5 km/h. The advice given by the DGT is therefore that:

- children in vehicles should at least be restrained by safety belts,
- children should never be held in an adult's arms when travelling by car.

Presentation of other materials

“Cycling”

This is a puzzle showing a group of children confronted with different situations when they are out cycling. As they do the puzzle, the children become familiar with road signs and signals and the rules they must respect when cycling in town, in the open country and at night. Slides can be used by the teacher to drive the message home.

“Travelling”

This is a puzzle where the right sequences have to be superimposed on the wrong ones. The child is the traveller; the puzzle is about the use of the safety belt and also includes health and safety topics. Slides and teaching guidelines on the four situations illustrated by the puzzle are also provided.

“From home to school”

This is another puzzle in which the pupil plays the part of a pedestrian on short walks (pavements, pedestrian crossings, traffic lights and policemen). It is also accompanied by slides and teaching guidelines.

“A computer-aided programme for road safety education: the bicycle”

This programme for use on a personal computer consists of eight lessons on cycling and includes simulations of cycling behaviour. Its main object is to provide road safety training for school-age cyclists. It is intended particularly for pupils aged 8 to 14 but can also be used for other age groups. This programme addresses the rising demand for educational materials that use new technologies, as expressed by teachers and other people who wish to tackle traffic problems from an educational standpoint.

“A computer-aided programme for road safety education. Road Safety Education 1, 2 and 3”

This programme consists of three road safety lessons mainly concerning signs and signals and pedestrian facilities. It is intended for use on a personal computer equipped with a colour screen, a mouse and a Windows 3.3 or more advanced system.

We could refer to other materials, but consider that this list is sufficiently exhaustive to give an idea of our work. However, you are cordially invited to visit Spain’s stand so that you can obtain information on our teaching and communication programmes.

Conclusion

I should simply like to encourage everybody to continue working on safety issues, with particular emphasis on the children and young people who will be tomorrow’s adults.

2.3 Communication strategies adapted to defined group of receivers:

2.3.1 Children, teenagers, adults

2.3.1.4 *Project “Personal communication” addressing students in schools of further education: new ways of communicating with young people*

Mr. Maginot (Germany)

1. General considerations

In order to be able to “reach” the particularly accident-prone group of 18 to 25 year old drivers, a concept of “personal communication” for use in vocational schools was developed in 1995 and put into practice by the German road safety organisation, Deutsche Verkehrswacht (DVW). Specially trained moderators had the task of bringing young people to see more road safety conscious behaviours as being successful problem-solving strategies in what are for them typical conflict situations (the dilemmas of contradictory goals), and to try them out. Starting from the problem situations known from the everyday world of young people, an effort was made to create an atmosphere in which they could “discover” for themselves more successful solutions and stabilise them through practice. It was a matter of recognising dysfunctional traffic strategies as poorer alternatives and establishing functional, i.e. road safety oriented, strategies as successful.

With regard to the youth-specific and group dynamic particularities, which can differ substantially according to the situation and constellation, and because of the differing professional backgrounds of the moderators concerned, the dilemma game, widely known in social work, but here used for the first time in road safety work, appeared to be a suitable approach and communication strategy. It creates the necessary space for the preservation of self-esteem, the observation of others, the possibility of spontaneous emotional expression, the adoption of changed values (without “losing face”), and at the same time the opportunity for the moderator to ask questions.

2. Different causes require different interventions

Year after year the traffic accident statistics show accident rates for the 18 to 25 age group which are over-proportional both in relation to their share of the total population and their share of road use or transport output.

For young drivers in this age group the risk of being killed in a road accident is two or three times that of the average motorist. More precisely, it can be said that this overall picture is heavily influenced by young men; young women being only about one-quarter of the total.

The serious road accidents caused by this age group are again over-proportionally frequent in leisure mobility, at weekends and especially at night. The nights of Friday-Saturday and Saturday-Sunday account for a very high proportion of total driving and the accidents at this time (in just 12 hours of the week) account for one-fifth of driver deaths and one-fourth of passenger deaths in the 18 to 25 age group.

The apparently plausible explanation for the phenomenon of high accident rates -- young people's lack of traffic experience and driving practice -- is only part of the story. It is more a matter of a combination of different *direct* causes of accidents (including over-tiredness, inappropriate speed, distraction by passengers, and alcohol), in addition to which there are a number of *indirect* causes which are not to be attributed to road use but rather to the specific (life) situation (background, frustrations, wish to impress, group pressure, etc.). Road use is for them thus just one field of social interaction, in which accidents appear as a fatal coming together of "unfavourable" circumstances.

The fact of these indirect causes of accidents makes it possible to explain why it is that young men appear to be far more accident-prone than young women, why they are involved in serious accidents to a much higher extent, and why drunk driving and accidents caused by alcohol consumption are very much more frequent among young men.

While for women the rational use of the car is dominant, for young men having their own car is more of a status symbol, through which they can demonstrate their strength, speed and willingness to take risks, and which puts them in a position to be able to "work out" their emotions.

Within this group -- as is shown by the findings of analyses of leisure and lifestyles -- there is "only" a sub-group of some 30 per cent who are particularly at risk.

With the conventional methods of sensible road safety work it is scarcely possible to "reach" the group of young road users who are particularly at risk.

Since the indirect causes of the over-proportional road accident rates of young people are rooted in a particular social and psychological propensity to take risks, effective road safety work with them needs to be concentrated on these indirect causes.

3. Theoretical bases

The personal communication programme finds its theoretical basis in fundamental approaches and findings from the fields of communication research, drug prevention and social work. Generally understood as the verbal influencing of the attitudes and behaviours of other people, the persuasive communication is not explicitly aimed at imparting information, but rather at influencing affective structures through word and sentence meanings.

Empirical findings from drug prevention confirm that the mere imparting of knowledge to people at risk at best produces better knowledge, but in no way brings about the desired changes in behaviour.

In the concept of social learning it is pointed out that patterns of behaviour are acquired through the fact that they are seen to bring rewards for others (the "model"). This model of learning orientation includes both the rewarded behaviour and the rewarding (or punishing) actors or structures, from which a corresponding reward (punishment) for one's own behaviour is expected.

In this context, the peer group is of particular importance, because this is the interaction structure in which (new) orientations and patterns of behaviour are acquired, practised and finally established.

4. Implementation of the concept

The place chosen for this personal communication to be carried out is the vocational school. In the first place the programme suits the development of the “traffic education” provided for in the curriculum. Second, this is where the group particularly at risk is ideally represented in its sociodemographic structure and where it can be reached.

The moderators must not be teachers, and in particular not the class teacher. Very broad experience from various drug prevention programmes show that teachers are not suitable for the double role of evaluating school performance and assessing personality. The particular importance of peer group orientation for the target group points more to the need to use what are known as “peer leaders” as moderators. These are people of the same age, or only a little older, who are familiar with the everyday problems of the target groups, their way of talking, the usual behaviour patterns and conflict solving structures, and who are therefore “credible”.

5. The dilemma game

At the centre of personal communication is the dilemma game. The starting point for the dilemma game is the development of situations in which there is a dilemma related to the subject. The participants’ task is to solve this problem. The dilemma situations must correspond to the everyday world of the young people, i.e. be known as (everyday) subjectively experienced problems, and be oriented towards the communications structure relevant to the feelings and behaviours of the target group. Care must be taken however to avoid discussing concrete cases involving people present.

It is more a matter of pointing to the dilemmas of fictional third parties so as to permit participants to “talk about these other people”, seek solutions, etc. The intention is that the “model of the others” permits participants to take positions, express views and revise their own opinions and adopt more objectively functional solutions, without their having to try to justify their own behaviour in a possibly conflictual way.

The moderators’ task is only to construct the dilemmas and “ask” what the actors described in the situation might *think*, how they *feel* and how they will *behave*. They should initiate a process -- again just through asking -- in which only the participants seek, weigh up, discard and follow up solutions.

At this stage we should give some concrete examples of dilemma situations:

- a) Paul and Franz meet by chance in a motorway service area. Paul immediately says, “This calls for a drink” and orders beer for them both.
- b) Rita has met the handsome Franz in the disco. At some stage his friends want to change discos. Rita goes with them and finds that Franz is racing with his friends.
- c) Rita is at a party. Everyone is on a high. Later on somebody suddenly suggests driving to the lake and emptying a case of beer.
- d) Rita has driven to the disco with her boyfriend. He drinks one beer after the other.
- e) Rita goes with the gang to a rock concert. On the way back everyone is on a high. The music is going full blast and the driver is really stepping on the gas.
- f) Paul is a good driver, but he doesn’t like driving at night because he has poor night vision. His friend Franz knows that, but the others in the car don’t.

6. DVW experience

From the short experience to date it has become clear that “personal communication” is not an easy project; there is a great danger that the moderator will talk like a traditional teacher or even hold a monologue. In order to prevent this the moderators need to have intensive training and great attention must be paid to their pedagogic and psychological capacities at the recruitment stage.

Equally important are the practical arrangements in the school for the preparation of a session. The moderator must be able to have an active influence on the structure of the participant group. In no circumstances must participants from different classes be “detailed” to attend a session. Already with a group of 15 people the intended discussion among participants tends to be inhibited.

The traditional “teacher in front of the class” situation must be avoided at all costs. Sitting in a semicircle is of great importance for giving an “equal right to speak”.

Finally -- as indeed in other projects -- it is necessary to have continuous monitoring of the programme.

All in all, “personal communication” represents a new approach to road safety work. Although admittedly it is a difficult path, it seems more promising in the sense that the project does not only inform, but is aimed at bringing about changes in young people’s attitudes and behaviours.

2.3 Communication strategies adapted to defined target groups of receivers

2.3.2 Policy-makers, journalists

Communication strategies aimed at policy-makers and journalists in Poland

Mrs M. Dabrowska-Loranc (Poland)

1. Introduction

It is becoming increasingly apparent that communicating with the public can have positive results for road safety improvement. For communication to be effective and have a real impact, communication objectives and strategies must be clearly defined. Of the various channels available for communicating with the general public, the mass media are the ones most commonly used.

The objective of communicating with the public in the field of road safety is to deliver appropriate information to road users in order to make them more aware, influence their attitudes and change their behaviour and, consequently, reduce the number and severity of road accidents. Of course, communication is just one element of a much wider road safety programme, since (as research shows) communication alone is not enough to achieve the desired objectives.

Policy-makers (senior civil servants, members of Parliament) and journalists (who can reach a large public through the mass media) are a major target group.

One objective of communicating with policy-makers is to increase their awareness of the importance of road safety in the social context and to encourage them to take steps to improve it through appropriate regulations and legislation.

Greater awareness of road safety issues should also be an objective of communicating with journalists, so that they will be willing and able to inform the public through the mass media and in this way influence appropriate social groups and public opinion. Public opinion can also be a major influence on the decisions taken by policy-makers.

Communication with defined target groups requires a clear plan of action, i.e. a communications strategy.

2. Communicating with policy-makers and journalists in Poland

Since the beginning of nineties Poland has seen a significant increase in car ownership levels. The number of vehicles has increased by 30% in 1990-1996. At the same time the risk of road accidents is, unfortunately, very high and has been rising steadily since the beginning of nineties. Various initiatives have been taken in an attempt to improve the situation. It now seems that communication with the public, if properly planned and implemented, can make a significant difference. The aim of public relations campaigns is to make people see the positive benefits of road safety and encourage public acceptance. However, we should point out that it takes a long time for any campaign to counteract negative attitudes and win the public over.

Poland's Road Safety Council was established in 1993. The Council is responsible for road

safety information and in 1994 it gained the support of an eminent politician, Mr Włodzimierz Cimoszewicz, now Prime Minister of Poland and Chairman of the Council. When he became Prime Minister, Mr. Cimoszewicz stressed the need for road safety initiatives in his outline policy statement. The Office of the President of Poland is also involved in these initiatives. The President is the patron of the “Safe Roads” campaign to ensure that children are safe on their way to school.

Members of the Road Safety Council, representatives of various departments and autonomous provincial and local authorities are involved in road safety initiatives and are kept informed of progress at plenary sessions of the RS Council. They also receive information about the different types of initiatives, their importance, programmes, etc. from the Secretary’s Office of the RS Council.

In connection with work on amending the Road Safety Act, a special seminar was organised to give members of Parliament an overview of road safety problems. Reports prepared by road safety experts were presented in order to brief members of Parliament on the issues, to argue the case for taking decisive action and also to establish better contacts with them. Unfortunately, it became apparent that there was a great deal of resistance and lack of awareness of road safety issues among the majority of policy-makers. Their attitudes to road safety were reflected in their comments (for example, stories about how little time it took them to drive long distances or about driving at speeds much higher than the limit).

Negative attitudes towards road safety were also apparent in the course of work on amending the Road Safety Act. Plans to lower the speed limit to 50 km/h did not find any support among members of Parliament despite the firm stance taken by the Road Safety Council and the personal commitment of the Prime Minister. The results of research showing the importance of this limit for road safety were sent to deputies, but had no effect and a proposal to organise a seminar on the subject organising was not taken up.

The Road Safety Social Commission, part of the RS Council, includes some representatives of the mass media. At its meetings invited journalists are informed about road safety initiatives.

Press conferences are held periodically at police headquarters to publicise road accident and casualty statistics and trends and to brief journalists on road safety operations carried out by the police initiatives, e.g. its “Safe Holidays” campaign, when breathalyser testing and speed checks are stepped up.

The Office of the President also organises press conferences on the “Safe Roads” initiative to make roads safer for schoolchildren.

In most cases journalists report the bare facts about the number of accidents or measures taken. However, road safety often makes the headlines after a particularly serious incident. When this happens, journalists in various editorial offices are instructed to produce articles or programmes about the incident and as a rule they then gather detailed information and report it faithfully, getting the road safety message across. Normally, however, they cover these issues only occasionally or when instructed by editors. Journalists who do cover road safety issues often put forward views that are inconsistent with, or even contrary to, road safety principles. When the popular press does cover the on-going debate on lowering the speed limit, it tends to give more space to views supporting higher speeds.

There are a few titles on the market that cover problems caused by road building and the number of cars on the road and these sometimes cover road safety issues. The only magazine specifically

devoted to road safety problems is issued by the Motor Transport Institute. As it is not centrally financed, the magazine has only a small print run and therefore its circulation and readership is limited.

There are some radio and television programmes covering road safety and traffic problems. They give advice to motorists, but usually cover the issues from the driver's angle. Unfortunately, the views taken by the media on these issues vary so much that it is difficult to gauge exactly what impact such programmes have on public opinion.

There is no systematic analysis of press cuttings and radio and television programmes to estimate the frequency and quality of coverage of these problems in the media. So far, communication with groups of policy-makers and journalists has had relatively little effect, as is reflected in the sharp increase in road accidents and casualty figures in 1997.

3. Principles of communicating with policy-makers and journalists

To be effective, communication with the public must be well planned and consistent. However, successful planning means integrating any initiatives into the broader road safety policy context. Any information delivered during the communication process must be based on sound analysis of accident risks (identification of main risk factors, definition of particularly vulnerable road user groups). Only accurate information can build respect and confidence in the organisation whose job it is to deal with and find solutions to road safety problems. Communication with the public should be managed at central or local level by one institution (RS Council, Provincial RS Council). Countries that do not have enough experience in this area should call on the services of specialist public relations agencies or train staff specifically for this purpose. Public relations is, simply, planned communications designed to influence specific social groups or to convey a message to a range of social groups in order to achieve the desired aim. In this context, public relations can be said to have a social service function.

Communications strategies aimed at policy-makers

Policy-makers are responsible for taking decisions on legislation, the economy, and policy approaches to be adopted. Consequently, communication strategies aimed at groups of policy-makers should convince them to commit to an idea and take the measures necessary to achieve it. For this purpose, a lobby group of road safety experts should be set up. Lobbying is a means of bringing direct influence to bear, by informing, educating and convincing members of Parliament or government officials. It can target individual policy-makers or groups of policy-makers, associations, clubs and organisations.

It involves organising:

- information meetings (not always formal) that bring together road safety experts and policy-makers;
- seminars;
- discussions between policy-makers and scientists.

Major regional or national problems and ways of solving them should be discussed at these meetings. The arguments used need to be convincing. Educating these groups should focus on winning their trust and backing for the lobby. Ensuring that the public has a positive image of the

initiatives undertaken by the organisations responsible for road safety is a very important aim. At the same time, government institutions must be kept widely informed of on the activities of the lobby group.

The communications strategy for this target group should link policy with the social benefits to be gained from a reduction in the number of road accident casualties.

Communications strategies aimed at journalists

The role of journalists is to disseminate information through the media. The mass media, i.e. press, radio, television, are the most effective methods of communication. The aim of **communication through the media is not only to educate journalists but through them, to inform defined social groups and, ultimately, public opinion and policy-makers.** Since they play such a crucial role, special attention should be paid to communications strategies aimed at journalists. Care should be taken to cultivate good contacts with journalists. In order to ensure their co-operation, an understanding of their job as journalists is required.

Journalists need topical stories with a “human interest” element that will hold the attention of their readers. The media are not interested in new technologies or organisational solutions and that is why it is necessary to point out the importance of road safety in terms of the potential human costs and the advantages for road users.

Building up an appropriate contact base or “mailing list” is the starting point for good contacts with journalists. This list should include named contacts (not editorial offices) and journalists from:

- the specialist press,
- the general press,
- press agencies,
- named editorial offices dealing with road safety problems,
- the major national dailies,
- the major road safety magazines,
- TV, radio, news editorial offices,
- editorial offices of popular and specialist TV and radio programmes .

The basic criteria for selecting journalists for inclusion on the mailing list are:

- the specialisation of a given journalist,
- the audience or readership reached by a particular journalist’s medium and its reliability,
- the professional and ethical standards and reliability of reporting.

This list should be constantly updated.

Journalists on the list should be sent selected information for publication or broadcasting. The information must be interesting and catch the recipient’s attention. That is why techniques like press information and press conferences should be used.

Information for the press must be carefully edited and checked for factual accuracy. It should be in the form of stand-alone items that can be published immediately without reference to editorial staff. It should be written in non-technical language that even non-specialist journalists can

understand and should also give details of whom to contact for additional information. Any contacts initiated by journalists should be maintained and journalists must be sure that the information they receive from us is reliable and satisfactory. Such an approach will foster closer ties between road safety organisations and individual journalists and will enhance their reputation as specialist journalists. Materials delivered to journalists should have a standard graphics look that immediately identifies them with road safety (name, logo). Mostly information for the press is sent as press releases or press packs. It should be borne in mind that there is no guarantee that the press will report the information, the final selection will be made by journalists. Therefore, press liaison staff must be able to convince journalists that the material they have received is worth reporting on.

As journalists will probably be receiving press information quite frequently, press conferences should only be called when really necessary. Press conferences are organised to present information that is particularly important and to establish direct contact with journalists. The conference should be very carefully organised as regards both the list of journalists to be invited and the plan to be followed. During the conference or after, all the materials or a summary of the information given at the conference should be made available to journalists.

In institutions dealing with road safety problems, specially trained personnel are responsible for press relations. In the beginning it is useful to employ specialist public relations agencies. These will take care of the complex business of contacts with journalists, i.e.:

- planning;
- organising seminars and conferences;
- drafting and releasing information and press reports;
- managing information flow.

According to the accepted theories of communications strategy, evaluations should be carried out constantly to check that the desired aim is being achieved. One of the evaluation criteria used is whether road safety problems have been given media coverage. For this purpose it is worth creating a computerised database for analysing press cuttings and programmes presented as a result of information issued. Such a database enables permanent monitoring of the media. Consideration should also be given to public opinion surveys to establish whether the main purpose of communicating with the public (i.e. a change in the attitude and behaviour of road users) has been achieved. If the main purpose has not been achieved, the strategy for a defined target group will probably have to be changed. It is worth repeating that communication in the field of road safety at both local and central government level is not easy and that it may take some time to achieve results.

Obviously, the frequency with which such subjects are reported in the press, or on radio and television has an important impact on shaping public opinion on road safety problems.

Summary

Communication with the public is a very important element of road safety policy and, as the experience of many countries (France, Austria) shows, it is instrumental in changing the behaviour and attitudes not only of road users but also of policy-makers and political parties, etc. To achieve the desired results it requires professional, permanent and planned activity and the appropriate resources (for example France's communication budget is FRF 65 000 000).

Winning over some journalists (mass media) and policy-makers (organisation, legislation, economy) can pave the way for the introduction of many prevention initiatives, which will improve road safety.

2.3 Communication strategies adapted to defined group of receivers

2.3.3 Private partners

Mr. B. Gatin (France)

The road accident situation remains a national scourge in France. However, the positive trend seen in the road accident rate in recent years, confirmed by the latest figures, is encouraging the authorities to pursue and develop an energetic road safety policy, in liaison with their different partners.

In this connection, the reduction of accident rates in firms' vehicle fleets is now a major objective of road safety policy.

1. The challenge: reconciling safety and profitability

While enterprises have on the whole been able to implement effective programmes to prevent industrial accidents, traffic accidents, because they generally occur off the premises, have not yet been sufficiently taken into account.

Road accidents in the world of work represent a major human, social and economic loss both to society as a whole and to enterprises.

According to data published by the French National Health Fund (Caisse Nationale d'Assurance Maladie - CNAM) in April 1995, of a total of some 781 000 work accidents recorded in 1994, 108 000 accidents or 13 per cent of the total occurred on the journey to or from work or while travelling for the company. They cause 24 per cent of the total loss of work time and 25 per cent of the permanent incapacity resulting from accidents. They are also at the origin of 55 per cent of all deaths caused by work accidents, some 1 300 a year.

Despite the growing weight of financial pressures and the economic difficulties which often encourage practices to run counter to road safety (excessive use of vehicles, inclination to drive faster, etc.), an increasing number of firms have for some years been carrying out road safety activities which have enabled them to significantly and durably reduce the number and seriousness of traffic accidents connected with work.

The fact is that road safety is economically profitable for the enterprise. It is one of the tools for improving its productivity and the quality of the service provided or the product manufactured. It is also obvious that the new enterprise management techniques and new operating methods such as the introduction of a "quality plan", the "zero faults" method and "just-in-time" transport can be developed effectively only if the transport safety level is very high.

Given this situation, a collective response is called for, and drawing the lessons from many experiments the government intends to promote a dynamic policy of road safety and road risk management within enterprises.

2. Road safety charters: “road safety clubs”

Important initiatives have already been introduced in this field. Thus at national level “road safety charters” have been concluded between the State, insurance companies and big enterprises. They serve as an example and play a mobilising role for the sectors of activity represented.

These moral contracts for the purpose of road safety provide for the pooling of competences and know-how in order to design and implement programmes adapted to each case.

The fact is that dealing with road safety in the enterprise is a complex task. It is therefore necessary to use a structured and coherent approach which comprises the following stages:

- preliminary *diagnosis* to permit the firm to have a precise knowledge of its specific road risks and their consequences;
- the drawing up of an *action programme* consistent with the recommendations contained in the diagnosis: it consists of a set of measures likely to reduce the risks in a significant and durable fashion. Its implementation requires the strong and lasting commitment of the firm’s management and supervisory staff at all levels;
- *monitoring and evaluation* of the results of the project, essential for measuring its performance and if necessary for reorienting the project itself.

So far, 16 road safety charters have been signed, representing a total of some 53 000 vehicles and over one hundred enterprises of different sizes in different fields of activity. The oldest dates from 1992 and was renewed in 1996.

All the enterprises concerned have implemented their road safety programme. The most effective have obtained very encouraging results. Thus 51 enterprises with a total fleet of 12 000 vehicles (trucks and light vehicles) reduced their frequency of traffic accidents by 41 per cent in two years.

In order to encourage exchanges of experience, road safety “clubs” have been formed at local level, in which representatives of enterprises can talk to all the local actors concerned with road safety.

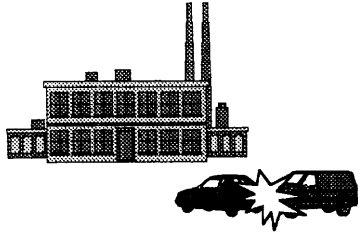


Figure 7. Road accident risks in the firm

The figures

In the past 10 years, work-related traffic accidents have accounted for:

- **13 to 14 % of accidents entailing more than three days off work**
- **23 to 25 % of accidents resulting in permanent incapacity**
- **54 to 59 % of fatal accidents at work (1060 to 1300 per year)**

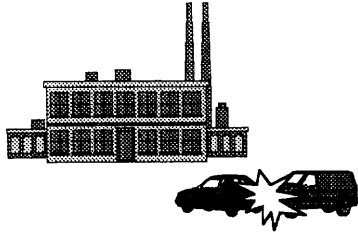


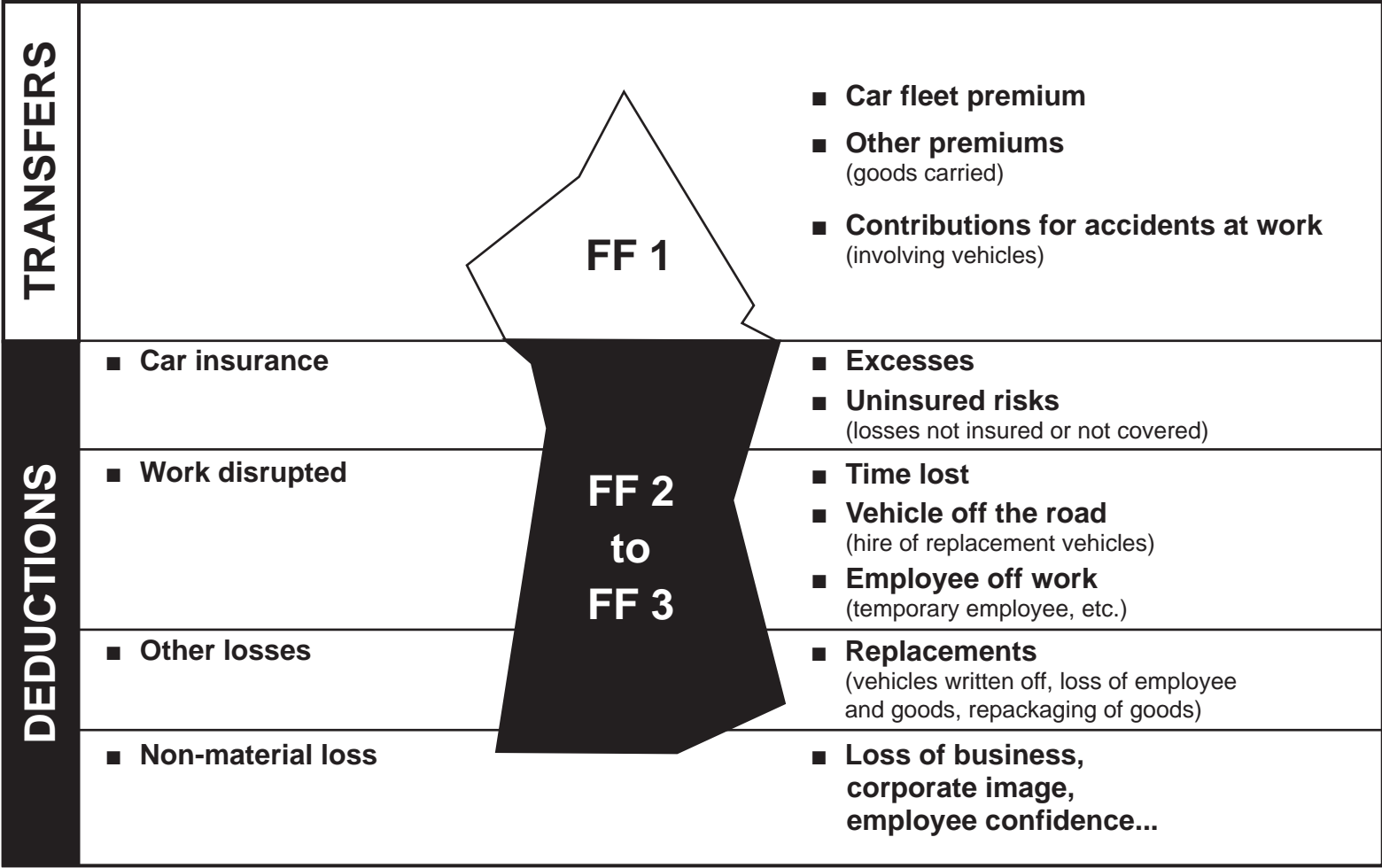
Figure 8. Road accident risks in the firm
Work-related traffic accidents in 1994

| | | |
|---|--|----------------------|
| ➤ | On journey to/from work: | 84 000 |
| ➤ | While travelling on company business: | <u>24 000</u> |
| | Total : | 108 000 |

Representing: **23 % of employers' contributions, or
9.4 billion**

Source: Caisse Nationale d'Assurance Maladie. Data published in March 1995.

Figure 9. The real costs of accidents



Source: Ministère de l'Équipement, des Transports et du Logement, France.

2.3 Communication strategies adapted to defined group of receivers

2.3.4 Road hauliers

The road transport industry and road safety

Mr. Köfalvi (IRU)

According to the EU Commission's Programme for 1997 to 2001, there is an annual toll of 45 000 persons killed and 1.6 million injured each year on Europe's roads. Although these figures have become commonplace through the media, they cannot but rouse emotion.

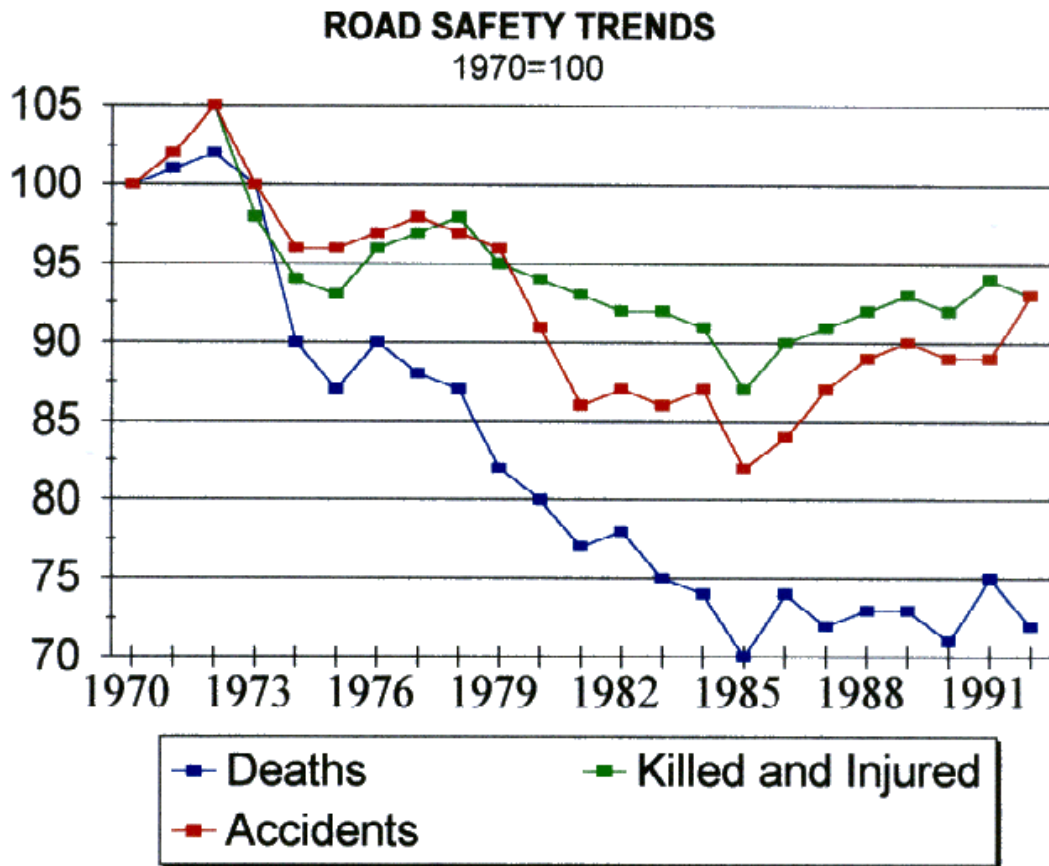
It is true that road accidents involving coaches and lorries receive more attention in the media than other accidents, but they are, in fact, less often involved than other types of vehicle in relation to their number on the road and particularly the distance they travel. This is no reason for complacency and the IRU believes that urgent action must be taken to reduce accident rates for all types of vehicle to a more acceptable level. Nevertheless, it should be pointed out from the outset that the media have a responsibility to transmit correct information and appropriate advice concerning road safety and the prevention of road accidents.

For its own part, despite the lack of adequate statistics permitting a better identification of accident causes and culprits, the IRU adopted its Charter for Sustainable Development, at its XXVth Congress in Budapest, ascribing a major role to improvements in this field. These will be contained in the code of conduct for transport undertakings which is currently being prepared on the basis of the best practices currently implemented in the industry.

However, a successful strategy must involve all the partners involved in road traffic and be implemented at an international level. To achieve this objective, governments should provide the actors with the necessary harmonised data on road accidents. Such statistics do not exist in most European countries and we, in the IRU, believe that it would be desirable for the governments concerned to devise a harmonised collection of statistics relating to specific vehicle categories as an instrument to better focus the efforts by all concerned on the road users most likely to cause accidents. This request coincides with the information-gathering task which the European Commission considers to be the first target in an integrated EU strategy for road safety¹ and which builds on the decision already taken by the EU Transport Council to set up an accident data base (CARE).

¹ Promoting Road Safety in the EU: the Programme for 1997-2001 (EU Commission, 1997).

Figure 10.



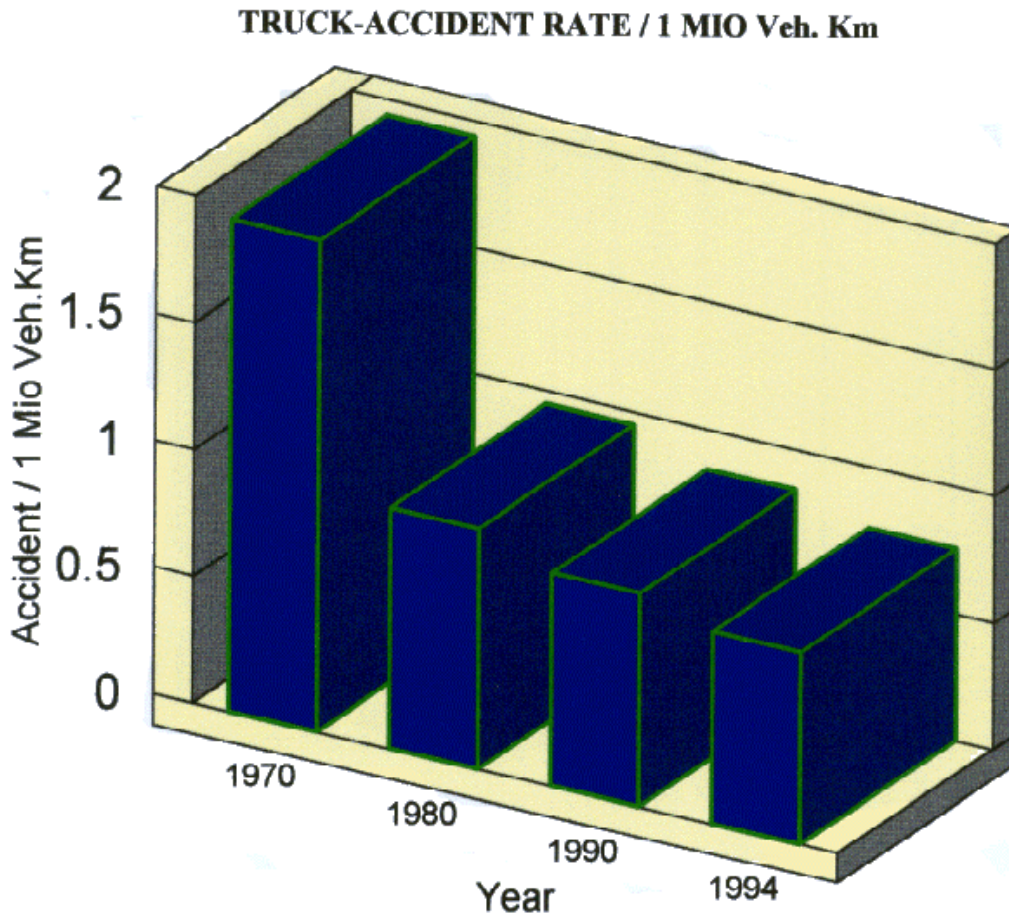
Source: International Road Transport Union (IRU), Switzerland.

The International Road Transport Union and its Member Associations throughout Europe have nevertheless a long-standing programme of action in the field of road safety. These efforts concentrate on motivating the industry itself to make still greater efforts in this field, but also to contributing advice to intergovernmental bodies and national governments in respect of their responsibilities.

Any action or strategy aimed at improving road safety must be based on at least the three following elements:

- road infrastructure;
- road vehicles and their equipment; and
- The human factor: motivation, aptitude, training, health, etc.

Figure 11.



Source: International Road Transport Union (IRU), Switzerland.

1. Road Infrastructure

The provision of safe road infrastructure is the clear responsibility of governments and it is one in which construction, equipment and maintenance have failed to respond to the growth in road traffic over the last 25 years. The fact that, over the same period, road traffic accidents have declined in western Europe overall and are now showing the same trend in central and eastern Europe cannot, therefore, be ascribed, in the main, to major infrastructure investment which could nevertheless make an important contribution to further improving road safety.

An analysis of the very incomplete statistics that do exist shows that accidents resulting in bodily injury and material damage often take place at the same places and have the same causes. Consequently, instead of introducing widespread measures to moderate traffic without discernment or reason, governments should first make the necessary improvements to road infrastructures and their equipment wherever several serious accidents have already taken place.

The IRU therefore calls on governments in all parts of Europe to recognise the vital importance of infrastructure improvement, equipment and maintenance in the promotion of sustainable development through increased road safety. It calls upon them to allocate the funds needed so that road transport can play its full role in the economy while reducing the impact of road accidents on society.

2. Road vehicles and equipment

The second widely recognised contributor to the safety of transport operations on the road is the vehicle. Huge progress has been made in vehicle construction over the last twenty-five years, to the point where it is general knowledge that accidents due to vehicle breakdown are rare indeed. The more modern the vehicles, the safer they are and the more environment-friendly. While the purchase of efficient vehicles is in the clear interest of transport operators, Governments should also consider it their responsibility to facilitate the renewal of vehicle fleets, by abolishing all taxes and excise duties on the sale of commercial vehicles, as is the case in the other transport modes.

The International Road Transport Union is in the privileged position of promoting a permanent dialogue between the industry it represents and all the major European commercial vehicle manufacturers, present within it as associate members. It also advises operators of coaches and lorries about the relative effectiveness of equipment marketed as promoting vehicle safety.

In the context of the revision of the Vienna Convention, it has supported the on-going introduction of criteria limiting the life span of commercial vehicles involved in international transport operations, initiated by the ECMT. It also advocates on-board electronic checking of all safety systems when the ignition key is turned.

At present, after expert examination of their relative merits, it is pressing the European Union to prefer three-point safety belts in its planned Regulation, as being far more effective than two-point belts in coaches.

Figure 12. **Illustration showing the efficiency of a two-point safety belt during a test-run of the overturning sideways of a coach**



Source: International Road Transport Union (IRU), Switzerland.

Figure 13. **Illustration showing the efficiency of a three-point safety belt during a test-run of the overturning sideways of a coach**



Source: International Road Transport Union (IRU), Switzerland.

Finally, in the current debate on the introduction of second-generation tachographs, the IRU has taken a clear stand, urging the EU Transport Council to implement a policy framework which would effectively achieve harmonised control and uniform sanctioning with respect to the regulations on resting and driving hours. This framework must provide for the co-responsibility of shippers and

carriers foreseen in the IRU Resolution adopted by its Council of Direction on 15 April 1994 and could be based on the example of EU legislation relating to speed limits: the technical device and the directive concerning its use were decided unanimously.

3. The human factor

The IRU considers the human factor to be of the utmost importance in improving road safety. It is concerned, above all, with motivating road transport operators and drivers to aim constantly at increasing their efforts in favour of road safety.

Such motivation involves a joint obligation incumbent upon transport operators and drivers to ensure that the latter are physically and mentally fit to assume their tasks. It involves also motivation to comply with all legislative measures aimed at improving road safety, including those related to driving hours and rest periods, although rigid restrictions, in the case of driving hours, may increase pressure on the driver and adversely affect road safety.

Paramount to the successful contribution of the human factor to road safety is the proper provision of initial and continuing training for both management and drivers. The IRU does not understand why the EU Commission's strategy is strangely silent on this essential matter. It is of the opinion that the strategy must be complemented by assistance to the training process where the private sector can play an important role in co-operation with the public authorities.

Training

The IRU has long been active in the field of training, notably through its Group of Experts on Training.

Looking beyond the requirements of the relevant driving examination, its recent achievements include the preparation and distribution of a defensive driving programme for commercial vehicle drivers and of a course to train safety and risk prevention officers engaged in the transport of dangerous goods, both co-financed with the European Union. It has also devised for the EU Commission a catalogue of questions for the ADR examination which must be passed by drivers involved in the carriage of dangerous goods.

Furthermore, the IRU launched in 1995 its training programme for drivers from central and eastern Europe countries to acquaint them with the specific characteristics of driving « green vehicles » equipped with ABS. This was necessary on account of the EU requirement for the use of “green” vehicles, which were, in fact, all equipped with ABS systems, whereas such systems were not required by the national law of these countries nor by EU law. Consequently, new drivers of such vehicles were not aware of their behaviour on the road in normal and emergency conditions. The courses deal with driving an ABS-equipped solo vehicle and a vehicle plus trailer or semi-trailer. Organised and financed by the IRU alone – not even with the assistance of the vehicle manufacturers – the courses are operated in 10 countries, and have already trained almost 1000 drivers, mainly involved in international transport operations.

Figure 14. **Tanker driver training session**



Source: International Road Transport Union (IRU), Switzerland.

It has also promoted the design and application of technical driving simulation devices as tools for the selection and training of commercial vehicle drivers and been involved in the organisation of seminars which have furthered technical and pedagogical progress in this field and is happy to note the recent completion of the TraCS Simulator by a European consortium in the framework of the Eureka programme. Such devices should be validated at the European level to ascertain their applicability and contribution to efficient and cost-effective driver training.

Road safety management programme

Certain road transport industry associations and individual undertakings have, for many years, engaged in systematic programmes to promote road safety. Most recently, programmes have been launched by the road transport associations in the Netherlands, with the support of the government, and in Germany, aimed at motivating all transport undertakings to further efforts in this field. Their strategy is to provide road transport undertakings with a system for registering and identifying accidents and their causes, with a manual directing them to the measures to be taken, and with expertise in the form of seminars or on-site consultancy, to permit improvements.

Figure 15. Lane change and braking on a slippery road



Source: International Road Transport Union (IRU), Switzerland.

The success of the programmes undertaken in the larger companies and at the national level in these countries led the IRU to propose a project to the European Union through the European Road Safety Federation (ERSF), of which it is a founder member, aimed at introducing such systematic programmes throughout the European Union, for passenger and goods transport undertakings of all sizes. The IRU hopes that its application for co-financing of this road safety management project (RSM) will be approved by the European Union and that, on the basis of the experience in the fifteen west European countries, it will be possible to extend it to the CEEC.

Motivating commercial... and other drivers

In seeking to motivate commercial vehicle drivers to greater efforts in favour of road safety, the IRU has a long-standing programme of awards for drivers who have had a long and active, accident-free career in the road transport industry. At present, some 1000 « diplômes d'honneur » are awarded every year by the IRU through the national associations which hold award ceremonies, honouring their best drivers and stimulating emulation by their younger colleagues.

Stimulation is also the by-word of the « Well driven » campaign recently introduced by the road transport associations in the United Kingdom and which may well find its place in the IRU Code of Best Practice currently being elaborated. Other road users are invited, by means of a highly visible sticker displayed on participating vehicles, to call a central telephone number and give their opinion on the way the vehicle was driven. Feedback is provided to the participating company. The results so far show that more than 50% of the calls-in have complimented the driver!

Getting to know one another better on the road is also an essential task for all users and it is the task of their representative organisations, to help them to do so. Thus it was that, in the framework of

« 1995 - Year of the Young Driver », the IRU led an ERSF project, co-financed by the EU, which resulted in the distribution of 650 000 copies of an attractive, full-colour leaflet addressed to young learner car drivers, alerting them to the specific behaviour to adopt in the presence of commercial vehicles on the road. A similar leaflet has just been completed and is being distributed throughout the European Union, addressed to teenage riders of motorcycles, mopeds and scooters.

Indeed, it is only through a full understanding of the strengths and weaknesses of all road users and their vehicles in real traffic situations that a sustainable reduction in road accidents can be achieved.

Conclusion

In conclusion, the IRU is of the opinion that, to act efficiently in the field of road safety, it is important to reinforce, as a priority, the training of all road users and especially of professional drivers, as well as to improve the active and passive safety of vehicles and infrastructure.

However, to target better the priority action for accident prevention, it is important to produce harmonised and precise statistics, in co-operation with the private sector, providing a breakdown of accident causes, the types of vehicle involved and the type of infrastructure on which they occur.

On the basis of these statistics, joint action should be taken to reinforce co-operation between the private and public sectors to improve infrastructure, the passive and active safety of vehicles and with regard to the selection, training and motivation of all road infrastructure users in compliance with effective road safety measures.

Last, but not least, I should stress the responsibility of the media to publish press releases, correct information and appropriate advice concerning road safety and the prevention of road accidents as well as that of the public authorities to encourage the media to become more involved in such activities.

2.3 Communication strategies adapted to defined group of receivers

2.3.5 Particular groups: influence of alcohol, drugs or medicines

2.3.5.1 *Strategies of communication adapted to different groups targeted*

Mr. Mikkonen (Finland)

In Finland the incidence of drunken drivers (DWI, driving while impaired) in traffic flow is presently rather low. The road side breath test showed in 1996 that 0.18 per cent of drivers had blood alcohol concentration (BAC) exceeding 0.05 pro mill, which is the level defined as crime. In 1970s the roadside surveys showed the incidence above 0.5 per cent. Accordingly, the present incidence of DWI cases is less than half of that for some twenty-five years ago. Moreover, the present incidence is fairly low if it is compared internationally. Only a few countries can show better statistics in this respect.

As background information it is important to notice that the consumption of alcohol is not low in Finland. In 1994 the consumption, measured in 100 per cent spirit, was 6.6 litres per capita. Same figures can be found e.g. in Argentina, Chile, Japan, Romania and the United States. On the other hand e.g. Poland and Canada show higher figures, not to mention about Sweden, Norway and Iceland.

The beneficial development towards low rate of DWI cases in traffic flow is achieved through a purposeful work combining several measures, among which public communication forms the main stream. The annual campaigns, again, form the framework for public communication. Themes and slogans in campaigns have varied, and some principles in organising successful communication can be observed.

Development of themes and slogans in communication

Increasing amount of traffic accidents formed a serious social problem in 1950s and 1960s. Alcohol was recognised as one of the most distinctive causes of accidents, and in public communication a *direct ban* of it in traffic was fostered. "Spirit away from traffic" was a typical slogan at that time.

The development of traffic safety turned positive at the 1970s and also the public communication received a new tone. *Rational decisions* were promoted by slogans like "Make a sober decision when being sober". The risks of being caught by police enforcement in traffic were dressed in side of the increased risks causing a serious accident if alcohol was in blood. Towards the end of 1970s and at the beginning of 1980s another argument for rational decisions was found: the costs of drunken driving are high. They are high for DWI-drivers themselves and for the society as a whole.

A new theme, stressing drivers' duty to *master the situations* was launched in 1984 by the slogan "If you drink don't drive - if you drive, don't drink". The theme remained some five years, even though the slogans changed. Drivers' personal responsibility was stressed, as well as direct advice to "let it burn before you drive".

Towards the end of 1980s campaigns were supported by social dramas acted by street theatre group. The main theme was now *social responsibility* of all citizens and especially of young people to prevent drunken driving in the nearest social environment, and in occasions where it is known to be quite common.

Results and principles

As was pointed out above the proportion of drunken drivers in traffic flow has decreased from 0.5 per cent to 0.2 per cent. However, the present level was achieved already in the mid 1980s and after that the proportion has remained unchanged. On the other hand, the increasing consumption of alcohol during the last decade did not cause increasing drunken driving. The anti-DWI publicity, realised by annual campaigns seems to have compensated the pressure brought by increase of the alcohol consumption.

The results in terms of alcohol related accidents are also somewhat ambiguous. The trend in the absolute figures is positive; the number of victim killed in DWI-accidents was about 150 in 1970s and the average has been about 80 during the last ten years. At the same time, the general development of traffic safety has been even more beneficial. This means that the proportion of victims killed in DWI-accidents has slightly increased. Moreover, the alcohol related accidents of impaired pedestrians and cyclist have decreased in pace of the DWI-accidents without any specific measures addressed on them. Accordingly, it is possible that the positive results have been achieved with some other means than the anti-DWI publicity. But it is also possible to interpret from these developments that the campaigns described above have contributed to the beneficial development of this specific group, where the positive results would not have been possible without them.

The most impressive results in connection with the drunken driving campaigns are the values of visibility and social impact measured after launching the slogans. Quite typically the visibility values were above 70 per cent some twenty years ago, and they have been as high as 95 per cent in the latest campaigns. Intensive public debates have been generated around the campaigns.

The principles which seem to be important are: *continuity* of the work with annual campaigns and permanent publicity of the relevant issues, keen *temporal connection* of campaigns with the other simultaneous measures like intensified enforcement, and a *concretised message* to a specified group of recipients in the campaigns.

2.3 Communication strategies adapted to defined group of receivers

2.3.5 Particular groups: influence of alcohol, drugs or medicines

2.3.5.2 *Anti drink driving campaign in the United Kingdom*

Historical background, results achieved and challenges ahead

Mr. Allsworth (United Kingdom)

Background

Thirty years ago a quarter of all drivers killed in road accidents had more than 0.8 grammes/litre of alcohol in their blood. The British Government tackled the problem by introducing a legal drink/drive limit enforced by roadside screening (the 'breathalyser') in cases where police had reason to believe that a driver had been drinking. This strategy led to an immediate one third reduction in accidents involving alcohol.

As a result, drivers adopted strategies to avoid the, albeit low, likelihood of being stopped, and over the next ten years the alcohol factor in fatal road accidents rose even higher than the proportion existing before the breath test.

In 1976 the Department of Transport carried out a major review of its policy and determined that the most effective approach to the problem was to increase the public's awareness of the road safety risks involved in drinking and driving.

How it has worked: advertising strategy and effect

Early advertising ran at Christmas time with slogans such as "think before you drink before you drive". Campaigns showed the consequences of drinking and driving (the scene of an accident, a crash with car occupants being killed, being stopped by the police, a slight accident between two vehicles where the "innocent" driver has been drinking, losing your licence, etc.) and raised awareness of the repercussions on the driver of drinking and driving. Activity by the police and by local authority road safety officers were an essential part of this campaign.

Over the ten years to 1987 this strategy led to dramatic changes in attitudes towards drink/driving. Drinking and driving which had previously been to some extent socially acceptable became much less so. This led to a falling number of road deaths and serious injuries involving alcohol.

From 1987 the message was strengthened to bring society fully behind the campaign and ostracise drinking and driving. Using the slogan, "Drinking and driving wrecks lives", the advertising featured the dreadful consequences to innocent victims and their families, to drink drivers' friends and families -- as well as to drink drivers themselves. It was at this stage too that the campaign was extended to other parts of the year to demonstrate that drink driving was not just a Christmas issue.

In addition, a new offence of causing death by careless driving when under the influence of drink or drugs, carrying a heavy prison sentence, was introduced in 1992.

The result was an improvement in attitudes to drink driving, a decline in the incidence of drink drive related casualties and a decline in the number of positive breath tests.

How we work: creating effective campaigns

All campaigns are based on research and involve the participation of other agencies, including the police and the media.

Qualitative research is carried out at creative concept stage and effectiveness is evaluated through quantitative research carried out both before and after each campaign. In addition periodic qualitative research using focus groups probes public attitudes to drink/driving.

All campaigns are discussed with a Campaign Planning Team. The Team is chaired by the Department's Head of Publicity and consists of representatives from other government departments, local authorities, the police, private sector organisations, etc. Information is exchanged on creative and media proposals. The Team also looks at the effectiveness of past campaigns and what can be done to ensure the effectiveness of future campaigns and ways in which the constituent organisations represented can support the campaign at both national and local/regional level.

A high profile national campaign is run annually in the lead up to Christmas and the New Year. The main medium is normally television with possibly radio support. More recently summer campaigns have been introduced which besides television advertising have also used roadside posters.

The national campaign acts as a focus for regional/local campaigns, which together with a high profile ministerial launch can more than double the value of the amount spent on paid media.

Statistics and research information about drinking and driving, together with leaflets, small posters, film and tapes for TV and radio are all brought into play to support those backing the national campaign.

The challenges to maintaining success

There is no doubt that the incidence of drink driving has been considerably reduced. But there are now signs that the gains are diminishing -- possibly as we reach the hard core of drinkers -- and it is likely that it will be harder to make further progress through advertising. There is general acceptance and understanding of the drink drive message. Those who drink and drive are, on the whole, consciously choosing to do so.

The challenge for the future is to try to find ways of making progress within the hard core of drink drivers.

There is also a practical challenge to be faced as a result of the increasingly rapid fragmentation of the media.

In the United Kingdom the number of TV choices has until recently been limited to two non-commercial and two commercial terrestrial TV channels. We bought space on the commercial TV channels and regularly reached 70 per cent or more of our audience.

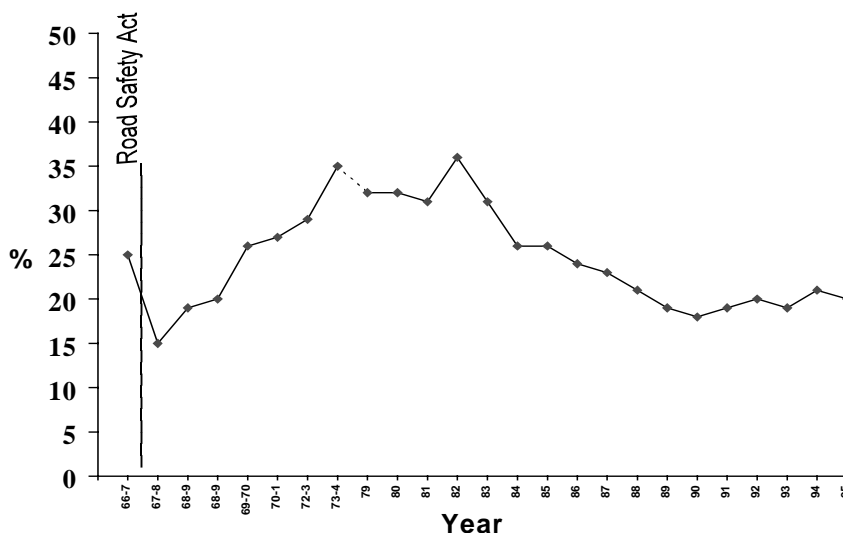
There are now five terrestrial channels (three commercial) and nearly 40 satellite and cable channels, all commercial.

In 1998 the advent of digital TV will make available a further 200 channels. As these channels multiply and specialise they are expected increasingly to draw audiences from the mainstream channels. This could particularly affect the younger drivers who make up our main target audience. The challenge we will face is how to continue to reach that audience, with limited resources, in a cost effective manner.

Striking and powerful advertising, unveiled by transport ministers at high profile media launches, have always attracted a great deal of media attention and, at times, controversy. The resulting editorial publicity can more than double the value of our paid advertising. As media continue to diversify, the value and importance of this free editorial coverage in reaching our target audience will continue to grow.

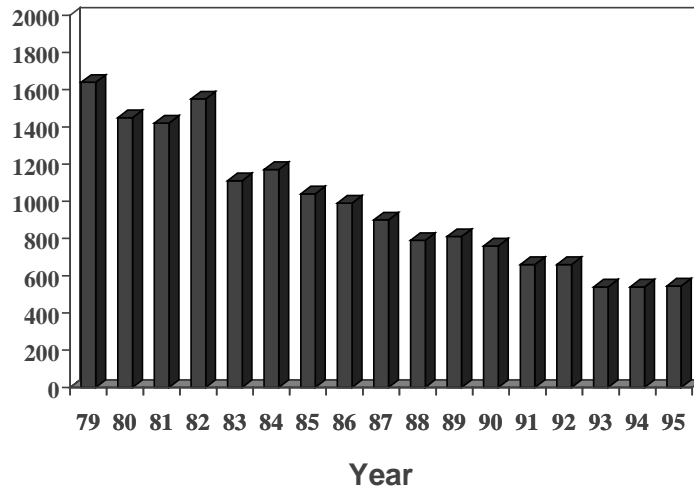
Figure 16.

% of drivers and riders killed in accidents who were over the legal limit 1966 - 1995



Source: Department of the Environment, Transport and the Regions (DETR), United Kingdom.

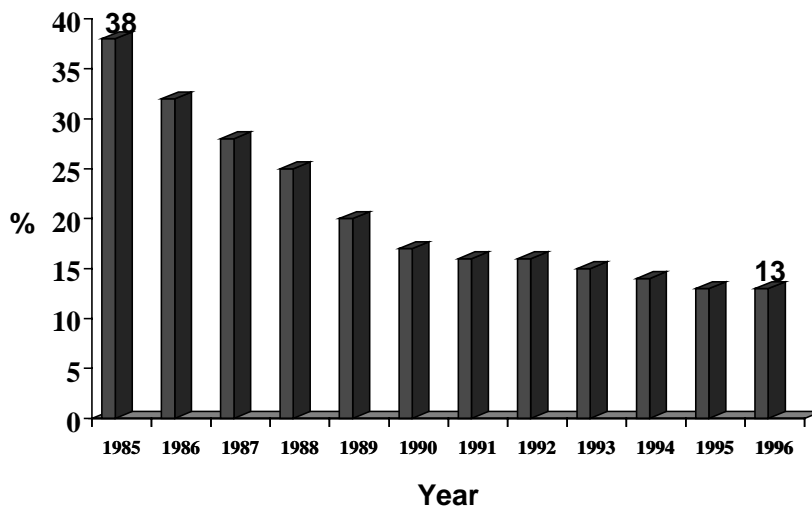
Figure 17.
Number of deaths in road accidents where driver was over legal alcohol limit
1979 -1995



Source: Department of the Environment, Transport and the Regions (DETR), United Kingdom.

Figure 18.
% of total number of breath tests which showed illegal blood alcohol levels¹ 1985 - 1995

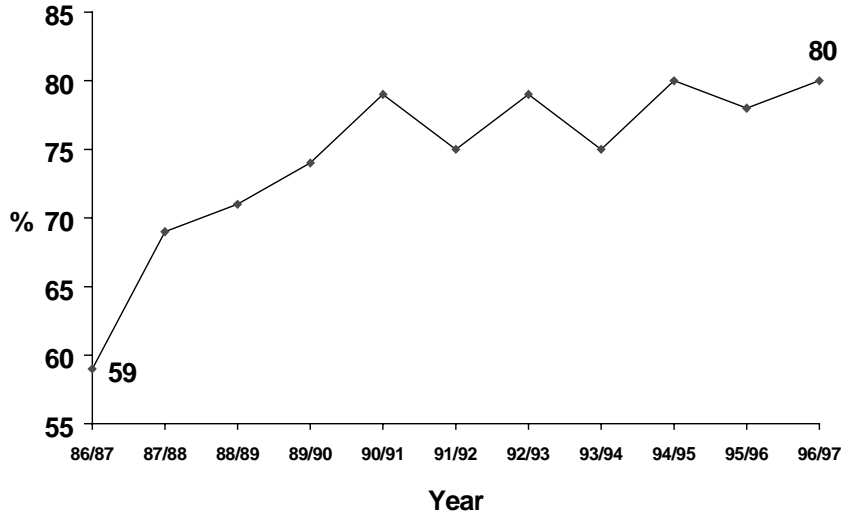
1. includes drivers who refused tests



Source: Department of the Environment, Transport and the Regions (DETR), United Kingdom.

Figure 19.

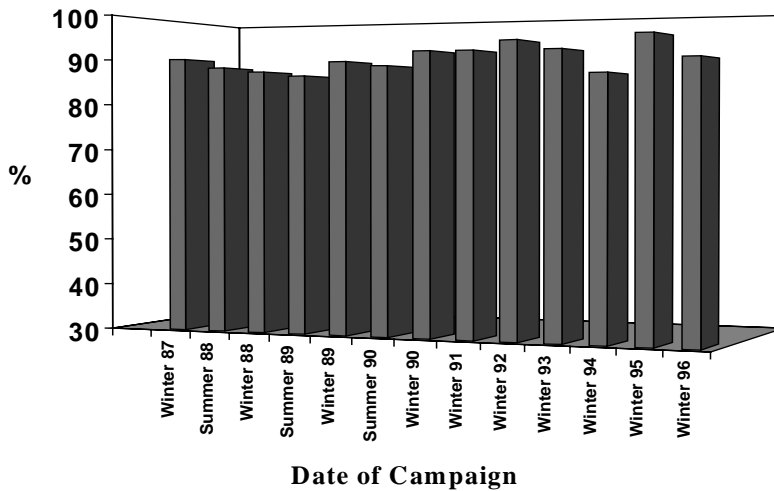
% of people agreeing with the statement
“I never drink and drive under any circumstances”
1986/7 - 1996/7



Source: Department of the Environment, Transport and the Regions (DETR), United Kingdom.

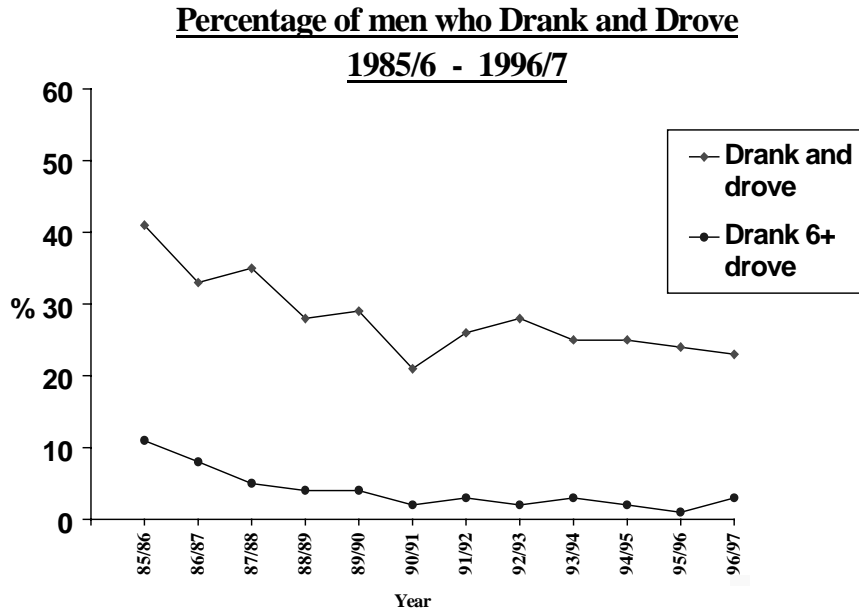
Figure 20.

Prompted recall of campaigns
1987 - 1996



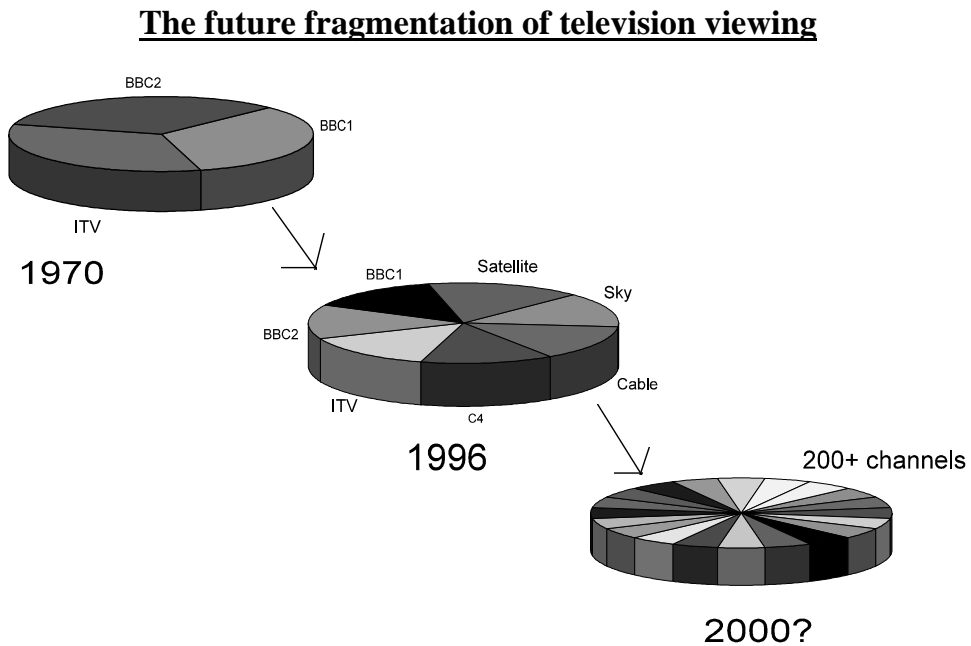
Source: Department of the Environment, Transport and the Regions (DETR), United Kingdom.

Figure 21.



Source: Department of the Environment, Transport and the Regions (DETR), United Kingdom.

Figure 22.



Source: Department of the Environment, Transport and the Regions (DETR), United Kingdom.

2.3 Communication strategies adapted to defined group of receivers

2.3.5 Particular groups: influence of alcohol, drugs or medicines

2.3.5.3 *The “Bob” campaigns: an adequate answer to drink driving*

Mrs. Schevelenbos (Belgium)

One of our major concerns is to highlight the problem of drink driving. According to our own estimates and all the studies on the subject, over a third of serious accidents is alcohol related.

This is why a campaign is launched every year on the initiative of the Belgian Road Safety Institute (IBSR) in order to warn drivers about the dangers of drinking and remind them that there are ways of avoiding the drink-driving trap.

For several years we have adopted a resolutely positive approach by trying to influence the people with whom a driver associates, make drivers aware of their responsibilities and enhance the image of driving without drinking.

The concept of Bob as “a male or female driver, who refrains from drinking and who is given the job of driving everyone in a party safely back home” was created in December 1995 as a new strategy -- in addition to recommending people to use public transport or consume non-alcoholic beverages -- aimed at helping people to steer clear of alcohol when they know they have to drive.

The concept of the sober driver, which had already been highlighted in earlier IBSR campaigns, has thus been given a name, Bob, making it easier for people to relate to the concept in everyday social life. Bob is not a real person but a character with a role anybody can play. Any group going out together must ensure there is a Bob who will drive them all safely back home, which will motivate “Bob” and add to his standing in their eyes.

Co-operation between the IBSR and the Arnoldus Group, a body which was set up by the Belgian Breweries Confederation to help curb alcohol abuse and promote responsible attitudes to beer drinking, led to the first Bob campaign which was conducted from 1.12.1995 to 15.1.1996. The message that “it’s great for us when our Bob is on the wagon” was intended for all members of the community, whether they were young or old, men or women, and appealed to everybody to behave responsibly.

The fact that the brewers and HORECA are our partners in our anti drink-driving campaigns is extremely significant, since it proves that the business circles concerned have understood that pressure from the public against drink-driving is mounting and that they have to assume their responsibilities with regard to this social problem.

This strategic alliance between the IBSR and Arnoldus can only boost our message, for it is based on a consensus on the prevention of alcohol abuse, compliance with the legal limit (0.5 per thousand), the need for checks and an educational approach to the problem.

Bob was very soon a great success. A survey at the end of the campaign showed that Bob was a celebrity, since 83 per cent of the respondents already knew who Bob was. Bob’s success was also

due to the name given to a concept that already existed: that of a driver who is looked up to and not ridiculed for not drinking. This is an extremely important point, especially for young people who are greatly influenced by their peers and group attitudes.

Once the public knew Bob, this had to be reflected in their behaviour and Bob had therefore to be seen as a model and not as a victim.

For this reason the emphasis in the second Bob campaign in the summer of 1996 was on having fun and taking your turn to be Bob, or in other words on team spirit.

Also, by identifying with Bob, you were no longer a nonentity but somebody who was to be admired, who made sure that everybody had a good time and who had the support of those around him.

It was no accident that this second campaign was launched on the first day of the summer of 1996. A “Bob”, however, can be elected at any time during the year so that everyone can return home in safety after enjoying a night out.

The results of the tests after the second campaign showed how successful the concept had been and its significant impact on the public, for 90 per cent of the respondents knew Bob, and of these 37 per cent of men and 40 per cent of women had already been Bob. Moreover, “Bob” had made a very good general impression in Belgium since 94 per cent of the respondents approved the initiative.

The two campaigns were therefore so effective that Bob quite simply could not be overlooked when there was any talk of drinking and driving. Everybody knew who Bob was and many people had already been Bob, especially among the under thirty-fives (46 per cent).

After the advent of Bob, you were no longer a wimp because you refused to drink if you had to drive. Bob was not only accepted by the people around him but also respected and admired.

Once everybody knew Bob, awareness had to be heightened so that the choice of Bob would become a reflex as soon as there was any talk of drinking and driving. After messages to improve knowledge and attitudes, the third campaign (1.12.1996 to 15.1.1997) had to put over a message on behaviour. Now that the target group was quite familiar with the message, it had to be encouraged to act accordingly.

In addition Bob had moved on from making an important contribution to an evening out to playing the leading light, i.e. the life and soul of the party who, by offering to be Bob, persuades the others to go out and enjoy themselves and at the same time takes responsibility for seeing them safely home. This also explains the slogan: “Who gets the car keys so we can all have a good time?”

This slogan in fact implies four questions:

- By asking who is to be Bob this time, it maintains the practice of taking turns.
- It suggests admiration for Bob by asking who is to have the privilege of playing the part.
- It also suggests a challenge by asking who will dare to be a Bob and assume his responsibilities.

- Lastly, those in the party continue to play an important role since they always choose their Bob by asking who is to get the keys.

Unlike the two earlier Bob campaigns, in which two different posters with the photo of a Bob were used in each case, we opted this time for an impersonal message showing a key and a key ring, the two symbols of the Bob concept that are now sufficient for identification with him.

The bars where the target group happen to be when the drinking and driving problem arises also play an important part in this campaign. The bar manager plays a leading role with the other stars -- the evening's Bobs. He undertakes to run his business as a "Bob" bar and keep his eyes open; the customers reward their Bob and are helped to do so by the bar manager who can play a positive role. Bar managers have been asked to display on their front windows the Bob key ring and the slogan "it's great fun here when Bob's driving." In reply to an answer form, they receive a "Bob kit" (campaign posters, table stands with participation forms for customers and "Bob" key rings).

Brewers as well as bar owners thus faced up to their responsibilities with regard to drink driving in this campaign.

As the Bob image was being developed, we also brought in Bob on his own. It is not only the revellers who choose a Bob when they are out on a spree. All drivers without exception are confronted with the drink-and-drive problem and must give some thought to their predicament. When somebody wants to celebrate on his own, he is his own Bob and is responsible for himself and other road users. The Bob campaign draws his attention to the fact that he must show self-control, an effort to which bar managers as well as breath tests can make an important contribution.

According to the results of the last survey in February 1997, 94 per cent of Belgians knew Bob (98 per cent among the under thirty-fives), while 96 per cent of respondents thought that the Bob initiative was positive or very positive.

In terms of practical action, 39 per cent of men and 52 per cent of women had already played the part of Bob. The most favourable trend was among the under thirty-fives, of whom 54 per cent had at some time been Bob.

As for the Bob experiment organised for the first time in bars during the late 1996-early 1997 campaign, it was also a success since 40 per cent of those who visited a bar during the campaign took part in the initiative, which had an approval rating of over 80 per cent.

Bob will continue to play a key role in our various efforts to heighten awareness of the drink-driving problem. In other words, Bob will be present in our year-end and summer campaigns. He will also be on radio and TV in our ongoing messages. We shall also continue to co-operate with HORECA, and stand up for the idea that bar proprietors have a duty towards society. We therefore see communication as a long-term effort to bring about a basic change in behaviour.

WORKING SESSION No 2:

CONSTRAINTS AND LIMITS TO COMMUNICATION STRATEGIES

3. CONSTRAINTS AND DIFFICULTIES TO BE TAKEN INTO CONSIDERATION

3.1 Obtaining the political will to communicate in road safety

Mr. Krystek (Poland)

“If we are talking about something we cannot measure,
then we do not know what we are talking about” (Kelvin)

1. Introduction

The fact that road accidents are dispersed in time and space makes it relatively easy to keep the public unaware of the growing threat to human health and life that it is exposed to in road traffic. This is because the closest surrounding of man observes very few road occurrences, and so the subjective feeling of risk is insubstantial, too. Meanwhile global statistics (if they are made public at all) do not appeal to a single person as the information they contain about the numbers of killed or injured in road accidents has very little weight. Similarly to information on the number of deaths of cancer resulting from smoking tobacco, or data on the frequency of diseases of the circulatory system resulting from bad eating habits or lack of physical exercise. Therefore the system of informing the public on the threat to man’s life and health in order to shape his awareness of the size of the risk, constitutes the point of departure towards evoking in the public the need for improvement of their safety (Krystek, 1996).

Hence the question at the very beginning: how to measure the level of safety in road traffic if the only scientifically true measure of safety is absence of accidents (Rumar, 1988). Does that mean that the intermediate states between “safety” and “unsafety” are difficult to quantify, so they are immeasurable? How to run road safety promotion campaigns while we are having such fundamental problems with defining the phenomenon we want to protect the public from - this is a rhetorical question that we in Poland are still unable to answer.

Co-operation and communication between politicians, road users and professionals

The threat to the health and life of road users is a difficult issue both for the citizen and politician;

- for the citizen; because usually what happens is that he is unaware of the road traffic risk figures; the total number of fatalities in the country or a public health rate (fatalities/100 000 inhabitants) is rather an abstract number for an average citizen,
- for the politician; because the social losses inflicted by road accidents (Poland's losses are estimated at more than 7% of the state budget) are distributed over the particular institutions and private individuals and hence do not directly affect the government administration.

At the end of the day the citizen does not feel the need for a road safety improvement to the extent to which they need water supply or a new street in their town, and so the citizen sees no point in exerting pressure on the authorities to get them to intensify efforts on road safety improvement activities. At the same time the authorities not motivated by the voters deal with other equally important social problems such as schools, health service etc. and push road safety improvement further away.

Road safety management is a difficult task both for politicians and researchers:

- For politicians; because the process of management and implementation of road safety measures involves specialists from various fields: transport, economics, engineering, law, psychology which makes it more difficult for the politicians to feel confident in this jungle of specialities.
- For researchers; because still little is known about the causes and circumstances of road accidents, the data base on road occurrences is insufficient and what is more it is difficult to translate the theory into practical activity. However, researchers continue to work not only on developing the theoretical part but also on perfecting methods of its implementation to provide the politicians with a scientific basis for road safety improvement activity (Muhlrad, 1994).

Co-operation between professionals and politicians is an important issue; politicians are not really pressured by the public to initiate comprehensive road safety improvement activities which in turn would bring assignments for research projects and implementation projects. Professionals, on the other hand, complain that politicians call their work “general” and “unrealistic” which in turn means that no projects are ordered.

Apart from that this lack of communication between politicians and professionals brings about a methodical problem in road safety improvement activity which is the following: professionals treat the road safety problem as a comprehensive one consisting of complex relations between its components. The politician however, strives at dividing the problem into concrete elements (e.g. man - vehicle - road) as this makes it easier for him to assign the accountability to the departments, according to the existing structures, ignoring the researchers' calls for an integrated action of specialists from various sectors.

As it stands right now the process or communication in the area of road safety can be brought down to three elements: “road user - politician - professional”. Unfortunately, the road user has relatively little influence on the result of this process. So what is left is communication on the line “politician - professional”, made quite clear today which does not mean that it is at its best. Very few projects are funded thanks to political decisions and so politicians and managers can influence the subjects and scope of research. This is quite a common phenomenon namely that the opinions of politicians on road safety are often shaped by events that the public finds scandalous. A few

accidents involving children could start a children road safety improvement programme even though research does not qualify children as a high-risk group. Decisions made by politicians can also be shaped by general opinion; for example “elderly people cause more accidents than others” so the easiest way would be to introduce an upper limit of drivers’ age. The result which is a social isolation of this group is not really a problem of road safety (Ledru, 1994).

At present road safety campaigns are based on the current level of knowledge of the authors, which is how they perceive the problem. Therefore the authors usually refer to a one cause theory and publications of the type “more than 90% of accidents are caused by the human factor”. At which point educational and repressive action gets intensified, oriented directly at man. Another way of approaching the problem is the “black spots” method where we explain that engineering activity on the road will ensure a significant improvement of road safety. Such action is oriented at road services. Unfortunately it usually does not include ways to convince the public about the sense and importance of the road safety measures that have been used. Therefore these measures are perceived as limitation of freedom. Multidisciplinary approach seems unavoidable because of the fact that there are many causes to a road accident and this requires this particular approach.

The main obstacle in using this approach is having to gather several partners from various sectors under one motto “A road safety improvement programme”. One also has to concentrate enough funds, divide the roles and accountability for performing the roles. At present road safety does not seem to be a clearly specified task of the government. Establishing the National Road Safety Council was meant to provide a platform used to formulate the state policy on road safety, it would ensure stable sources of road safety programme funding, co-ordination of implementation work, effectiveness evaluation and correction of the next stages of the programme. In the meantime the Council which has no legal representation or its own funds or a bureau of experts remains a body whose only role is to assess the state of road safety in the country only based on reports of the Police Headquarters and listening to reports of representatives of the particular ministries and institutions on the activities they do in their line of duty. So practically there is no platform of communication just on the “politicians-professional” line but also on the “politicians-politicians” line as the Council meets only twice a year.

From among the several groups of road users, pedestrians are mostly exposed. But in reality road accident casualties, irrespective of which group they belong to, suffer the most. They have no organisation that could represent them before legislative or executive authorities, as is the case with auto motor associations. The end effect is that their interests are not protected which can be characterised in the following way:

- the motion filed with Parliament to reduce the speed limit in urban areas to 50 km/h was rejected by a strong lobby of drivers whose interest is contradictory to that of pedestrians;
- neither the public nor the administration know anything about what happens to road accidents casualties, about the degradation of their lives caused by a lost physical or a mental ability resulting from road accidents. What is considered a disgrace is the results of road accidents and it ends in a report on the number of killed and injured in a given year (Haegi, 1996).

And so we have yet another important goal to accomplish “mutual communication about the causes and effects of road accidents and about the losses suffered by the public due to that”. How to accomplish this goal?

An attempt to bring politicians closer to professionals should start by declaring efforts made towards the same joint goal; at the end of the day we are all road users (as pedestrians or drivers) so we can imagine the level of risk and do not want to be a victim of a road accident. This determination of a common goal makes sense in that it helps to counteract frequent cases of undermining the importance of compilation work of international research or our own research projects. In the meantime an important source of knowledge for professionals that is the data from the international data base of OECD countries called IRTAD is thought to be useless and costly statistics while we have been trying to include Poland into this system since 1994. Even Poland's membership in OECD since last year has not changed the status of this issue.

Accidents are no doubt a weakness of the transportation system. Therefore politicians responsible for the functioning of the transportation system usually see their roles as ones in planning, construction and maintenance of the transportation system to provide mobility. Road accidents are not only a deficiency of the system but also a weakness of those who manage the system and use it. That is why they are treated as a shameful thing and possible activities to improve road safety are forced by the pressure of economic and social loss.

To accomplish things in the area of road safety we must enhance forms of co-operation and communication on the "politicians-professionals" line. The main task here is promotion of a comprehensive approach to road safety in decision-making procedures. To accomplish these we need first of all to examine the existing procedures of road safety management to be able to formulate strategies of acting in the process from a decision maker to a selected risk group. Next we need to answer the question "how to convince the politicians about the importance of road safety"; it is not enough to present them with basic knowledge about the campaigns carried out so far, we need to help them to orient their decisions at a multidisciplinary approach to the problem, not a singular one, according to the chart that marks the responsibilities divided between the particular ministries (Goos, 1996).

A proper policy aimed at enhancing the safety of road users should have a dual approach to the problem:

- on the one hand, it is necessary to intensify efforts which are effective today, that is "corrective" action;
- on the other hand, the approach to the road safety problem must change towards "preventive" action.

In this way one can reach a state of superior control over extensions of the infrastructure which will ensure adequate safety conditions. That is why a politician should consider long-term effects of his decisions, which he has not done so far.

Today in the light of scientific research of OECD countries (OECD, 1994) we have no doubts that the problem should be approached comprehensively. First we need to diagnose the problem to determine the high risk group, apply adequate measures and finally perform an effectiveness evaluation of the project. We can consider it well done when the final outcome of the communication on the "politicians-professionals" line is a compromise reached by the parties with great difficulty. We just have to have hope that the next international conference in Poland will provide this platform of communication "politicians - professionals - road users". The question is, who represents the latter today?

Conclusion

In 1994, the Minister of Transportation and Maritime Economy commissioned a research project “GAMBIT - Integrated Road Safety Improvement Programme in Poland”, funded by the Scientific Research Committee. The specific goals were to:

- identify the problems of road safety;
- define the targets and develop programmes of their completion;
- develop a road safety programme;
- develop a strategy to promote these programmes to achieve political support for the idea of road safety improvement and its social acceptance.

The Programme (GAMBIT’96) contains a strategy of preventive measures that need to be implemented in Poland to stop the growing tendency of accidents in Poland and to make it decline continually. The conception has been elaborated on the basis of knowledge collected nationally and of Western countries’ experience. It is the authors’ opinion that the solution adopted will help avoid the mistakes made earlier on by Western countries and balance the 20-25 year delay between our countries. Implementation of the Programme will substantially facilitate Poland in adjusting to the problem solving methods in terms of road safety used in European Union countries (Brouver, 1995).

The Programme puts extra stress on a systemic, integrated approach to the problems of road safety. What it means is concentration of activities on the most important problems and an attempt to solve them using the widest possible scope of various projects. They all are supposed to lead to anticipated changes in the behaviour of road users. The most difficult part of the Programme’s task was to optimise the division of tasks among the particular road safety improvement measures.

The main assumption of the Programme is that the Polish public as well as state administration and local authorities will appreciate the significance of road safety and will actively get involved in projects aimed at reducing the level of risk to health and life in road safety. Hence one of the basic conditions of the programme’s success will be to gain social acceptance for the solutions proposed in the Programme.

The Programme contains a concept of road safety system, which makes it possible to pursue a professional and long-term policy in Poland in this area. The point of departure upon formulating the policy was first of all an analysis of Western countries’ experience and recommendations of the World Bank (Gérondeau, 1992).

Finally the Programme contains a proposal of financing of road safety activities and also an attempt to estimate the costs of implementing the solutions proposed in the Programme. It is the authors’ opinion that the size of social and material loss annually borne by Poland in road accidents expenditure is sufficient justification of allocating funds to finance the activities.

The GAMBIT Programme was completed in July 1996 (Krystek, 1996). In March 1997, the programme was presented at the meeting of the National Road Safety Council. Unfortunately until today there has been no decision on the funds to support the Programme. The second intermediate goal of the programme said: “To obtain the public support for road safety activities”, and intermediate goal three said, “To establish the basis for an effective and long-term road safety policy”. Three months ago Parliament rejected a motion to reduce speed in urban areas to 50 km/h. What it means is that communication with the public has failed, because it is this communication that should have

explained the meaning of this proposal. And since Parliament rejected this proposal it also means that we have not established the right basis for an effective and long-term road safety policy.

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Road accidents statistics do not reflect the actual size of moral and material losses suffered by the public. Road safety improvement is not a onetime occurrence; it is a process, a tedious and long one. This process requires consistency and first of all the basic conditions have to be met. They are the following:

1. Start road safety improvement with yourself; when you are a politician, manager or scientist you have the special moral responsibility for driving properly.
2. Discuss road safety with other people, at work, at home; this is the simplest way of disseminating knowledge.
3. Never treat the suggestions and opinions of others as unprofessional.
4. Only a diagnosis based on in-depth studies of accidents can be the basis for developing a good programme. Word of mouth opinion is usually subjective.
5. Develop the programme together with those who will implement it, make them understand the goal. Otherwise they will reject it.
6. Publish information about how single campaigns contribute to the general cause.
7. As the author of one road safety campaign do not get attached to it to the extent that you perceive criticism as personal attack.
8. The most frequent cause of failure of a programme that already has a stable source of funding is that the public does not accept it. Make them understand what the level of the risk on the road is.
9. It is best to convince the politicians about the sense of doing a programme, because it is them that have the funds and methods of reaching communication media and so they can reach the public.
10. Nobody is perfect; you must realise that a stage by stage correction of a programme is not a failure, you must correct your programme to achieve greater effects at the final stage.

To refer to the motto, a saying of Kelvin's, and to conclude, an attempt could be formulated to determine the admissible level in the lack of road safety in a given country. It is a level of risk that can still be tolerated by the public. Perhaps it is a controversial definition but the indicator of fatalities in road accidents (killed/100 000 inhabitants) in Poland is on the average three times as high as their best counterparts in EU countries. This proves the definition right, if the high level of risk is still tolerated by the public. So, how can we become member of the EU if the public there will not have the high level of risk in road traffic in the new European community?

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3.2 Financial means

The future is no longer what it was: financial means – constraints or possibilities

Mr. Goos (Netherlands)

1. Introduction

There are casualties on our roads each and every day -- the consequences in many cases stretching many years ahead for those affected. Lack of safety out on the road also causes a great deal of damage in economic terms.

Nevertheless, much has been achieved. Danger on the roads is not some natural disaster that overcomes us and which we are unable to do anything about. Recent decades have proved that it really is possible to make traffic on the road safer.

That is why we must continue with united strength -- nationally and internationally -- to pursue the activities designed to promote road safety. The departure point here should be that every road casualty is one too many. This idea is what lies behind the concept of "double zero vision" in Sweden.

The human factor plays a decisive role in more than 90 per cent of road accidents. Information, communication and publicity campaigns are important tools in influencing people's behaviour out on the road.

Nevertheless, budgets for these "human factor" measures have been under significant pressure for quite some time now.

It is important to ascertain how this comes about and what arguments are at play.

The question then arises of whether the situation imposes a restriction on activities or inherently creates new opportunities.

2. The way things used to be: the simplicity of the 1970s

Information campaigns in the Netherlands have traditionally been handled by the Dutch Traffic Safety Association - VVN.

The Association is a non-governmental organisation. Large-scale national campaigns are held each year. Past topics have included alcohol, driving speeds, seat belts and child safety. The campaigns comprise such elements as billboards and posters along motorways, provincial roads and in local authorities, leaflets and TV and radio spots.

The Dutch Traffic Safety association was commissioned to run the campaigns by the Dutch Ministry of Transport. This Ministry financed all the campaigns. The T.V. and radio broadcasting channels broadcast the spots, and very frequently in many cases. They did this free of charge, endorsing their social responsibility for promoting road safety.

In brief, a situation that is easy to understand with a highly centralised or national approach. The Ministry of Transport acted as the (sole) financier and had relatively generous budgets available.

3. Changes: the transition during the 1980s

There have been some fundamental changes afoot in the road safety network in the Netherlands since the eighties.

Essentially the main trends are as follows:

Decentralisation

Road safety policy has increasingly become decentralised. Resolving the bottlenecks close to the public is the basic principle.

The Ministry of Transport does retain a co-ordinating and control function, but the lower-tier authorities i.e. the provinces have been given a major responsibility in implementing and co-ordinating regional road safety policy. Budgets for education and information campaigns have also been decentralised.

At present, decentralisation policy is being evaluated. One of the discussion points is how local authorities can become more implicitly involved in road safety policy.

The government withdraws

For decades, promoting road safety has been the (exclusive) domain of the government. Laws, rules, financing policy, were the instruments for curbing the negative quality aspects of traffic and mobility i.e. the lack of road safety. The government was the sole agency solving the problem. Increasingly, however, the government is decreasing its role and appealing to society to assume its own responsibility.

Promoting road safety is a shared responsibility. Society (both individually and collectively) should be made aware that it shares the problem.

Cuts

Government budgets are under significant pressure. Cuts to subsidies and project financing are the order of the day. This development is expected to continue in the future. What this means for our association is that if we are to continue our activities with the same level of intensity, we must increasingly seek alternative sources of financing, in other words non-governmental financing.

Business-like approach

A business-like approach to road safety is increasingly emerging. Government subsidies to NGOs such as the Dutch Traffic Safety Association are no longer determined by what they are, but by what they do, or what they deliver. Input subsidies are converted into financing core tasks. Target results and cost effectiveness have become key concepts.

The government itself is also increasingly thinking in terms of objectives and responsibilities. We have been working with quantitative objectives in the Netherlands since 1985. The number of road accident casualties is targeted to fall by 25 per cent in the year 2000 compared with 1985. There is also growing attention in the European Union context for specific objectives and scenarios designed to reduce the number of road accident casualties and accidents.

4. The present: the complexity of the 1990s

The trends referred to in the previous section are having major consequences for our Association, its activities and financing them. As a social organisation, we have the ambition of continuing our activities at the same level and expanding upon them. The reason for this lies in the fact that people continue to die on our roads each day.

As government financing is on the wane, financing from other sources should also be found. This means more funds from society, and from the market.

If you are to be successful in this endeavour, you have to be an attractive organisation and provide products and services that society needs. Our organisation is an independent organisation that works for the public. As in the past we have very often been commissioned by the government, the public has come to regard us as an extension of the government. We are actively seeking to shake off this governmental image. What this actually means is that we want to return to our roots. We once started as an organisation of members of society with some sense of disquiet. Citizens who wanted to act on behalf of vulnerable participants in road traffic. The public must clearly read in the sense of our organisation existing for them and not for the government. Products and services must become contemporary and attractive, we must not only inform people (passively) but also mobilise them (actively). Where possible they should be interactive. The public should be actively involved in road safety, that is the major challenge. To achieve this, we are tying the national information campaigns to concrete local activities.

Our focus is not confined to individual citizens, but also extends to industry. Co-operation with and sponsoring by industry is important. It is in any event a challenge -- a creative one -- to develop activities which create a win-win situation. Social objectives and commercial objectives may well merge, but there must be careful deliberation in advance. It can never be the case that we put our independent position at risk, or allow commercial objectives to prevail above our social profile. This means there must be clear rules of play governing our careful sponsoring policy. The complexities of the 90s are setting rigorous and in any event different requirements for an NGO. Requirements in terms of image, market orientation, financial strategy, effectiveness and efficiency. Apart from the numerous changes, one factor has remained constant, T.V. and radio stations continue to broadcast road safety spots free of charge.

5. The future: railway timetable 2000

In the interests of road safety, a decline in government sponsoring must not lead to a fall in activities.

Not a scenario of cutbacks, but a growth scenario is what is at stake. Developing new opportunities and exploiting them is the challenge.

Although the government share of all financing of all communication activities is on the decline, it is important to identify that significant government financing is and remains vital. Road safety is not just a matter for individual citizens but also a collective and general interest of society. The public has a right to a safer society.

The following lines have been mapped out:

- There must be further co-ordination and concentration of forces to further increase effectiveness and efficiency. At present, three Dutch road safety organisations are discussing how to arrive at an integrated form of co-operation or merging. Greater strategic co-operative links are also being established on other fronts, for example with driving school organisations, motoring associations, research institutes and this trend is an international one. See for example the European Road Safety Federation (ERSF). There is also much more dissemination of knowledge internationally ("best practice") in such areas as the PRI context (*La Prévention Routière Internationale*).
- National information campaigns are associated with regional and local spin-offs. Apart from partial financing by central government, additional financing by provinces and local authorities is coming within reach. The objective is to keep the level of government financing as high as possible.
- attractive and interactive elements are being linked to the information campaigns for the public. For example, cataloguing the public's complaints and opinions via the Internet, or dial-and-win games on the telephone, offering benefit discount on bicycle insurance if following a moped training course. Part of this is that a charge is levied for some services. This generates revenues (users fee).
- Developing communication activities that are to be sponsored or implemented in conjunction with industry i.e. private companies and firms. Some examples can be given here.

The umbrella organisation of motor vehicle insurers is sponsoring campaigns (or part thereof) aimed at driving speeds, alcohol, and vehicle safety (seat belts, head rests). The last alcohol campaign enjoyed mixed financing by government, and the Netherlands soft drinks industry - NFI.

In conjunction with a chain of opticians (Pearle) we developed a campaign with the central theme of, "good vision in the interests of road safety".

With car manufacturer V.W. (PON importer) we are engaging in activities aimed at young people and alcohol (a game on the Internet).

Activities connected with driving instruction and bicycle training are attracting joint financial support from insurance companies (Univé, FBTO).

One solution that we do not have in the Netherlands, but which is still an interesting one which is why I am mentioning it, is adding an additional tax or surcharge for road safety to the premiums for mandatory car insurance. The 10 per cent surcharge would be used for investing in road safety. Such schemes (Fee on Third Party Insurance premiums) have already been adopted by statute in a number of countries.

Finland, Quebec and Victoria in Australia are the countries leading the way here.

3.3 Official and professional organisations examining public opinion and preparing campaigns

Mr. Mikulik (Czech Republic)

The problematic of road transport, especially of road traffic safety stays on the edge of interest of institutions working on the field of investigation of public opinion. The reason why can be a lack of public awareness, preference for other topics, especially political and economical ones. Nevertheless road traffic safety is a social phenomenon concerning almost every citizen who moves in road traffic, either as a driver or pedestrian or passenger.

The only action carried out by a professional institution in the field of investigation of public opinion in the Czech Republic was the international project SARTRE, based on drivers' attitudes towards risk on European roads. The results of the first stage of the project (1991) showed a significant lack of "traffic culture" and knowledge across the driver population in the Czech Republic. The increasing trend in road traffic accident figures in this country can have its roots in those attitudes.

Research on public opinion towards road traffic and especially towards road traffic safety itself should have a positive effect on road users' attitudes, and should at least increase public awareness towards road traffic safety problems. The results of such investigation or survey should be a scientific background for follow up by road safety campaign that should have a chance to succeed.

In the field of road traffic safety we can recognize the following main actors:

- Governmental bodies, especially:
 - Ministries and local Authorities,
 - Research Institutions,
 - Road Administrations,
 - Traffic Police,
 - Health Organizations,
 - Co-ordinating body on the level of government, if it exists.

- Non-governmental bodies, especially:
 - national non-governmental organization, if it exists,
 - automotoclubs,
 - car dealers, car and spare part industry,
 - citizen groups (cyclists, pedestrians),
 - environmental groups,
 - local authorities,
 - private health organizations,
 - non-governmental co-ordinating body, if it exists
 - advertising companies.

We have to take into account, that mostly every actor introducing a campaign has a specific position within the hierarchy of the level from which the campaign is launched. The ministries are more often involved in nation-wide, broader campaigns, the non-governmental bodies cover very often more a narrower target group, which means that the campaign launched by this body is often launched on either a regional or a local level. The co-operation amongst bodies involved at all stages of a campaign is crucial.

Talking about main actors we should not forget one of the most important things - which is, as our Prime Minister said, “every time at least on the first place”. The system of financing and obtaining money plays one of the most important roles in the whole system. If the budget of governmental bodies is often limited, some private enterprises have no difficulty with financing.

Allow me to try to describe the situation in the Czech Republic with respect to official and professional institutions responsible for campaigns in this country.

The official governmental body responsible for launching and co-ordinating road traffic safety campaigns in the Czech Republic is the Secretariat of the Czech Governmental Council for Road Traffic Safety. The Secretariat has a budget for those campaigns, which is a part of total budget from the Ministry of the Interior and should not be used by other members of the Czech Governmental Council for Road Traffic Safety. In recent years, the Secretariat launched the following campaigns:

- “The Butterfly on the Bonnet”,
- “Alcohol and Drugs in Road Traffic”,
- “Dangerous Speed”,
- “Child Restrain Devices”.

The above mentioned campaigns used mostly TV spots, spots in broadcasting, stickers and paid articles in newspapers.

Unfortunately due the organization of work and the attitudes of staff of the Secretariat, the campaigns launched by this body have almost zero effect on public. The reasons why can be defined as follows:

- lack of knowledge of the Secretariat staff, forcing its own attitudes how to solve road traffic problems without respect to research results and codes of good practice,
- the topics of campaigns are launched by accident with no clear goal defined and with no scientific background,
- there is no control over campaigns from the cost/benefit point of view.

The restructuration of the Secretariat of the Czech Governmental Council for Road Traffic Safety with respect to its responsibilities and way of work is essential if we are to achieve positive results through campaigns launched on national level. The situation is more complicated because the Secretariat itself is an integral part of the Administrative Section of the Ministry of the Interior and has to fulfill the tasks given by the section director.

The Czech Governmental Council for Road Traffic Safety consists of governmental bodies and non-governmental institutions as well. Non-governmental institutions represented here are Automoclubs, the Czech Red Cross Organization, insurance companies, etc. Should the situation be optimal the Council would give the common platform for good co-ordination and preparation of tools of communication with road user. Unfortunately, the situation could not be optimal because of the construction of the Council itself. The main problems are as follows:

- the Council itself has no budget,
- the Council has no right either to give orders or to advise its members,
- the Council meets a few times a year, there is no schedule for its work,
- as I mentioned before, the Council's Secretariat is only a unit within a section of the Ministry of the Interior, so the only budget the Secretariat has is the budget of the Ministry of the Interior.

Only a few campaigns were launched by non-governmental bodies in the Czech Republic in recent years. The only one I would like to mention here, is the billboard campaign aimed at the attitudes of drivers. This controversial campaign, using billboards with slogan "Only Ox will not Give the Priority to Zebra" was prepared and totally financed by private advertising company. Autoclubs, especially the Central Autoclub which is getting money from the Secretariat of the Czech Governmental Council of Road Traffic Safety annually (app. 18 millions of Czech Crowns) did not introduce any road traffic safety campaigns within its members in recent years.

The ineffectiveness of campaigns launched by official structures gives more space for unco-ordinated campaigns prepared for commercial reasons - car dealers, car manufacturers and other firms very often send messages across which are in contradiction with road traffic safety. There is the Code of Ethic in Advertising in the Czech Republic, but unfortunately the road traffic safety is not mentioned there. Explanation of this situation can be that this is because, as I mentioned before, the society does not feel road traffic safety is an important problem. The situation is worsened by the fact that young people and teenagers "believe" more in advertising and their behaviour is formed by it.

It is the task of the responsible officials within the government and representatives of non-governmental bodies to improve the situation in the Czech Republic. The solution is well known from the Codes of Good Practice of other countries across the Europe. At this stage establishing goals, human and financial resources and real co-ordination tools is necessary. Communication, through road traffic safety campaigns, if well prepared and used properly, should be one of the main tools, which will lead to the common goal of a road traffic safety policy - the minimization of the number of road traffic accidents and number of people killed and injured.

3.4 Evaluation methods of the efficiency of campaigns

Constraints and difficulties to be taken into consideration

Mr. Järvinen (Finland)

In Finland we have during the last few years focused on increasing the use of helmets in order to improve the road safety of cyclists. The main measures have been mass-media campaigns with local activities. The results have been positive. From the summer of 1995 to the summer of 1996 the use of helmets increased by 6 per cent. Approximately 21 per cent of Finnish cyclists use helmets. At the end of year 1996 statistics showed that cyclists' fatalities had decreased by almost 30 per cent from the previous year. It was very easy to believe that the positive development was due to our campaigns. However a more accurate study indicated that the decrease in fatalities did not apply to the groups whose use of helmets had increased!

Although we can be satisfied with the ultimate result of improved safety of cyclists, we know very little about the effects of our campaign: what was successful and what went wrong? What were the external factors that influenced the process?. We will require all this information when we plan the next step of the campaign for the increased use of helmets. There is need for more extensive and accurate evaluation.

Our example gives two important conclusions concerning the planning and evaluation of campaigns. Firstly, traffic safety campaigns are not separate initiatives. In spite of plans there are always unpredictable external factors that have an impact on the campaign process. As a matter of fact, the modern campaigns take advantage of this phenomenon. Besides the traditional mass-media and advertising activities, campaigns consist of different kinds of other traffic safety measures such as new legislation, education, law enforcement and local events. The integration of different measures makes campaigns more effective. This also means that the demand for extensive evaluation increases.

Secondly, the campaign itself is a complex process. It consists of a large number of elements and procedures. They are usually long-term operations, because changes in people's behaviour are usually slow and take place step by step. That's why there is in campaign planning the need to develop the procedures and materials. This emphasises the important fact that evaluation should be part of every stage in campaign planning and implementation.

A group of experts from the OECD has made a report on Marketing of Traffic Safety. According to its recommendations evaluation should be long term, integrated and constructive.

Long term evaluation means putting the emphasis on strategic thinking and recognising that change is likely to be gradual. It is important to know what was successful and what went wrong in the campaign process.

Integrated means that the evaluation of effectiveness should take place throughout the planning and implementation of different campaign initiatives.

Constructive means that the ultimate purpose of evaluation process is to provide a better understanding of road users and the effectiveness of the procedures.

The campaign plan

Campaign planning usually includes the following elements:

- situation analysis: the problem and “market” analysis;
- formulation of campaign strategy: target groups, objectives, campaign instruments;
- pre-testing of materials;
- implementation of the measures;
- evaluation and feedback analysis.

There are two items in the plan which are very often neglected in practice concerning the integrated evaluation of campaign. The first is situation analysis, which could also be called pre-evaluation, and setting objectives.

Situation analysis: a pre-evaluation

In the situation analysis we define the problems that should be resolved by the campaign. From the accident statistics we find the risk groups, black spots on the roads and the main causes for accidents. Unfortunately we often fail to specify the problem behaviour and especially road users’ perceptions, opinions and attitudes concerning the (behaviour) problem and the campaign issues. We also often fail to give an environmental analysis which could give us knowledge about possible obstacles in the common “traffic atmosphere” among people or some political, cultural and practical problems in implementing the campaign.

A situation analysis which is made with care gives good opportunity to find the right target groups and specify the objectives, campaign instruments and even the design of messages. In a long term campaigning the evaluation of previous campaigns gives important ideas and issues for the pre-evaluation of the next campaign.

For example in Finland we know, due to road user analysis (interviews), that cyclists don’t like to use helmet because they regard helmets as ugly, uncomfortable and expensive. They feel that the helmet makes a mess of their hair and it’s difficult to find a place where to put it while shopping. On the other hand cyclists who use helmet have very easily resolved these problems and they want to be good examples for traffic safety. We also know on what conditions non-users could think they would buy a helmet. This knowledge has been useful in defining the target groups and in designing the campaign messages. Step by step and campaign by campaign we get closer to our customers, if we take care of evaluation.

Setting objectives

The crucial point for any evaluation of effectiveness is the setting of objectives. Good objectives make it possible to monitor progress and ultimately to assess success. But they also ensure clear understanding and consensus by all those involved and they give a clear focus for designing the campaign. It’s not possible to measure achievements without clear original intention.

There are essentially two kinds of objectives in a campaign process:

The target groups' **reactions** to the initiative

- Are they aware of the campaign?
- Do they understand its messages?
- Are they involved?

(The last two points should be evaluated beforehand by pre-testing the ideas and materials)

The **changes** in the target group

- Awareness of the campaign/subject
- Increase in knowledge
- Changes in opinions, attitudes and behaviour
- Reduction of risks and accidents

The setting of objectives often demands courage. On one hand we should have the courage to set challenging objectives, because setting objectives is always also a message. It could be seen as one of the instruments in an initiative that focuses on increasing people's awareness to some specific road safety problems. The Swedish zero-vision is a good example of this kind of objective.

On the other hand objectives should be realistic. Concrete objectives in particular should be within the capacity of the organisation and within the capacity of a campaign as a means of influence. Sometimes it also requires courage to remain realistic. An information campaign is rarely the only way of solving a concrete traffic safety problem. We professionals must recognise this when politicians suggest this as an easy answer to an acute problem.

The advertising companies often lack realism when they offer their services. If a company offers us a campaign design and assures us that within 2 months there will be large and crucial changes among road users behaviour, it would be reasonable to reserve some level of doubt. A detailed analysis of the traditional mass-media road safety campaigns found that, on average, a 10 per cent gain is the maximum that can be expected in response to any given measure.

In my opinion, one of the realistic objectives for a mass-media campaign is that it should raise publicity for the acute traffic safety problem i.e. increase people's awareness of the issue. It starts with the launching of common activities and different processes concerning the issue in media and administration, aiming to focus on peoples' awareness. One of the goals of a campaign is to create a positive atmosphere for the traffic safety issue. It leads to both a positive and negative debate on the issue and to alternative solutions to resolve the problem. The campaign organiser must be well prepared for this debate so as to make positive interventions and to support positive activities in the society.

This idea of campaign strategy is called "tuning of thoughts" (as a musician tunes his instrument). The basic idea could be from Galileo. He is said to have stated: "*You cannot teach a man, but you can make him realise things by himself*". We believe that the tuning campaign strategy is one way to do it.

At the beginning of my speech I spoke about the difficulties of evaluating the process of a helmet campaign. The "tuning" idea of our campaign, which was focused on the use of helmets created a debate on the dangers of cycling in general. We believe that this was one of the many reasons why cyclists' safety has improved.

The evaluation of a tuning campaign is complex but not impossible. Besides the ordinary methods the progress can be evaluated by following up the debate in media, political decisions, new initiatives in administration and voluntary organisations, requests for campaign materials and by carrying out opinion and public attitude surveys among road users.

In Liikenneturva we have for several years had an ongoing survey on traffic atmosphere. During interviews road users are asked if they have found any changes in fellow drivers' behaviour, politeness, etc. We have also created a new behaviour index, which gives us concrete knowledge about changes in different features of road users' behaviour, such as use of seat belts and respecting red traffic lights.

I believe that we are able to develop a long term, integrated and constructive evaluation system if we are asked to. One of the most important preconditions for a proper evaluation is that we take it into account in the campaign budget.

4. LIMITS OF COMMUNICATION STRATEGIES

4.1 Admission to the communication media

Information on road safety: part of a global goal

Mr. Flensted-Jensen (Denmark)

We have a goal to fight road accidents and the consequent sufferings of people involved. It is a sympathetic goal which most politicians are willing to support and it is a goal which everyone has their opinion on how to reach it.

In the daily political debate the agenda often consists more of single cases which are typically brought into light by the media on the basis of serious traffic accidents with young people behind the wheel.

In this situation more information campaigns are often mentioned as part of the solution to a concrete problem, such as drunken driving, exceeding of speed limits, etc. Or one tries to find the solution in more severe terms of imprisonment or heavier fines.

Being responsible for information and campaigns is a reason to be delighted that politicians and the population have so much confidence in our possibilities of solving the traffic problems, but it is also necessary to realistically evaluate to what degree road safety information alone can reduce the number of accidents.

In the long term, we can not live with the fact that information and campaigns in many cases only give a limited result in the reduction of accidents. Therefore a thorough evaluation of each case is necessary in order to find out whether a given information campaign may be expected to have sufficient effect. And the campaigns that do not pass this test should be rejected, even prior to their planning. And we who are responsible for the information should have the courage to contradict the politicians and the public when we do not believe in the effect of a given information campaign.

My point of view is that information and campaigns can contribute to change undesirable behaviour, but firstly the result depends to a large degree on which other means we combine with the information and that a considerable effect can only be expected in the long term if we focus efforts on the same problem for a number of years.

The problem analysis

Prior to planning an information campaign, the first thing to do is to make a thorough problem analysis of the actual kind of accident and the behaviour that lies behind. One of the most important questions is whether relevant information is needed at all, which contributes to create the dangerous behaviour?

And is it reasonable to expect that increased information will contribute to change the behaviour of the road-users -- e.g. by influencing them to reduce the speed/observe the speed limits.

I shall not go into further details about these thoughts but should like to emphasise that a positive answer to these questions is an absolute condition before the information is chosen as part of the means to fight the concrete kind of accidents.

Requirements for information/campaigns about road safety

We believe that information can influence the behaviour of the road-users under a number of conditions. First, we have to settle a number of myths about communication and information campaigns.

The recipients of the information do not always act rationally and there may be many reasons why people stick to a particular behaviour which run counter to rational knowledge and facts -- look at smoking for example.

The general population is not interested in our messages and they do not automatically start behaving according to the message.

If the road safety information should have an effect that influences the behaviour a long number of conditions must be fulfilled:

- The information must be available to the recipients.
- The information must be experienced as relevant.
- The information must include clear and unambiguous instructions of actions: Which behaviour (change) is called for?
- The information must contain a possibility for a dialogue or an independent reflection by the recipient of the message.

These are the minimum requirements for public information about road safety.

The crux of the matter is whether the information alone can make the recipients change their behaviour in the desired direction.

I will give a new example of how information alone has led to a massive change of behaviour, viz. the information from the National Health Service about the connection between babies' sleeping postures and cot death.

Here the information alone has made the main part of the parents change their behaviour so that the babies are placed on their backs instead of their stomach or the side, which was recommended earlier.

I can not help thinking why an information campaign has changed a behaviour in the desired direction so easily. The answer is first and foremost partly a strong motivation: to avoid cot death and partly, there are no "expenses" combined with the change of the behaviour. There is not resistance to be overcome if the parents do believe that the message is right.

In my opinion it is one of the most important parameters in order that an information campaign can succeed: if the road-users are to change their behaviour of their own free will via information, we must be able to offer as big rewards/prizes as possible and the change of behaviour must "cost" as little as possible for the recipients.

Unfortunately, it is not always possible to meet this requirement sufficiently and thus it will often become a must that the information MUST play positively together with other kinds of means that can increase the motivation of the recipients of changing a given behaviour.

The central, strategic consideration will be which other kinds of means can be applied and which part does the information play in the total strategy.

Schematically the considerations can be illustrated as follows: if the problem is to reduce speed in town areas in order to reduce the number of killed and injured road-users, we must consider whether it is a problem that can be solved with e.g. information about the risks of too high speed.

Could the problem be more effectively solved through increased police control -- or perhaps automatic speed supervision, which we among others know from Norway? Or is the solution to establish a number of physical arrangements on the roads so that it is no longer possible to drive too fast? Or should you deter the road-users from driving too fast by making the sentence more severe or the fines heavier?

In practice there may be a large number of financial or political obstacles to obtain the most effective solution e.g. rebuilding of road system or massive automatic control. Except from the fact that in a large political/human perspective it is clearly preferable that the problem is solved voluntarily without a big-brother society that is constantly watching its citizens.

Thus one of the conditions for an information campaign often will be that it is chosen because it is an inexpensive solution that does not encroach on the rights of the citizens, although being well aware that it might be possible to solve the problem in a more effective way!

In this situation we as the responsible for the information must work to have the information combined with other kinds of means as far as it is possible.

Here the triangle (information, control and road technology) can be used for inspiration.

As planners of information and campaigns we must try to integrate as many of the elements of the triangle as possible in a combined, goal-directed effort. It will often be possible to connect more police control to a given campaign, typically some weeks after the campaign has been carried through based on the motto: now we have told you how the road-users should change their behaviour, if you do not do it, the police will come and get you!

I think that to a much larger degree we should work with such combined information and control campaigns, and the control should be integrated a direct part of the strategy in the information campaign. Let me give a fresh example of this from a coming Danish speed campaign that starts in April.

The main message is 10 = 44, which refers to a message about speeds and braking lengths.

This is phase 1 of the campaign. Three weeks after the beginning of the campaign further road placards are set up which gives notices about the possibility of road control. These placards are set up the same places as the first placards were set up. And the local police will during the next weeks now and then perform speed controls on these stretches that by the way have been jointly selected by the local road safety committee and the local police.

I am convinced that campaigns of this kind where the more stringent control is directly integrated in the information strategy will give a larger effect than the information campaign alone.

As a last element I must mention that right now in Denmark more severe sentences are in preparation in the form of heavier fines and lower limits for suspension of driving license on exceeding of speed limits. A lucky coincidence, but by rights the information effort should to a still larger extent be part of a long-term combined process where information, more stringent control and more severe sentences formed an integrated whole.

Our goal on the long view must be that the road safety information at the greatest possible extent does NOT appear as a pendant or an isolated part of the road safety work -- but that it is integrated as one of several necessary means to change the behaviour of the road-users. And that considerably more resources are spent to ensure this connection and the interplay between the information and the other means!

I hope that this Conference will contribute to promote this integration and connection and that through the discussions here in Warsaw we can inspire each other to work on in this direction.

4.2 Admission to the communication media

Why communication can not be the only element of road safety policy and how to avoid communication being used as an alibi for persons responsible for road safety not to develop any other types of actions or take any other essential measures?

Mr. Rothengatter (the Netherlands)

1. Introduction

The possibilities of influencing road user behaviour through mass media communication have been studied extensively (Koenig et al., 1994; McKenna et al., 1995; Rothengatter, 1997) both in purely academic laboratory and in large-scale implementation. It is not the purpose of this study to provide an overview of these studies or even an overview of the results. Instead a different approach will be followed which emphasises the need for a systems approach to road user communication, taking into account not just mass media messages but road environment and telematics as well. It will be argued that information campaigns, as isolated events, are unlikely to be effective in changing road user behaviour. To substantiate this, the notion of predisposition –or attitudes–, dose-effect relationships and manipulation of task environment and consequences will be discussed in more detail.

2. Predispositions and attitudes

Road users have the tendency to react in a predictable manner to specific situations. Some of that behaviour is learned, other is inherent to the information-processing capabilities of the human brain. Some of the tasks drivers have to perform are of such cognitive complexity that road users are bound to make errors. When that is the case information campaigns, or for that matter, police enforcement cannot change the problem behaviour. In such cases, only task restructuring by changing the environment can solve the problem. Task restructuring is in fact the basis of changing road design such that accident involvement is reduced.

In principle it is possible to describe the required or in other words normative behaviour for every given situation and every given interaction with other road users. In fact, that has been done in the past for the purpose of developing driver training objectives (McKnight et al., 1970; McKnight et al., 1971). But not every road user acts in accordance to normative behaviour and tends to willingly deviate from that behaviour. This predisposition to violate the normative behaviour is assumed to be determined by the attitudes towards that behaviour (Parker et al., 1992; Rothengatter, 1993). In road safety research there still is much confusion about the concept of attitudes. Many studies are unclear or downright useless in their use of the concept of attitude and since many information campaigns are based on such studies they are often inappropriately focused on changing opinions rather than attitudes. This is unnecessary because social psychology has in the last twenty years formed a very clear definition of attitudes and has developed a clear methodology for measuring attitudes and relating them to behaviour. Attitudes are now commonly defined as evaluative statements about behaviour or objects and are measured in terms of anticipated outcomes of behaviour and the evaluation of these outcomes (Ajzen, 1985; Ajzen et al., 1980). Taking that into account provides a framework for information campaigns to be focused on those outcomes and evaluations that are relevant for behavioural change. This has been discussed in detail elsewhere (Rothengatter, 1993), the point to be made here is that a commonly accepted technique exists to define and measure

attitudes and failure to use these techniques is at the detriment of the effectiveness of information campaigns.

What also has become clear is that attitudes are by no means the only component that determines road user behaviour. Of equal importance is the concept of social norm, which represents the anticipated expectation of others. The influence of that component is apparent from for example the effect of the presence of passengers on the driver, or the presence of other road users. Recognising this component as an important determinant of behaviour can greatly increase the scope of information campaigns.

There are other components that are relevant, such as personal and moral norm. One that deserves attention is called the perceived behavioural control, which has been a recent addition to attitude theory. This component concerns the degree to which the road user believes that the behaviour is under his own control and it appears very important in such diverse road user behaviour as drinking-driving, speed choice and distance keeping (Stradling et al., 1997).

These theoretical considerations have profound practical consequences. Two examples illustrate this. For speeding, it appears irrelevant to emphasise the risk because speeding and non-speeding drivers are equally convinced that speeding is risky. These do differ however in their anticipation of pleasure in driving and information campaigns should therefore target on this evaluative aspect (Rothenatter, 1988). Attitudes towards drinking-driving are much more negative when the driver is sober than when the driver has been drinking. Drinking-driving decisions are not made when the driver is sober and the perceived behavioural control is low ("what else can I do"). Thus information campaigns should emphasise that the drinking-driving decision is to be made beforehand.

In summary, information campaigns need to focus on the relevant attitude components that determine specific target behaviour. Social psychology has developed a coherent and explicit framework for identifying and measuring these components. Taking this framework into account can greatly enhance the effectiveness of information campaigns.

3. Dose-effect relationships

Most attempts to modify road user behaviour implicitly assume a linear relationship between the amount of effort that is put in communication and the effect the effort will have on road user behaviour. This assumption is naive and very often incorrect. It ignores the predisposition to display the required behaviour (e.g. in seat belt campaigns) or, conversely, the predisposition to refrain from undesired behaviour (as, for example in drinking-driving campaigns). It is a naive assumption because dose-effect relationships are very often non-linear. This is perhaps best illustrated with the effect of alcohol on the risk of driving, which does not increase linearly but exponentially. The assumption is also naive because the psychology of learning has established that people do not change behaviour in a linear manner. Instead, behavioural change proceeds normally in an S-shaped function which implies that low-dose interventions will yield disproportionately small effects, if any whatsoever. Cost-effective interventions should be aiming for the part of the curve, where small increases in effort yield high increases in behavioural change. Most interventions, such information campaigns or police surveillance, can be assumed to be operating on the bottom part of the curve: little effort, no effect. One of the very few dose-effect relationship studies that has been done in this respect (De Waard et al., 1994) came to the conclusion that 1 in 6 speed offenders have to be stopped to achieve an optimum effect. Realising that 'normal' intensive surveillance campaigns raise the level of the probability of detection from say 1 in 10 000 to say 1 in 1 000 shows how far away we

normally are from intervention levels that are effective. Although these results apply to police enforcement, there is very little reason to believe that these would be vastly different for information campaigns. Decisions about the effort of the intervention, in other words about the amount of money spent on a particular campaign, are seldom or never based on empirically established effort-effect relations. Information campaigns are probably mostly in the lower end of the curve, and as a consequence of which, unlikely to be optimally effective. An effort at 40% of the maximum effort would yield less than 10% behaviour change, and that if that effort would be increased to 60%, it would yield almost 90% behaviour change. Although this is just a theoretical example, it very clearly shows that optimal effort levels need to be established empirically. In the field of road safety, this is usually not the case.

Naturally, there is the objection that levels of intervention required to make the intervention effective are untenable in 'real life'. The short answer is that that would be a good reason not to undertake levels that are deemed to fail. The long answer is more complicated but more optimistic. Many processes of change do not proceed in either a linear or even S-shaped functions, but are conceived as three-dimensionally folded, as is the contention of catastrophe theory. The relevant issue here is that on the same point of the Y axis, two levels at the X-axis can be achieved, depending on whether the progress is from high to low, or from low to high. This is nothing new to physics: water at 0 degrees can be in a frozen state, if it started as ice, or in a liquid state if it started as water. Not unlike freezing fog, which creates hazardous driving conditions encountered in winter. This process occurs because the change from liquid to ice requires energy, just as behavioural change requires effort. Applying this process to road safety campaigns implies two things. Firstly, that getting drivers to change their behaviour requires disproportionate effort. Secondly, that once behaviour change has been achieved a much lower level of effort is required to maintain that behaviour. Once behaviour is accepted as 'normal' only a small maintenance dose will be sufficient, but if the pressure to comply becomes too small, it is predictable that then compliance will suddenly collapse. There is every reason to assume that such catastrophe-like processes are at work, but until now they have been virtually ignored. A practical implication based on these processes would be that information campaigns would be optimally effective if directed to behaviour that is established as being 'normal', simply because with a relative small effort the safety-relevant behaviour would be maintained at a high level.

4. Environment and consequences

Road user behaviour is not just determined by the road user. The road environment, vehicle characteristics, presence and interaction with other road users and the momentary state of the road user are known to be important factors that affect road user behaviour. Yet, when we address the road user directly, we assume to be able to change his predisposition to display a certain behaviour given a certain situation. The latter part, the situation, or in other words, the road environment is a very powerful, immediate and obviously present cue in eliciting road user behaviour. In contrast, the information message is abstract and distant in time and place. Moreover, road users are known to act on procedural rather than declarative knowledge, where procedural knowledge is basically knowing how to do things and declarative knowledge is knowing about things. Information provided through campaigns in the traditional sense is remembered as declarative knowledge, if at all. For that reason, it is unlikely that it will have an effect on behaviour, unless the stimulus, i.e. the road environment, is in accordance with the information message. The road needs to invite, as it were, the road user to display the required behaviour. This concept is known as 'the self-explaining road'. The simple strategy is that road design and information campaign need to tell the road user with the same message. Information campaigns then provide the road user the declarative knowledge to perform as

required in a given road situation. It does not at all mean that information campaigns are superfluous because the road is self-evident, it means integration of the information and design.

The increasing quality of roads and vehicles implies that the road user is less exposed to simple haptic feedback. Yet feedback is an extremely powerful tool in modifying behaviour, and there is a range of experiments that demonstrate that feedback, even simple road side signs can have a substantial effect on driver behaviour such as speeding or seat belt use (Van Houten et al., 1983; Van Houten et al., 1985).

Given the developments in in-vehicle telematics, there are now increasing means available to deliver feedback messages directly to road users at the place and at the moment they deviate from normative behaviour. Both laboratory and on-road experiments, many of these carried out in the framework of European research projects, have demonstrated that can have substantial effects on road user behaviour (Groeger et al., 1995; Kuiken et al., 1994). Here is a whole range of possibilities becoming available that are ready for application as an addition to traditional information campaign approaches. It is regrettable that as yet these new possibilities have as yet not been integrated.

A last integrative element to be mentioned is law enforcement. The state-of-the-art has been reviewed a few years ago in an OECD symposium (Koornstra & Jorgensen, 1991) and this is an area where everyday practice often deviates considerably from what has been proved to be optimally effective. In particular, the increased efficiency that can be achieved by combining information campaigns and police surveillance needs to be addressed. The effects of combined efforts appear generally to be more substantial and in particular longer lasting than either approach on its own (Gundy, 1988; Rothengatter, 1997). Even though integration, or at least co-ordination of the two may pose practical difficulties, it is necessary that this becomes standard practice, if only to have a better chance of reaching a critical mass to achieve an optimal dose.

5. Conclusion

Information campaigns as isolated events are not the most effective way to modify road users behaviour. On their own, they are unlikely to achieve the 'dose' or effort necessary to achieve change. Clearly a systems approach is required. Taking the developments of attitude theory into account is likely to greatly increase effectiveness because this would enable information campaigns to address those components that are salient in the drivers' attitude. On a practical level, information campaigns should be regarded as an element in comprehensive strategies for road user behavioural change, and these latter should include road environment, in-vehicle feedback using transport telematics and police surveillance as necessary ingredients.

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4.3 Efficiency comparison between environment and safety campaigns

Mr. Tracz (Poland)

1. Introduction

Both continuing increase in road transport growth and the development of infrastructure for road and other transport modes, in urban and in rural areas, raises social objections. Road projects are generally undertaken to improve the economic and social welfare of those using roads and served by them. Improved road capacity, pavements and traffic safety can reduce travelling time and transport costs. Benefits include increased access to jobs, education, markets, health services, cultural activities, leisure time and tourism. Roads, however, may also have significant negative impacts on the environment and on people, for example through road accidents. Road accidents are perceived as a social problem, but on an individual level, risk awareness is very low. Analysis of the social attitudes of Polish drivers shows that traffic risk is not considered an important problem. It is difficult to compare the positive and negative impacts of road transport in a quantitative or even a qualitative manner, but the increase of road accidents and victims should be of increasing concern to policy makers.

On the basis of very subjective evaluation, the experts carrying out research in the fields of road safety and environmental protection can give the impression that ecological campaigns are much more effective than road safety campaigns, as thousands of people are killed and hundreds of thousands are injured in road accidents, whereas and whereas only very few die as a direct result of the environmental impacts of roads and traffic. No doubt, there are more people affected by the environmental impact of roads overall. Impacts in both fields should be reduced as much as possible, even if a certain amount of competition occurs between the environmental and road safety criteria. Communication strategies should be designed to meet both objectives together.

Are people more sensitive to the environmental impacts of roads and traffic than to the consequences of road accidents? Are the environmental campaigns carried out in a more efficient way than road safety campaigns? "Are the lives of frogs and storks more important than those of human beings?" Conclusions derived from the comparison of communication campaigns in these fields should be taken into account when formulating communication strategies in both areas. The author tries to give answers to these questions in this document.

Analysis of communication campaigns carried out in Poland in the fields of road safety and environmental impacts, induces us to make comparisons, with respect to:

- a) target groups,
- b) target areas,
- c) forms of campaigns,
- d) characteristics of groups and individuals concerned and the involvement of young people,
- e) preparation of groups concerned with the campaigns and protests,
- f) exactitude of arguments used, written and published,
- g) sponsoring.

Most of the listed issues are examined in this document.

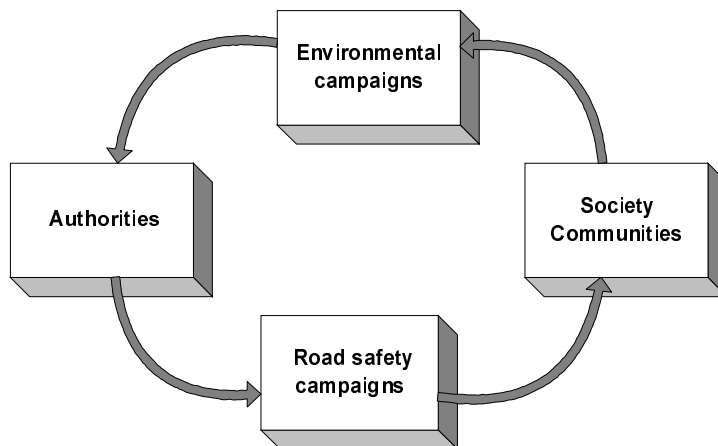
2. Target Groups in Campaigns

The following target groups are involved in environmental and road safety campaigns:

- decision- and policy-makers (members of government, parliament and senate, local Authorities, etc.),
- journalists (television, radio, newspapers) - as an indirect target group, which could influence the decision makers, increase awareness and inform/educate ordinary people,
- groups of ordinary people (involved or interested),
- others (police, insurance companies, scientific and other associations, etc.).

In Poland the basic differences in the recent campaigns between the two fields considered are illustrated in Figures 23. In general, campaign organisers choose target groups that are completely different one from another.

Figure 23. **Directions and Target Groups in Campaigns in both fields**



The directing of road safety campaigns to the community is at variance with public expectation that the government should improve road safety.

When comparing campaigns carried out in Poland in both fields, it is clear that a difference in the selection sequence of the target groups exists. It can be explained as follows:

- environmental actions target successively decision- and policy-makers as well as mass media, and sometimes the groups concerned, but very seldom ordinary, unconcerned people,
- road safety actions target ordinary people i.e. large groups of road users, media, but very seldom other groups or decision-makers (practically never).

At present, actions targeting decision- and policy-makers on regional and national levels seem to be the most effective. It is interesting to note that there were several protests against the motorway programme and the national transportation policy, including protesting in front of the offices of the Ministry of Transport and Maritime Economy (Figure 24) and the Government, reported by television and newspapers. Similar protests against, for example, the lack of financing for road safety and road maintenance, or against maintaining the speed limit at 60 km/h in urban areas, organised in front of these buildings or the Parliament/Senate, have not been reported or seen yet. Even if reports, letters and appeals from experts, associations or lower levels of road administration are sent to the Ministry or to the parliamentary commissions, these individual actions can not be considered a public campaign.

With regard to ordinary people it should be pointed out that the involved (affected) or interested groups of citizens are almost always well identified in environmental campaigns. They are sometimes well organised such as, for example, people who live in the surrounding areas of a planned motorway, refuse dump, etc. Such groups cannot usually be identified in a road safety context, as for example, parents of children crossing at a dangerous intersection who wish for a safe route to school. The highest risk groups, selected on the basis of statistics of road user victims, which in the past were indicated as the target groups in the road safety campaigns, are treated here as a main preoccupation.

People affected by environmental impacts but who are not responsible, are not unable to move, read, write or protest, whereas the victims of accidents, either killed or seriously injured, are not able to express their opinions. Accident victims and families of victims are very efficient in stimulating public awareness of road safety problems. However it is very difficult to involve numerous accident victims in road safety campaigns, since they often do not want to present their opinions because of guilty feelings. There are several examples of individuals, tragically affected by road accidents, who are involved in road safety activities and actions, and who can play a very important role in communication. Maria Dabrowska from the Motor Transport Institute, who lost her parents in a road accident, is a relevant example. The question is, have sufficient efforts been undertaken to involve accident victims in road safety campaigns, and particularly those who have thus been disabled?

3. Target Areas

The efficiency of a campaign depends particularly on the accurate selection of aims and target areas. In the road safety field, the following target areas have often been selected for campaigns during “road safety weeks” or other events:

- road safety for children (or protecting young lives), teenagers and adults,
- influence of alcohol in accidents (drinking and driving),
- use of safety belts,
- use of running lights when raining,
- risks connected with speeding (or driving at a safe speed).

These target areas seem relevant as far as accident statistics and analyses of road users' behaviour are concerned, and also appropriate from a communication point of view. However, targets are very difficult to define in relation to some other areas e.g. an itinerary to school or “safe travel” (of children to places where they spend their holidays). A “safe itinerary” constitutes a clear, concrete objective in spite of the required regulations, funds and the education of people concerned.

Road hazards present, in our own environment and lives, a source of fear for many people. They should not become an abstract concept.

Comparatively, in the environmental field only main themes are selected for campaigns, taking into account their potential efficiency. Campaigns are, therefore, organised against the establishment of new waste dumps, incinerating plants, transmitting antennae and against motorways (the whole programme or specific sections thereof). It can be noted that, excepting the motorway construction programme, groups of inhabitants to be affected in the vicinity of a proposed location always back up the organisers of campaigns or ecological organisation. Certain ecological organisations offer their assistance and participation in organising protests or *ad hoc* campaigns.

Interestingly certain potential target areas are sometimes selected to the detriment of others better justified but not chosen. Why have environmental campaigns been organised against the motorway programme, whereas protests against new car factories, new car exhibitions, taxation policy, importation of cars, etc. or wide popularisation of motorization have not been organised in Poland? Perhaps those target areas are too strong. It should also be noted that environmental campaigns, which are not supported by groups of concerned inhabitants are not successful, in spite of media coverage (TV and press), as for example protests against the motorway construction programme or against the dam at Czorsztyn. The last protest against the construction of the dam across the Dunajec river, organised in July 1997 during the great flood, is good example of an unsuccessful action.

The comparison and analysis of several campaigns show that, in the future, campaigns in certain target areas could become easier, as, for example, the campaign against the importations of damaged cars (post-accident or just ordinary scrap metal), or perhaps much more difficult, as for example campaigns against disregard for rules and the aggressiveness of road users in Poland.

A weak side of campaigning in both fields is the degree of acceptance by society or by communities of some identified controversial target areas identified. It is possible to give several examples of recent unsuccessful campaigns, e.g. utilisation of bicycles in cities, the lowering of speed limits in built-up areas from 60 to 50 km/h.

4. Forms of Campaigns and Communication in the two areas

In the two fields various techniques are used in campaigns depending on the specificity of a target area and target group and on the creativity of the organisers. The applied techniques should bring the problems of traffic hazards, and ways to improve them to the attention of the public. Traditional accident information and public awareness should not be the only targets of a campaign.

National campaigns are of the utmost importance as they impress on the public that the subject is of national priority. So the use of television with presentations of well-prepared films (including realistic scenes), information and discussions concerning road accidents is of capital importance. The strong point of local campaigns is that the inherent knowledge of local people on the traffic situation in local blackspots, bottlenecks, etc. and their motivation to take stronger action when the consequences of road accidents are a tangible reality.

Several forms of actions employed by environmental groups do not seem reasonable for a road safety campaign, as for example:

- blockades of conference rooms, buildings or construction sites,
- chaining of people to a site,

whereas other forms seem more pertinent, as for example:

- protesting in front of a building with banners and chanting slogans,
- handing out leaflets in public,
- organising regular and *ad hoc* media events (used in the road safety campaign of 1995).

Other techniques can be used in both areas, for example:

- leaflets for the general public or for the target groups of road users (pedestrians, cyclists, drivers of various vehicles, children, teenagers and elderly people, etc.) and brochures,
- posters,
- educational letters,
- articles in professional journals.

In all campaigns, reports and official appeals from professionals and experts from universities can give precious professional support.

Since a few years ago, crosses have been placed by the families of some victims in accident locations, giving the date or / and circumstances. It would seem an excellent way of marking blackspots. Drawing the contours of accident victims on road surfaces in Krakow (Figure 25) showed a new, interesting and strongly eloquent form of road safety campaign. Techniques of campaigns and individual actions adopted from other countries are not always suitable for national conditions and constraints. In Poland, generally, motorization, road safety and public relations are at a less advanced stage.

Organised campaigns carried out in the road safety field are unfortunately very rare in comparison to the number of environmental campaigns. Actions carried in both fields have one common feature - they advocate the right, and usually expensive solutions.

5. Characteristics of parties and individuals involved

It is interesting to compare organisations and individuals involved in campaigns in both fields. The list of organisations and associations involved in the preparation and organisation of the 2nd International Traffic Safety Week in Poland, i.e. a very comprehensive road safety campaign, shows that the main efforts came from the national administration (departments of “voievodeships”), road police, provincial safety boards, automobile clubs, TV and radio reporters and journalists and from some insurance companies. Only two road safety foundations and scouts in two cities were also involved. In general, participation of independent organisations and occasional participation of young people (in the organisation of events) were very limited. Not enough importance is attached to

the involvement of young people in organisational activities. It should be noted that in Krakow, in spite of very bad weather, hundreds of teenagers with great enthusiasm drew on the street surface 3 363 figures completes with red hearts (Figure 25) - representing victims of accidents in the Krakow province in 1994 (172 killed and 3 191 injured). It confirms the possibility of a wider involvement of young people in road safety campaigns, linked to their social and traffic education.

Environmental campaigns are organised by several existing ecological and environmental organisations (Green Federation (FZ), Polish Ecological Club (PKE), Green Party (PZ), Ecological Transport Company (ETC), etc.). Their actions and publications are sponsored by National Foundation for Environment Protection, Partnership for Environment and other ecological foundations. In general, these campaigns are mainly animated by young people with relatively low level of general ecological knowledge. They are, however, determined protectors of the natural environment, protesting heartily with other young people and treating protests as a form of enjoyment. A large percentage of these people are involved in environmental campaigns in several different areas in which their knowledge is frequently very poor. These young people are active also in actions against the development of road traffic, against the motorway construction programme, against new transport arteries in cities. It is interesting to note that the environmental campaigns of one small organisation is often supported by another small group from another city or even, another country. For example an experienced group from Kraków supported a group from Poznań in their protest against the car traffic in Poznań.

Apart from remarks concerning the ecological knowledge of the young people they (or at least some of them) are well prepared in the area of public relations. Courses, seminars and traineeships are organised in order to form ecological groups and to compare experiences. Besides several serious ecological journals and periodicals, edited by scientific and expert bodies, a few periodicals, leaflets and brochures are published by these young groups. Campaigns are carried out by both types of publications, but only the latter group includes instructions on how to conduct them.

Similar organisations and activities in the area of road safety are not visible at all, particularly organisations in which young people could be made to feel useful and play an important role. No common organisation which regroups all drivers exists, and the Polish Automobile Association (PZMOT) is, in fact, a selective organisation with very limited activity in the road safety field, it is mainly involved in developing skills of drivers and in supporting certain traffic safety actions.

People from institutions involved in road safety campaigns organise them with great commitment, but without specific instruction and preparation in the area of communication. This gap, as well as various forms of involvement of young people, should be taken into account before launching further road safety campaigns in Poland.

The validity of the documentation, the arguments published in ecological periodicals and used in public presentations, discussions and manifestations is a subject which deserves attention. Below are a few extracts from the article about social engineering techniques, which are exemplary illustrations of the ways in which the ecological organisations display their approach:

In order to serve campaign purposes, all slogans should be well rounded and their motives must take into account the proverb "a foot in both camps" (A candle for God and a candle-end for the devil). A green alternative should not be presented as too radical, in order not to discourage people outside their own circle. For example, when speaking about motorways, the problem can be presented in the following way: "Motorways? Yes, but we would like to

develop them in a different way ... (in this place quite a few well-rounded veiled slogans can be given)". Never speak out directly and univocally. It is not consistent with the good principles of social engineering techniques...

A few examples of characteristic slogans from the leaflet published by one of the ecological groups (ETC) very well illustrates the approach to credibility of the used materials (Figure 26):

a) *about motorways:*

- *motorways do not mean economic development.*
- *motorways do not solve transportation problems..... Nowhere in the world do motorways or ring roads solve transportation problems in large cities, as for example Krakow, Poznań, Warszawa,*
- *motorways do not save energy as fuel consumption on motorways is 30% higher than on the ordinary road,*
- *motorways - expensive roads to nowhere,*
- *motorways do not improve road safety; in Poland where a significant number of accidents are caused by alcohol, the European results have not been confirmed.*

Supplementary information: ...*"with time you will learn that the number of jobs is lower than was promised, local shops will go bankrupt as shopping is cheaper in supermarkets (because of motorways). The same bankruptcy will befall crafts and small industry. Dormitory towns will be constructed on both sides of motorways which will be too expensive for inhabitants of these towns to use. It will be used by foreigners and inhabitants of large cities." etc.*

b) *about transportation policy the following suggestions can be found:*

- *one should abandon the belief: "the more transport the better"*
- *abolition of subsidies for purchase of personal cars and the construction of motorways,*
- *transport by rail of all freight through Poland ("TIR trucks on rails").*

Leaflets provide instructions and consultations on creating an action committee, carrying out a campaign, writing protests and appeals, etc.

Irrespective of their professional relations to such slogans, the transport and road safety experts should note that their perception can be quite different from the perception of decision- makers and ordinary people. This diversity can be even worse in the case of journalists, as they can see sensational elements in these slogans. It seems that the exactitude of data, and top quality information concerning road safety, produced for road safety campaigns should be maintained. False information is not needed and is undesirable. What is needed is simple, relevant information for "the man in the street". A lot can be done with respect to the improved presentation of material on accidents in order to increase public awareness on road safety.

A comparison between the two areas shows also that the involvement of independent organisations, such as foundations or organisations of inhabitants is too small. There are few independent organisations and these organisations neither involve young people nor are they well supported by insurance companies or by governmental resources. Concerning financial resources, foundations and sponsoring, the comparison is also very unfavourable to road safety.

7. Including Environment Impact Assessment (EIA) and road safety audit in road investment and operation process - comparison of legal regulations

The efficiency of positive or negative campaigns can be evaluated on the basis of several subjective criteria, for example:

- mass media coverage (number of journalists, time and length of presentation) and contents of the reports,
- level of financial resources available from the budget and from other sources,
- existing legislation in the area.

The legal aspects are pertinent to the design criteria - representing the degree of protection of various elements of an environment or specifying a minimisation of accident risk for all classes of road users. Obligatory or recommended – an environmental impact assessment (EIA) and safety audit should be guaranteed by legal regulations in order to follow throughout the process of a project of road investment (planning, designing, construction) and operation.

Since the 1980s in various European countries and since 1990 in Poland, legislation made environmental impact studies of various types of infrastructure obligatory prior to the implementation of construction works. A 1995 decree of the Polish Minister of Environment determined types of infrastructure for which EIA is obligatory and specified the contents of EIAs. There are several categories of road investment which “can deteriorate a state of environment” for which EIA is obligatory, for example, national roads (including motorways and expressways) and voievodeship roads. EIA is a process that must be integrated with the road investment process and should include consultation and participation of the population. EIA obliges designers and investors to take into account the sensitivity of the environment and the intensity of potential impacts and to provide significant amounts of money for mitigation measures. Of course, it is very difficult to indicate the contribution of environmental campaigns to this important achievement. No doubt, it is mainly the result of international trends and directives, research and study works, as well as an increasing knowledge and sensitivity to environmental problems in Poland.

In several countries including Poland, there is a lack of a formal system of safety audits in the road investment process and road safety is ensured only by road design standards, engineers’ competence and those who give the green light to a formal project. Several errors in road layouts, co-ordination of access facilities, signing and marking, which are usually well identified in analysis of blackspots, show the need for exhaustive comprehensive checks. A campaign is necessary to incorporate safety audits in the process of road designing in order to save the lives of road users.

In order to implement safety audits and the conducting of community consultations, several conditions should be fulfilled, including most importantly the education of experts and acquiring

financial resources. A more detailed comparison shows that in Poland the road safety field falls in each of these areas, well behind the environmental field.

In several countries EIA studies include road accidents as one of the environmental impacts. In other countries including Poland, the road safety factor is not at all taken into account in the EIA of road investments. Moreover, certain contradictions in fulfilling environmental and road safety criteria can be seen. In the EIAs achieved for motorway sections A1, A2 and A3, estimations of the number of wild animals killed on Polish roads can be found, whereas the analysis of road safety and the prediction of accident victims is omitted. Does this imply that human beings are less important than rabbits?

8. Conclusions and directions of further activities

A very sketchy knowledge of road safety in the country, absence of general feelings of insecurity, and the conviction of most drivers that their driving skills are good, give the impression that, for the present, Polish society and local communities cannot be expected to be a strong partner in road safety campaigns. A few exceptions, including, for example campaigns for safe routes for children going to school, do not change the general picture, which differs from that in other Western European countries where road safety is treated as a value that should be protected. In contrast, to some extent protection of the environment has reached such a valued position. This calls for new and more efficient road safety campaigns with involvement of new groups to give the road safety problem a veritable national dimension.

The comparison shows that road safety campaigns have an expert character with regard to their preparation and reliability of information, and an amateur-level with regard to their communication aspects. Environmental campaigns present a low level impression with regard to information and argumentation (including even untrue information) and a highly professional level with regard to communication. Analysis of the development of campaigns in both fields indicates better preparation of people involved in the environmental field in public relations. Involvement of people with backgrounds in sociology and psychology, who have acquired an education in communication techniques, and who have exchanged experiences during special seminars, is important.

The role of the authorities responsible for road infrastructure construction and maintenance, for education and law enforcement is essential, but their activities are also influenced by public awareness and social realities. Contrary to the environmental experts, the few road safety experts seem too loyal in relation to road administrations and other responsible authorities. This can be explained by the conviction that, in the absence of independent associations and funds, in practice only these authorities can do something to improve road safety.

Analysis of communication and campaigns in the field of road safety in Poland, performed by various groups of people, organisations and associations, police, journalists and by administration (at various levels) shows that there is a need for:

- a new orientation of campaigns, with decision-makers at national and voievodeship levels as the target groups and with particular emphasis put on finding financial resources,
- a new, less schematic formulation of target groups and areas and new methods and forms of road safety campaigns,

- involvement of independent associations of citizens (social web) and young people. Rather than conducting traditional information and awareness campaigns at national level concerning this high risk group, it is better to involve young people directly, by relying on their sense of responsibility and creative talent,
- varied forms of campaigns depending on national or local scales,
- greater involvement of the mass media, which is still a very weak point in road safety campaigns.

The comparison of the efficiency of positive and negative campaigns shows that the road safety field falls behind the environmental field and the experiences of environmental campaigners could profitably be adopted in national and local road safety campaigns.

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Figure 24. Protests against the motorway programme - picketing in front of the buildings of the Ministry of Transport and Maritime Economy, Poland



Source: Mr. O. Swolkieñ, Ecological Transport Society, Krakow.

Figure 25. **Young people painting 3 363 figures of accident victims in Krakow region in 1994**



Source: Mr. O. Swolkieñ, Ecological Transport Society, Krakow.

Figure 26. Front page of the leaflet concerning the motorway programme with slogan:
“Motorways - expensive roads to nowhere”

**AUTOSTRADY
DROGIE DROGI
DO... NIKA, D**



**TOWARZYSTWO
EKOLOGICZNEGO
TRANSPORTU**

Source: Leaflet produced by the Ecological Transport Society, Cracow.

4.4 Conclusions from the Nordic Conference held in Sandvik, on 10th and 11th February, 1997

Mr. Lyster (Norway)

The title of the Conference at Sandvika was «Use of Information for promoting Road Safety» with the sub-title «An important measure - but a difficult tool». Because of the way the programme was arranged, I cannot present any definite conclusions agreed upon by the Conference in plenum. The conclusions I *can* present are more by way of being the thoughts, opinions and ideas which were focused in the lectures, questions and comments of the participants.

I have therefore chosen the points of view that were «common property» in the sense that they were endorsed or received broad agreement at the Conference. Since these points of view were widely shared, I shall not be referring to individual speakers. And this explains why in some cases I have not quoted specific sources among the participants.

The conclusions reached at the Conference can be split into three groups:

- Possibilities and limitations of road safety information,
- A critical appraisal of campaign plans,
- The themes and target groups that should receive priority.

1. Possibilities and limitations of road safety information

If you intend to use information campaigns in the fight against road accidents it is vital to know how information actually influences people. In the past, the influence of public communication has been both over- and underestimated. It has been used in circumstances where it had no chance of succeeding, and it has been omitted in cases where it could have achieved a great deal.

A common mistake has been to think that all that is needed, is that the message reaches the target groups, the underlying belief being that the public are rational and base their behaviour on mediated knowledge. This misconception has not taken into account the fact that emotional and subconscious factors are an obstacle to changing attitudes.

Another common mistake is to assume that most people avoid taking risks. The Norwegian behavioural scientist Dagfinn Moe, researching at SINTEF Samferdselsteknikk (SINTEF Traffic Engineering) has demonstrated that this is not the case. Life is full of risks, and it would drastically reduce our sphere of activity and sense of well being if we were to avoid every risk. The fact that something is risky is not in itself enough to deter us. The solutions that are offered have to be accepted and seen as something positive and effective in a broader context. At the same time, the user has to have the feeling of being in possession of the skills that are necessary.

The safety message can often be downright unpopular. You present something that the user simply doesn't want to know, doesn't want to do, or doesn't want to believe. The motives may be conscious or unconscious, but the result is typically the same: People reject the message from the very start, without accepting it or even reflecting upon it.

Sometimes we have tried to get around the problem of lack of interest by making the message humorous or attention catching. But it is not enough to be noticed, the general public have to feel that it is in their interest to act according to the message. The essential content of the message has to be seen as attractive, not just the packaging paper.

There are examples where official information has had such intrinsic motivation that the public have reacted with a spontaneous change of behaviour. Project leader Knud Flensted-Jensen from the Danish Rådet for Større Færdselssikkerhed (Danish Council for Road Safety) presented the results of a campaign aimed at informing parents on what they could do to prevent cot deaths. The three simple pieces of advice they gave were followed to such an extent that fatalities were instantly and drastically reduced, and within a few years the problem had virtually ceased to exist. However, it is seldom the case that the public is *so* intrinsically motivated to follow the message of a campaign.

Assessments of previous campaigns have shown that information works best when it works along with other measures. When information works alongside, for example, intensified control, changes in the road network or new legislation, the measures can reinforce each other. In many cases information is a prerequisite for the measures to succeed.

When information is not combined with other measures, there is usually one of the following two reasons. In some cases there is a wish to define something as an isolated information problem because other measures are too expensive or unpopular. In other cases controls, road rebuilding or legislation is planned without regard to information measures, with the result that the information challenges are not identified until it is too late in the process.

Knowledge of road safety is both complicated and involved. But information has the greatest effect when it is plain, simple and concrete. The message has to be believable and -- as far as possible -- attractive and appealing.

It is much more difficult for information to get through the more it conflicts with the user's experiences. If you want to change human behaviour that is deeply ingrained, you cannot reckon on a spontaneous change of behaviour, but have to work on long-term formation of norms. Even when you seem to have succeeded, there will often be a need for «maintenance work» in the shape of continual reminding and encouragement.

The Norwegian social anthropologist Sverre Nesvåg at Rogalandforskning (RF - Rogaland Research) has pointed out the long road that has to be travelled if one is to bring about changes in ingrained behaviour by means of cognitive processes. He presented a model in three phases:

1. Unspoken established values must be made spoken.
2. Spoken established values have to be replaced with spoken new values.
3. The new spoken values have to become the new unspoken values.

A spoken value can easily be overridden by an unspoken value, often without the person in question feeling any need to explain his/her behaviour. Nesvåg called this feature «that's the way it is».

The alternative to a cognitive process is an unconscious change. In this case you need to stimulate and reinforce existing desirable behaviour at the expense of existing non-desirable

behaviour. This is also a fruitful approach in cases where the public behaves in desirable and non-desirable ways without any apparent reason.

What about campaigns aimed at changing attitudes? Are they completely useless? Is there, in fact, any clear connection between attitude and behaviour? The Swedish traffic researcher Sonja Forward from Väg- och Transportforskningsinstitutet (VTI) (Swedish National Road and Transport Research Institute) presented a number of examples of campaigns where attitudinal changes had been registered and which were known to have had positive effects. She maintained that the general criticism of attitude campaigns was far too one-sided. Campaigns aimed at influencing attitudes and norms can both lead to changes in behaviour.

According to Sonja Forward, attitude campaigns should aim at increasing awareness of the consequences of desirable and non-desirable behaviour. Normative campaigns can be effective if you can increase awareness of the fact that the group you identify with dislikes the non-desirable behaviour and likes the desirable behaviour.

2. A critical appraisal of campaign plans

During the Conference a good deal of time was devoted to making the participants aware of their customer role when they hired advertising agencies and others offering professional communication services. In many cases these have delivered campaigns that give little value for money.

All too often the campaigns have been addressed to the whole population instead of being aimed at the most likely target group for the theme, and adapting the approach and channel of the campaign accordingly.

All too often the approach has been one of mass communication via advertising instead of network communication where the message is presented to the user in a personal spoken form. This is closely connected with the fact that we have not been good enough at identifying the intermediaries or what we could call «pseudo-groups».

Creative Director Jørn Duus in the Danish advertising agency Ted Bates A/s compared today's society with a pandemonium of noise. We are constantly bombarded with do's and don'ts -- «don't drink too much alcohol, don't smoke, eat less fat, exercise regularly, eat vegetables, use collective transport, be together with your children more often», and so on. He maintained that road safety information will never win through if the strategy is to make more noise than all the others -- we have to make the right noises at the right places, that is where the right target groups are found.

In order to exemplify these questions in practical terms, two very brave men were invited to the Conference. A Finnish and a Danish advertising man had been given the ungrateful task of being grilled by a panel of experts who were to teach the Conference participants how to pose the right control questions with relevance to their respective fields of study.

Project leaders Mogens Damgaard and Carl Johan Rosenström, each presented their campaign plans for a given case. Their campaigns were intended for a typical small Scandinavian town with serious problems related to youths driving under the influence of alcohol and drugs. The financial parameters for the campaign were clearly defined.

Both campaigns were given an elegant «packaging», but their respective communication strategies can be summed up as follows:

The Finnish campaign aimed to communicate the message that young girls don't like young men who drive like idiots -- in other words, a sort of ridiculing. The main channels were outdoor advertising and radio programmes.

The Danish campaign aimed to demonstrate that your driving deteriorates when you drink. The most important channel was to be major youth festivals where one group of youths drank before being tested for their driving skills, while the other group observed their unsuccessful attempts to drive.

The Conference experienced that elegantly formed campaigns could indeed be appealing in their presentation, but that it was absolutely necessary to ask critical control questions as to their probable effects. A shrewd confrontation with other fields of study can reveal important shortcomings in the campaign.

The panel of experts pulled no punches. The problem of developing a campaign that not only looks good but is also effective was highlighted when anthropologist Sverre Nesvåg was asked to say which of the two campaigns he would choose. He answered: «Then I would have to choose between a campaign I do not think would work (the Finnish one), and a campaign I think would work against its purpose (the Danish)».

His misgivings about the Danish campaign concerned the fact that the observer group might well think that they would have tackled the driving tests better than the test group. And they might put this theory to the test in a real traffic situation. Not everybody agreed with Nesvåg. But was this a risk worth taking?

The advertising agencies explained that the way they often work in their branch is that they gain knowledge by experience and adjust their strategies accordingly. If they work on the same theme over a period of time, they use surveys and effect studies to see where the campaign is having trouble and what changes need to be made. Only very rarely do they have the time and opportunity for a thorough analysis.

In order to succeed at the first attempt, however, you need to allow yourself sufficient time and money on problem analyses and preparation. You shouldn't leave everything to the communication experts, but let them relate to a reference group of experts in other fields, such as transport researchers, psychologists and social anthropologists.

The conclusion of the Conference was that above all the analysis of the problem has to be so precise that any communication strategy can be tested against it.

3. Which themes and target groups should receive priority?

Young drivers are identified as a high-risk group in traffic. Important factors are concerned with driving style, life style, moral norms, group affinity and frames of reference.

Not all young people are dangerous drivers. But the ones who are most willing to take risks are typically those who drive emotionally, are easily irritated by others, use the car for leisure purposes, and drive fast, unconcentrated, and offensively.

The Swedish traffic researcher Hans-Yngve Berg from NTF (Swedish Council of Road Safety) presented the results of a survey which divided young people into various risk groups. He presented which phenomena from other areas of life which are often correlated with dangerous driving. The willingness to take risks in traffic can be seen as one element in a whole life style.

The high risk drivers in Berg's survey were often unemployed, had no dreams for the future, took every day as it comes, and were not interested in moving to another geographical location. Their interests revolved around technical matters, cars, motorbikes, and sport. They had low social awareness, had problems defining their approximate moral borders, and had little feeling of care for others.

The low risk drivers in the survey were often students, had dreams and ambitions for the future, had a purpose in life, and were willing to move or had already done so. They were interested in sport, music and clothes. They had high social awareness, felt care for others, they had a high moral sense, and they could define their own moral borders.

A number of speakers emphasised that there are huge differences among young people and that it was therefore not enough to define target groups from the point of view of age alone.

The anthropologist Sverre Nesvåg pointed to another aspect than that young people should be picked out as a target group because of their willingness to take risks. He maintained that even if older drivers drove equally badly, it would still pay to target the young from the point of view of greater effect. It is easier to market a pattern of behaviour to a group whose behaviour in a given situation is not yet established than to a group with long experience and established patterns of behaviour.

However, the Conference was warned against confining the problem of road safety to young drivers. Dangerous driving is found among all age groups, and no one can feel exempt. One reason for the young being an accident risk group is simply their lack of experience, and this is a factor which will improve with time whether they are the campaign target or not.

The Conference was also warned against letting popular conceptions decide which campaigns should be run. Just because one concept is popular does not make it correct. The Danish road researcher Niels Helberg defined a popular campaign as:

- A campaign with an eye-catching form which can often overshadow the message.
- A campaign which confirms and reinforces existing attitudes and behaviour.
- A campaign aimed at changing the behaviour of «the others».
- A campaign aimed at «unpopular» groups of road users.

A clear conclusion of the Conference was that you need to think in long terms, to think in whole terms and to think big. You need to have the patience to work with the same theme over an extended period of time, often over many years. You should not spread your efforts over too many themes, but select a limited number of problem areas to concentrate on and approach them from ever-different angles. You need to have high aims and combine a variety of measures -- and not treat information as something isolated from the whole.

SUMMARY OF DISCUSSIONS

M. Huguenin (Switzerland)

1. Introduction

Does communication help prevent accidents? This may seem an odd question given that specialists from all over Europe have spent the past two days at this seminar discussing ways in which communication can help to improve road safety. Nonetheless, I ask it by way of introduction to my summary of the discussions.

Throughout this seminar, we have addressed the role, objectives and receivers of communication, as well as its limits. In other words, communication is not a miraculous remedy that can be administered in homeopathic doses to all and sundry. The discussions on strategies and the political barriers and psychological mechanisms involved in communication attested the differentiated approach adopted at the seminar; the aim was to review all the possibilities opened up by communication, though without overestimating them.

The general message of the seminar was thus that communication can help improve road safety, though it is neither the sole nor necessarily the best way of doing so.

2. Definitions

Before applying the concept of communication to road safety, it is first necessary to define our terminology. If we postulate that communication is a process based on the questions: “**Who** (1) says **what** (2) and **how** (3), using **which signals** and **means** (4), to **whom** (5) and with what **aim** (6)”, we can break it down into the following components:

- (1) Transmitter
- (2) Message
- (3) Context
- (4) Medium
- (5) Receiver
- (6) Objective

Communication thus consists of the following components: an information source (1) conveying a precise (2) content (3) by means of specific signs and media (4) to a target public (5) with a view to producing an effect (6). The crucial question, from the standpoint of accident prevention, is how these factors should be combined in the communication process to achieve optimal effect.

3. Components of communication

3.1 Objectives

Communication strategies exploit the effect of psychological mechanisms. Konrad Lorenz says in this connection:

*“One does not necessarily remember something because one has heard it
One does not necessarily understand something because one remembers it
One does not necessarily accept something because one understands it
One does not necessarily apply something because one accepts it
The fact of having done something once does not mean that one will do it for the rest of one’s life.”*

Applied to accident prevention, this means that, before transmitting information, it is first necessary to define the objective in accordance with the level of:

- knowledge
- motivation
- automatic behaviour
- decision-making capability

and to choose adequate means. Up to now, this aspect has not been dealt with systematically.

3.2 The transmitter

The probability that information will be received depends on its source. W. Klemenjak referred to this while stressing that communication should be conceived as a two-way process. To sum up, it may be said that the quality of the information depends, *inter alia*, on the characteristics of the source. It is necessary to distinguish between objective and subjective characteristics:

- the transmitter’s credibility,
- the attractiveness of the source,
- similarity of the transmitter and receiver,
- the transmitters’ specialised knowledge,
- the power of the information source.

3.3 Message

While there was a long discussion, with the aid of examples, of the content of communication, little was said about fundamental principles. The content of road safety information will vary according to the change in behaviour that is sought. The following relationships can be formulated:

- human being/law (for example, behavioural rules, new laws)
- human being/human being (for example, respect of others, rights of others)
- human being/vehicle (for example, style of driving, vehicle maintenance)

- human being/road (for example, memorising information, vehicle behaviour on different types of roads).

It is sometimes necessary to say things bluntly, though from the psychological standpoint it is usually better not to. The important aspects of a road safety message can be summarised as follows (see the conclusions of our Scandinavian colleagues):

- a) It should be eye-catching and non-authoritarian;
- b) It should be conveyed in such a way as to make the receiver feel concerned by it and make him think (see the German example of “dilemma games” [Maginot] and the Danish example of the “10 = 44 message”), and ultimately prompt him to change his behaviour. If we manage to persuade the receiver that he will be better off by adopting the proposed behaviour, detailed supporting arguments will enhance still further the credibility of the message;
- c) It should contain the maximum of information and describe the recommended behaviour in a concrete and unambiguous way, i.e. it should always give precise instructions as to the behaviour that should be adopted;
- d) It should convey new information or be presented in an original way so as to catch the attention;
- e) The information content should trigger the social imitation mechanism;
- f) The message should be easy to understand, whether conveyed in words or pictures or by means of explanations supplied by the context of the specific communication. The level of the text should be tailored to the target group, and the essential points -- what everybody should know in order to avoid an accident -- should be highlighted. To make the message easier to understand, the text and image should form a whole.

3.4. Context

Conventional advertising methods have not helped to resolve the aforementioned problems. They are effective only if an identifiable need exists. Social marketing shows the advantages of giving up such and such a type of behaviour. A non-moralistic message is better received by the target public. The message aims both to catch the attention and to overcome psychological impediments. Newly acquired knowledge will be translated into acts only if the individual accepts it fully. The environment of the target public also plays a role; messages urging the road user to take care often have to compete with many other messages. It suffices to mention advertising for cars and alcohol, on which spending is a hundred times that on accident prevention.

Eye-catching, well-presented messages (for example, the Dutch TV road safety spot mentioned by J.G. Goos) are the result of the combined efforts of experts in communications (designers, advertisers, media specialists) and accident prevention. Everybody knows that creativity cannot be obtained by diktat. At best, it can be stimulated. Brilliant ideas and slogans are usually the fruit of chance or a fortunate combination of circumstances.

Often, an attempt is made to make the message more attractive by means of “teasers” or other novel devices. While it is recommended that such means be used, they should not be overdone. Action scenes in a film or leaflet (for example, those used in refresher courses for drivers) can obliterate the message by distracting the attention of the viewer/reader. In any case, they should be avoided if there is a risk that the behaviour shown will be imitated. The dilemma arises when one wants to show the risks involved by depicting dangerous situations. Furthermore, road safety films shown on television have to compete with fictional films. In order to keep the viewer’s attention therefore, the producer of a road safety film may have to include action scenes in it.

Care also needs to be taken with “original”, ideas, since if they are too original, the point of the message will be lost sight of. For example, some of the road safety materials for children fail to get the underlying message across despite their original presentation.

The reception of the message is determined by qualitative and quantitative factors. What are they? The message should be as concrete as possible, giving clear instructions on how to react in a given situation. Slogans and images can be used to trigger off a train of reasoning. On the rational/emotional level, several approaches are feasible. Depending on the means, theme and target group, one or even several will be selected. Care has to be taken with messages that arouse fear, since they will change behaviour only if the dose of fear is right. Satire and humour can backfire by making the matter seem a joke. As for the use of sex appeal, experience in Switzerland, Germany, France and the United Kingdom has shown that the effect can be the opposite of that intended. In contrast, messages that make the road user aware of his own responsibility and that provide neutral information have been shown to be effective. Good presentation, a message that underlines the user’s responsibility, and information (and in some cases a dose of fear) are the best approaches. The target public’s reception of the message will depend on various factors (media, source, credibility and theme), especially when it is one that arouses fear.

3.5 Medium

Communication is impossible without an adequate medium. For each target group, the most cost-effective medium will be selected or created (see Libraire and Bernarcer Sales on communication with children). The term “media” comprises both the media proper and other channels of information, for example, a firm that wants to improve the safety of its personnel (see Gatin).

An exhaustive list of all the media that can be effective is beyond the scope of this summary. Basically, however, it can be said that:

- television is one of the most effective;
- several media can be used so as to optimise and multiply the effect of the message;
- the time and spatial interval between the reception of the message and its implementation should be as short as possible.

Depending on the objective, the target group, the length and content of the message, media will be used:

- where they will have a direct impact on behaviour (posters, warning signs),

- and where it will not be possible to ignore the message (for example, spots in the cinema, direct mailing).

Media which make the receiver think have proved their effectiveness. For example, direct contacts (radio and TV programmes which allow listeners to phone in) or indirect contacts (for example, contests or discussions on road safety pamphlets with parents and teachers so as to augment the impact of the message).

3.6 *The receiver*

Communication takes place at different levels (see the Hungarian example regarding traffic lights): at the level of the consumer, i.e. the general public and various target groups broken down by sex, age, occupation, means of transport, etc., and by means of the various multipliers that play a key role in the communication process. Examples of multipliers are:

- companies that decide to promote safety;
- parents, teachers and driving instructors who convey and reinforce the message to children;
- journalists;
- local, regional and national authorities and international bodies; without their co-operation, the message will fail to be conveyed.

Communication strategies often need to be two-pronged: they must be aimed at:

- a) on the one hand, a target group, and have a specific content,
- b) and on the other, at the authorities,

so that appropriate measures are implemented simultaneously. Though this makes the communication strategy more complicated (for example, if legal measures are needed to regulate behaviour), the overall impact will be increased, especially in the case of measures in the legal area: for example, before the population is informed about a measure, the authorities create the relevant legal framework for it.

4. The optimal strategy

Given the basic elements of communication, the fact that it is a process, and the difficulties involved in devising an optimal communication strategy, the following principles can be formulated:

- a) Communication as a means of influencing road users cannot be implemented in isolation from other measures. Several speakers showed that the impact of other measures can be enhanced by road safety campaigns, information, the media, etc. (see Flensted-Jensen, Etévé, Rothengatter).
- b) Communication tools cannot, and should not, be used regardless of the nature of the problem. They should not be used, whether to educate, train, influence or inform, if other means are more appropriate. Spending time on communication instead of ensuring that the system works properly or allocating funds to deal with accident black spots or imposing restrictive measures, would only be an alibi for doing nothing.

- c) Communication should be tailored to the target group and obey marketing principles, especially that of value added. For children, for example, it will mean using a comic strip to prompt them to read the road safety message, while for policy-makers and officials the value added will consist of more financial resources or a better chance of winning votes at the next elections, etc.
- d) The strategies devised by road safety experts should aim to:
 - increase the awareness of the target group -- road users -- and at the same time to
 - establish close contacts with policy-makers, the authorities and road safety officers.. This was emphasised by the Polish Minister of Transport and by Horn and Klemenjak. The European Union also endorsed the need for such contacts. This means that best practices should be exchanged between countries with a view to speeding up the transfer of road safety strategies.
- e) Communication in road safety should be seen in a long-term perspective. Our Nordic colleagues, and V. Mikkonen in particular, showed that it has an impact only in the long term and by dint of perseverance. Rothengatter showed that the effect of a message is not necessarily direct and linear. Often, many hours are needed to achieve an acceptable result.
- f) If the following principles are respected, the communication process has a much better chance of being successful (see Lyster):
 - set operational objectives and pursue them unwaveringly;
 - reinforce existing behavioural attitudes and models;
 - take into account the behaviour of “others” or “toward others” instead of just one’s own behaviour;
 - aim specifically at “unpopular” target groups (for example, moped riders) instead of trying to cover all groups.
- g) It is essential to evaluate the effectiveness (Horn, Järvinen) of road safety campaigns, information and public relations. The feedback received can be used to continually improve quality. Such evaluation is also recommended when “softer” measures than the number of accidents are used as an indicator. In addition, information about the success of a campaign can help to reinforce its impact. The degree of acceptance of the message will be enhanced both quantitatively and qualitatively, since the behaviour will have received the stamp of social approval.

5. Negative information

In order to complete our overview of the effects of communication, mention should be made of the impact of negative information. There have hardly been any studies of this. However, numerous studies of car advertising and test reports have demonstrated that a large part of their content has a negative impact on road safety awareness, especially that of young readers. Such advertising has ten times more impact than road safety messages (spending on it is also ten times as large!). This aspect should not be overlooked. European directives are needed to “neutralise” the impact, at least in regard of road safety, of car advertising, including that for accessories.

6. Towards safe behaviour

There are various ways of changing behaviour. For the purposes of road safety, various other measures can be used in addition to communication:

- legal measures: controls and penalties designed to produce a change in behaviour. Their success depends on the nature of the obligation and on mentalities (for example, the obligation to wear a seat belt);
- technical measures which oblige the road user to adopt a specific type of behaviour (for example, limits obliging the driver to reduce speed);
- psychological measures which aim to change behaviour by mental and/or emotional means. Their effectiveness can vary a great deal (for example, reflective accessories for pedestrians);
- educational measures: systematic use of educational measures to change behaviour. The results are tangible, though because of outside or internal influences, the effectiveness of such measures is not guaranteed (for example, respect of the priority to the right rule).

It is not always been possible nor indeed desirable to differentiate these approaches. It has been found that, in combination, they have a multiplier effect as well as a cumulative effect. Dutch experiences show, for example, that seat belt checks backed by campaigns have not only an additive effect (check + information) but also a multiplier effect (check + information). We shall therefore focus on communication -- the theme of the Seminar. When used properly, it is not only justified but also effective. However, it needs to be carefully prepared and implemented systematically (see the appended table).

After this review of the traditional means of communication used in road safety, we shall now turn to the other ways of influencing road user behaviour. Advertising vaunts the merits of the “talking” car, integrated navigational aids guide the driver, and modern technology is replacing one-way communication by interactive communication. The role of telematics was not touched upon (except by Prediger and Mikulik, and Rothengatter). International groups are publishing their practical findings, firms are marketing the electronic equipment, and road safety bodies are wondering what effect the new technology will have -- will it be beneficial or harmful? This is a subject that could soon interest the ECMT.

To sum up, communication in road safety:

- should be integrated with other measures (legal, technical, etc.);
- should not be used when other measures would have more chance of success;
- should be accompanied by evaluations of its effectiveness;
- should be carried out over a sufficiently long time span to allow it to achieve the desired effect;
- should be targeted at a specific group and use marketing methods.

The role of communication in accident prevention

| Phase | Tasks | Stages |
|----------------|--|---|
| Preliminary | <ul style="list-style-type: none"> - Check that the type of communication (for example, a campaign) is the appropriate tool for reducing the number of accidents in the area in question - Define objectives | <ul style="list-style-type: none"> - Check that it is possible to reach the target group - Check that a behavioural change is possible - Analyse the cost-effectiveness compared with other measures |
| Design | <ul style="list-style-type: none"> - Choose the theme - Define the motivational approach - Define the content of the message - Choose the medium - Create the tools | <ul style="list-style-type: none"> - Decide on the subject/create the slogan - Evaluate the “novelty” effect - Analyse the target group - Conduct an opinion survey - Draw up the budget |
| Testing | Conduct surveys to measure the impact | <ul style="list-style-type: none"> - Preliminary tests - Laboratory tests - Field tests |
| Implementation | Implement the measures | <ul style="list-style-type: none"> - Timetable - Determine/modify the intensity |
| Control | Evaluate the effectiveness | <ul style="list-style-type: none"> - Data recording - Observation - Measurement - Opinion surveys - Statistics |

FOLLOW-UP

Chairman of the ECMT Working Group on Road Safety

Mr. Courtois (Belgium)

The discussions over the past two days have been particularly instructive for the Working Group that I chair.

First, I would say that the leitmotiv of all our discussions has been that road safety policy is effective only if it is comprehensive.

Every death on the roads is, in a real sense, a failure for road safety policy, but can also provide the stimulus for new measures. By co-ordinating policies, road accidents can be prevented.

Of all the contributing factors to accidents, human behaviour is by far the main one. In road safety, communication is an integral part of a comprehensive preventive approach by the authorities to accident prevention. Road accidents affect society as whole and it is time to look at how each member of society can play an active part in communication.

Not only does communication reflect policy, it is an indispensable tool for raising awareness of a social problem in which everyone -- every single member of society -- must become involved in an on-going and responsible manner.

Communicating is about informing and convincing people. How effective the measures taken are depends largely on whether they are accepted. This is a difficult problem, compounded by the need to address different target groups through different channels of communication. There is more than one way of solving it.

There are many ways of convincing people; the methods employed will vary according to the subject, national culture and target group. The variety of channels of communication used in the ECMT Member countries show that it is time we had an operating structure to co-ordinate information, measures to raise awareness of the importance of road safety, and policy goals.

This structure must bring together representatives of the different authorities responsible for road safety policy -- for transport, education and information, policing and enforcement -- who are necessarily in close contact with the policy-makers, the Ministers themselves.

The ECMT has always played a key role in the safety field, as is amply attested by the number and calibre of the Resolutions adopted by the Ministers in order to improve road safety. This is the "official" side of the work of the ECMT, but there is also a hidden side: the experts, in this case the members of the Working Group I chair, also have to convince Ministers to give them a mandate to draft the Resolutions.

The Working Group will thus be considering what follow-up should be given to this seminar. It will be necessary to:

- define common principles;
- exchange information on comparable and transferable experiences;
- decide which new factors need to be taken into account, for example, road traffic information technology, the fact that communications are becoming more international, that borders are disappearing, that messages broadcast by radio and television can now be received in almost every part of the world;
- consider financial resources, because communication is costly.

In conclusion, it remains only for me, on behalf of the Working Group, to thank the Polish authorities for hosting and organising this seminar on road safety, which, for the first time, focused on the most recent Member countries of the ECMT. Our role will be to provide the impetus needed to ensure that the Ministers jointly adopt the necessary Resolutions. We should set about this task without delay, as it appears to be rather a difficult one.

FOLLOW-UP

Polish National Road Safety Council

Mr. Grzegorzcyk (Poland)

The theme of our Seminar is, of course, communication in road safety. Communication is one of the elements which can improve safety on our roads; a lack of communication, however, is a major obstacle to achieving the objectives we have set ourselves. Measures implemented to date -- in Poland's case -- have failed to deliver satisfactory results, despite the fact that we now have a Road Safety Council whose job it is to co-ordinate and set up information flows between the various institutions involved. Due to the lack of information and support measures, results have fallen far short of expectations. I believe not only that we would be wise to put into effect the conclusions to have emerged from the discussions at this Seminar, but that doing so will enable us to get better results from the measures we are implementing. However, we should not overestimate the role of communication, as communication alone cannot take the place of other measures. It is not a substitute.

Another important point to emerge from the Seminar is the marked divergence in approaches to problems and in responses to the statistical analyses and studies available in different countries. In the course of the discussions some speakers disputed some of the statistical results. To what extent can statistics help improve safety? I believe this to be an area which can be explored further by examining attitudes towards studies and findings in the CEECs and Western Europe. This was a point stressed by Mr. Courtois. The number of TV channels now available in Poland means that we have widespread access to western programmes; we also have access to the Internet and are beginning to be fluent in other languages. So we are aware of what is happening in other countries. Moreover, under various conventions and through compliance with ISO standards, but also because we wish to join the European Union, we are obliged to observe certain regulations and to ensure the same standards of safety on our roads as in the countries of Western Europe. As a first step, our aim in campaigns to improve road safety should be to influence politicians and decision-makers. I do not wish to repeat Professor Krystek's remarks about the mistakes made from an information standpoint or the changes a new Highway Code is expected to bring. This was an instance of members of parliament having insufficient information and, I am sorry to say, of an ineffective campaign by the Ministry of Transport and the Ministry for Home Affairs, since it was the Ministry of Transport itself that had drafted the proposal and explained it to politicians, members of parliament and road users. We failed to convince them. Our failure to push through a 50 km/h speed limit in built-up areas shows what could happen to the other measures that we had planned to introduce. At the time, we were a bit of a laughing-stock. Drivers thought, "Why stick to a 50 km/h limit, if it is so ridiculous?" Even the Polish Parliament ridiculed it. We have a particularly important role -- and I mean not just the engineers among us but the many people, psychologists and others, working on road traffic -- in convincing decision-makers and politicians and in promoting better road safety. Road safety campaigns should first be incorporated into the framework of proposed amendments, since up to now

users have regarded them as infringing their personal liberties. This has been our experience and still is as far as seat belts, safety helmets for cyclists and driving tests for the over-sixties (when performance deteriorates) are concerned. We have to convince others that we know what we are talking about and that we are absolutely right. We also have to convince people that the restrictions proposed are intended to prevent death and injury on the roads and are not repressive. For instance, driving over the speed limit is regarded as a personal liberty. People say to themselves "After all, I've got a car, I can handle it, why should the law stop me driving as I like when the road conditions are good (sunny, dry road)? Why should I drive at 90 km/h?"

In most cases, unfortunately, drivers do not realise what the consequences of speeding can be. We saw what a difference 10 km could make: the higher the speed, the greater the difference. One of the most interesting speeches at the Seminar mentioned that ecologists had managed to build up a lobby. Without repeating what Mr. Tracz had to say, I suggest that we try to do what the ecologists have done so that we reach the stage where any project to upgrade roads has to be undertaken jointly with road safety experts. At local level proposals are often the results of pressure by just one person. For example, my child goes to a certain school. As a parent, I think that this school is on an extremely dangerous road. Depending on how much say I have in decisions and what contacts I have, I try to ensure that there is a crossing and as many signs and signals as possible on that road. Now, this could lead to absurd situations and might also prompt drivers to ignore some of the signs. It might be better to close down the road altogether so that parents could be sure that their children are safe! This illustrates how important public acceptance of change is. We also have to try to raise people's awareness. If 100 people are killed in an airplane crash, a government commission of enquiry is set up under the Prime Minister. It studies the airplane's construction, the seat belts, etc. while on any weekend in July, 94 people are killed on the roads and nobody does a thing about it. We need to find a clever way to bring home to people that this is a tragedy and we are unable to do this on television, we are unable to reach the individual through the mass media. Showing figures or photographs, shock tactics -- like showing a Fiat wrapped around a post being cut open to get the body out -- will not do it. I cannot say often enough that shock tactics do not work any more, since the majority of people in Poland think that accidents are something that happen to somebody else, not them. Everyone thinks that they are "king of the road", the "world's best driver" and so they, personally, are not in any danger.

For the purposes of our own organisation and the European Conference of Ministers of Transport, too, as regards the international exchange of information, it would be better to draw on those experiences that are easily transposed from one country to another. I have mentioned the cultural and technical differences between our countries, but there are some things can be imported direct. For example, the 10x40 film (the Danish film) with no commentary could be very easily transposed to another country.

The last point, which one of the speakers rightly mentioned, is that we should think about including groups other than ourselves, specific age groups. We must win them over to road safety. We have managed to persuade the under-fifteens to think safety by giving them reflective items to wear over their clothes. Let us find out what will make young people positively want to wear these safety items so that we do not have to have a policeman, say, watching over every child, at school. I remember that when I was a schoolboy we all had to wear badges -- to get rid of them, we used to cut them off with a knife as soon as we got out of school. It is the opposite effect we are trying to produce: when I get out of school, I put on my Adidas trainers with the safety features and I'm proud to do so. This is a positive incentive for youngsters. Today this Seminar is itself a continuation of some of the changes we have made in Poland and it will enable us to take another step towards the

improvements that we are so eager to see. I would also like to take this opportunity to thank Mr. Courtois, the ECMT Group on Road Safety, and all of you for listening so patiently and attentively to all the. Thank you very much.

CLOSING BY THE DIRECTOR GENERAL OF ROADS
MR. SUWARA (POLAND)

On behalf of the Minister of Transport and Maritime Economy, who is away from Warsaw at the moment, and in my own name, I would like to express my satisfaction that this Seminar is being held in Warsaw, and that it is being attended by many specialists from several European countries. The general theme of the Seminar -- road safety and communication -- is an important one. Both aspects are very important in democratic regimes and especially in new democracies like Poland. Road safety is, unfortunately, bad in Poland, and a lot of questions still have to be answered. Many accidents occur in Poland, but the reaction varies depending on the type of accident. If there is plane crash in which 180 people die, it is a national tragedy. If there is a rail accident in which 12 die, the newspapers talk about it for a week. Those responsible for the accident have to be found. If there is a mining disaster in which 4 miners die, there will be discussions for several weeks about how to improve mine safety. But there is no reaction to the fact that every day between 15 and 20 people die on the roads, or that 90 (a record) are killed during a summer weekend, or that 7 000 people are killed on the roads every year. There is no reaction, there is a lack of awareness, a lack of communication but also of responsibility. A few years ago, it used to be argued that since 20 per cent of road accidents were caused by inebriated drivers, and 80 per cent by sober drivers, then those who had been drinking drove more safely!

My general impression of the Seminar is the following: the statements and presentations have been very relevant, very professional and have reflected a lot of personal commitment on the part of those making them. Successes and failures have been discussed frankly, we have been told how to communicate with society and to convince decision-makers. It is also important that ideas be translatable into practical measures, if only on the principle that "the most practical is also good theory". That is the kind of idea one remembers later. The participants in this Conference, especially those -- very numerous -- from Poland, due to the fact that the Conference is being held here, have learnt much that is new. In my opinion, the experience has been very positive.

I would now like to thank the European Conference of Ministers of Transport for its initiative, and its Secretary-General for having honoured us with his presence. It is really very important. I would also like to thank the Chairman of the Group on Road Safety, Mr. Courtois, who was an excellent Chairman of a session of the Seminar, as well as the members of the small drafting group -- Mr. Périsset (Switzerland), Mr. Prediger (Czech Republic), Mr. Grzegorzcyk (Poland) and Mr. Casier (Belgium). I would also like to thank the Secretariat of the Conference, and especially Mrs. Fouvez. Let me also thank my Polish colleagues who organised the event, the company "Profil" and the staff of this centre who, though they had no experience of organising such a major conference, did their utmost. I apologise for any discomfort caused by the transport or bad weather. I hope you will keep good memories of your stay in Poland and that you will come back one day for further meetings and seminars.

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