BEST PRACTICES FOR ROAD SAFETY CAMPAIGNS

Technical Committee C.2 Safer Road Operations

WORLD ROAD
ASSOCIATION
MONDIALE
DE LA ROUTE

AIPCR · PIARC

STATEMENTS

The World Road Association (PIARC) is a nonprofit organisation established in 1909 to improve international co-operation and to foster progress in the field of roads and road transport.

The study that is the subject of this report was defined in the PIARC Strategic Plan 2007 – 2011 approved by the Council of the World Road Association, whose members are representatives of the member national governments. The members of the Technical Committee responsible for this report were nominated by the member national governments for their special competences.

Any opinions, findings, conclusions and recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of their parent organizations or agencies.

This report is available from the internet site of the World Road Association (PIARC)
http://www.piarc.org

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EXECUTIVE SUMMARY

The report covers the following key focus areas of Road Safety Campaigns by road administrations and authorities, namely (i) Road User Behaviour, (ii) Types of Road Safety Campaigns, (iii) Target Audiences, (iv) Campaign Media, and (v) Campaign Evaluation.

The report presents key findings of a literature review of best practices for road safety campaigns, and relate these to actual road safety campaign practices of countries who responded to a survey questionnaire.

It is a well-known and researched fact that road user behaviour plays a major role in the current status of crash rates experienced by many countries. The ability to effectively change poor or bad road user behaviour is therefore much desired.

The reality is that many people are sceptical or even superstitious about certain safety measures, such as the wearing of seat belts. In some cultures there are even attitudes that all accidents are *"the will of God".* Breaking down these barriers and convincing the public that many accidents can, and have been prevented, can be a long and slow process. Road safety campaigns should, therefore, be seen as a sustained commitment, and influencing road user behaviour in a positive and sustained manner will therefore have a high road safety return.

The PIARC Survey revealed that most respondents communicated safe driving as the primary theme of their road safety campaigns. While there was variance between the countries, (i) promoting safe driving, (ii) reducing deaths and injury and (iii) reducing traffic offenses, were the primary campaign themes. Behaviour change, increased awareness and knowledge, and changing attitude, were the key objectives to achieve the campaign ultimate goal.

Behavioural change theories are used to (i) predict behavioural change, (ii) persuade behaviour change, and (iii) explain the process of behavioural change. The understanding of theories of behavioural change plays a major role in understanding the difference between desired and actual road user behavioural change. These theories allow for a more accurate evaluation of predicted outcomes of campaigns. However, despite the scientific evidence indicating the importance of using theoretical behavioural models when attempting to change or influence human behaviour, only a few of the responding countries used these models when developing their road safety campaigns.

It is important to acknowledge that a communication campaign is not the only intervention that serves to improve knowledge or change beliefs and behaviour. Other activities such as enforcement, education, legislation, reinforcement and engineering advances and improvements, are often added to the communication

campaign in order to increase its effectiveness. These are known as supporting activities and are vital to the success of a road safety campaign. All surveyed countries stated they had one or more activities supporting their road safety communication campaign.

The use of integrated programmes involves integrating and coordinating many different communications to disseminate a clear and consistent message about a particular type of problem behaviour, or about a range of issues over a longer time frame.

Whether or not the communication campaign is combined with supportive activities, or whether or not it is part of an integrated programme, its design and implementation will mostly be based on sound social-marketing principles.

Depending on the road safety problem to be addressed, the target audience may be the whole population or a specific target group. It is important of understand the dynamics of the current behaviour and how such behaviour varies within a specific target audience before change can be effected.

The majority of the respondents indicated that road safety campaigns were aimed at specific target audiences, and that while developing the various campaigns, understanding the target audiences were key to the process.

Choosing the appropriate means of communication is essential in ensuring that that the message reaches the target audience. The choice depends primarily on factors related to communication type, target audience, media characteristics, and costs. Research highlights that the biggest divide facing our society is not a gender, racial, income or technology divide, but it is the generational divide. Reaching the different generations, is therefore an important aspect that influences the type of road safety campaign media. It is important to ensure that the most appropriate and correct media choice is made. Special consideration should be given to the characteristics of a target audience and target audience segmentation which gives guidance to the media type.

Fear appeals should in general be used with caution and personal beliefs and experiences of the target audience could negatively credit the communicator.

The importance of evaluating road safety campaigns cannot be over emphasised. The literature review revealed that efficient evaluation of road safety campaigns must be embedded in the design of the campaign. The ability to evaluate and gauge effective of campaigns guides future investment.

One of the problems in using publicity measures is that people, on the whole, are resistant to change, especially when there is no apparent personal gain for them to do so. This attitude creates the challenge to convince road users to change attitudes and habits when there is no real desire to do so. Road safety campaigns can play its part in influencing road user behaviour for the better, special care should however be taken to ensure key issues such as (i) Road User Behaviour, (ii) Types of Road Safety Campaigns, (iii) Target Audiences, (iv) Campaign Media, and (v) Campaign Evaluation are sufficient researched and understood before implemented by road authorities and administrations.

INTRODUCTION

For the purpose of this study the term *"Road Safety Campaign"* will be used for road safety awareness campaigns through mass media. It includes all forms of advertising, including paid media advertisements.

Report Objective

The primary objective of the paper is to report on best practices for Road Safety Campaigns, which has been identified as a key area for research by a workgroup in Technical Committee C.2 *Safer Road Operations*, which forms part of the World Road Association strategic theme C: Safety of the Road System.

Report Scope

The report covers the following key focus areas of Road Safety Campaigns by road administrations and authorities, namely (i) Road User Behaviour, (ii) Types of Road Safety Campaigns, (iii) Target Audiences, (iv) Campaign Media, and (v) Campaign Evaluation.

Methodology

A literature review was conducted and is summarised for each key area of Road Safety Campaigns. The literature review revealed that extensive international literature on the identification, development, implementation and evaluation of road safety mass media campaigns already exists. Studies on best practices have to a large extent already been conducted and documented.

The objective and scope of this report is therefore to not *"reinvent the wheel"*, but to rather present key findings of the literature review of best practices for Road Safety Campaigns, and relate these to actual Road Safety Campaign practices of PIARC member countries.

In order to gather actual experiences in Road Safety Campaign practices, a survey questionnaire was develop and structured specifically based on the literature review findings. The questionnaire was circulated to PIARC member countries and the feedback analyzed. A copy of the PIARC Road Safety Campaign Survey Questionnaire is enclosed in *Appendix A* to this report. A limitation to the survey was that only 18 responses from 14 countries completed and returned the questionnaires. These countries are: Argentina, Australia, Belgium, Canada, Cuba, Hungary, Korea, Malaysia, Mexico, Portugal, South Africa, Spain, Switzerland, USA. The analysis and results can therefore not be truly representative of a global practice. However the completed questionnaires highlight key trends and extent to which road safety campaigns are implemented in various countries.

This is discussed further under the conclusions section of this report.

Structure of this Report

This report is therefore structured to comprise both the literature review findings and corresponding analysis of the survey for each of the key areas of a Road Safety Campaign. Actual best practice principles are highlighted per key area.

1. ROAD SAFETY CAMPAIGNS

1.1. WHY IMPLEMENT A ROAD SAFETY CAMPAIGN?

It is a well-known and researched fact that road user behaviour plays a major role in the current status of crash rates experienced by many countries. The ability to effectively change poor road user behaviour which have been proven to adversely impact road safety, to that which is regarded as more conducive to a safer environment for all road users, is therefore much desired. An effective methodology to provide a sustained positive change in road user behaviour is therefore seen as an investment with very high road safety return. *Figure 1* illustrates the extent to which factors contribute to road crashes. The human factor is by far the greatest contributor.
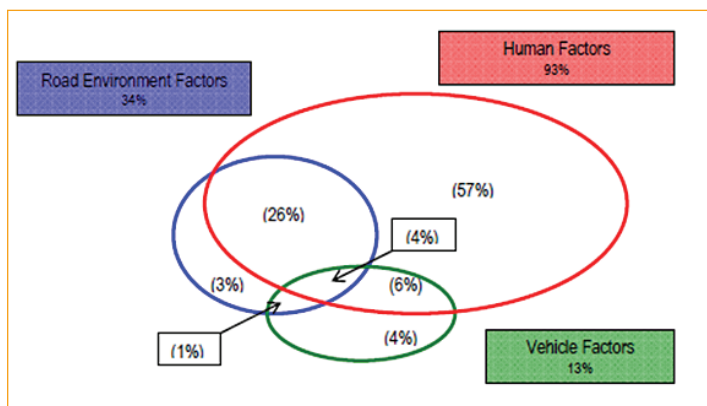
FIGURE 1 – CONTRIBUTORY FACTORS TO ROAD CRASHES [1]

It might seem unnecessary to have to devote resources to guide people to behaviour that may obviously be in the best interests of their own health and safety; e.g., not driving while intoxicated, wearing of safety helmets and seat belts, and not driving at excessive speed. People may not actually understand the risks, or if they do, may ignore the risk by acting on the belief that *"it won't happen to me"*.

Many people are sceptical or even superstitious about certain safety measures, such as the wearing of seat belts. In some cultures there might even be an attitude that all accidents are *"the will of God"*. Breaking down these barriers and convincing the public that many accidents can, and have been prevented, can be a slow process.

Road Safety Campaigns should, therefore, be seen as a sustained commitment, and influencing road user behaviour in a positive and sustained manner will therefore have a high road safety return.

Actually Road Safety Campaigns have become a major commitment for many countries. Out of the surveyed countries, three spend more 5,000,000 (EUR) or more per year, two between 2,500,000 and 5,000,000, four between 1,000,000 and 2,500,000 EUR.

Most Road Safety Campaign initiatives cover the following primary objectives:

• create awareness of road accident threats and vulnerability of certain road users;
• educate road users as to what constitutes safe or unsafe road user behaviour;
• change attitudes and beliefs to a more positive road safety approach; and
• inform road users of changes in traffic regulations or operating conditions.

Road Safety Campaigns should therefore be seen as an indispensable part of any nation's road safety strategy.

1.2. PIARC SURVEY RESULTS: CAMPAIGN THEMES, GOALS AND OBJECTIVES

The survey revealed that most of the respondents surveyed (56%) communicated safe driving as the primary theme of their Road Safety Campaigns. While there was variance between the countries, (i) promoting safe driving, (ii) reducing deaths and injury and (iii) reducing traffic offenses, were the primary campaign Themes as indicated *figure 2*.
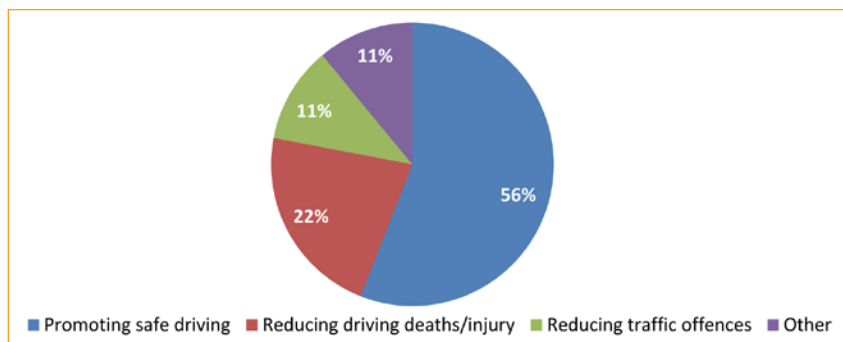
FIGURE 2 – PIARC SURVEY RESULTS: CAMPAIGN THEMES

Consequently most countries (44%) reported that the primary goal of the campaign was to reduce the number of crashes and injuries, followed by reducing road deaths (22%) as indicated in *figure 3, following page*.
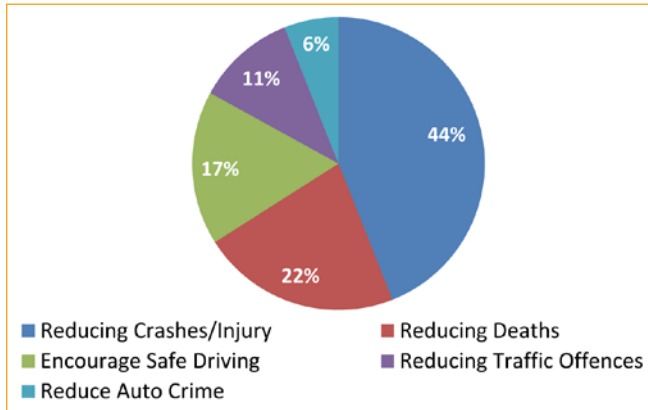
FIGURE 3 – PIARC SURVEY RESULTS: CAMPAIGN GOALS

The majority of the Road Safety Campaigns therefore promote safer driving relating specifically to reducing number of crashes and injuries, and subsequently a reduction in road deaths.
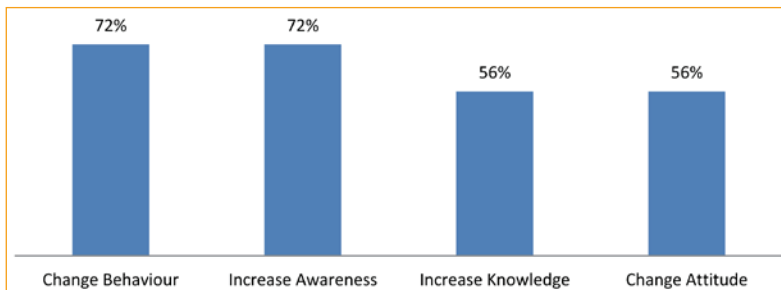
FIGURE 4 – PIARC SURVEY RESULTS: ACHIEVING KEY OBJECTIVES

When questioned on how the campaign goal would be achieved, the respondents noted, behaviour change, increased awareness and knowledge, and changing attitude, as the key objectives to achieve the campaign ultimate goal.

It is evident that behaviour modification is the key to the success of Road Safety Campaigns, and most of the Road Safety Campaigns are looking to achieve a combination of these key objectives.

> **"HELPING YOUNG DRIVERS BE SAFE DRIVERS."**
> *VicRoads, Australia*
>
> **"DO NOT STOP IN THE EMERGENCY LANE"**
> *Hungarian State Motorways, Hungary*
>
> **"ZERO FATALITIES – A GOAL WE CAN ALL LIVE WITH."**
> *Utah Dept of Transportation, Utah Dept of Public Safety, USA*
>
> **"RETHINK THE WAY YOU DRIVE"**
> *Multiple Agencies, Canada*

INSERT 1 – EXAMPLES OF ROAD SAFETY CAMPAIGN THEMES / SLOGANS

Insert 1 highlights a number of actual Campaign Themes/Slogans used by a number of countries.

> **CHANGE ATTITUDES**
> *To further change attitude toward drinking & driving (socially unacceptable)*
>
> **CHANGE BEHAVIOUR**
> *Positive psychological and behavioural reinforcement inducing a behavioural change.*
> *Encouraging more designated drivers !*
> *Beer Brewing Industry & Professional Association of Insurers (Belgium)*

INSERT 2 – EXAMPLE OF ROAD SAFETY CAMPAIGN OBJECTIVES

Insert 2 demonstrates combined attitude and behaviour change objectives of a Road Safety Campaign initiative.

2. ROAD USER BEHAVIOUR

2.1. THEORIES OF BEHAVIOUR CHANGE

It is important to understand what processes affect road user behaviour, what motivates a road user to behave in a safe or unsafe manner, and the process of behaviour change.

Psychological theories have been extensively researched and used in public health mass media campaigns. The consequence of compromised road safety relates specifically to one's health, and the relevance of behavioural change theories to road safety campaigns are therefore widely acknowledged and accepted by experts on the field.

Behavioural change theories are used to (i) predict behavioural change, (ii) persuade behaviour change, and (iii) explain the process of behavioural change.

Understanding theories of behavioural change can therefore play a major role in understanding the difference between desired and actual road user behavioural change. More important, these theories allow for a more accurate evaluation of predicted outcomes.

A number of theories/models of behaviour changes have been reviewed by Delaney et al. [2] These models include the following:

- Theories predicting behavioural change include:

  – Theory of Reasoned Action
  – Theory of Planned Behaviour
  – Health Belief Model
  – Social Learning / Cognitive Theory
  – Protection Motivation Theory

- Theories that persuade behavioural change
  – Elaborative-Likelihood Model
  – Associative-Propositional Evaluation Model

- Theories that explain the process of behaviour change
  – Theory of Self-Regulation
  – The Transtheoretical Model of Change

Different theories are applicable to different types of behaviour and thus different types of campaigns intend to affect a particular type of behaviour change. Variables associated with the perceived threat or impact, such as likelihood or severity, all play an important role.

The extent to which these variables are likely to impact on a particular targeted behaviour is also of significance. The success of a particular theory's application will depend on the match with the objectives of the Road Safety Campaign. This should in turn be linked directly with the target behaviour contributing to the safety risk that has to be changed.[2]

2.2. PIARC SURVEY RESULTS: USE OF BEHAVIOURAL CHANGE MODELS

Despite the scientific evidence indicating the importance of using theoretical behavioural models (TBM) when attempting to change or influence human behaviour, only a few countries used TBM when developing their Road Safety Campaigns.

As part of the survey, each country was asked if their campaigns were based on a specific TBM or whether a link between target audience and a TBM was established.

Most respondents (83%) reported that a TBM was not used in the development of their campaigns, nor do the objectives (83% of respondents) or target audience (89% of respondents), relate to a specific TBM, as illustrated in *figure 4*.
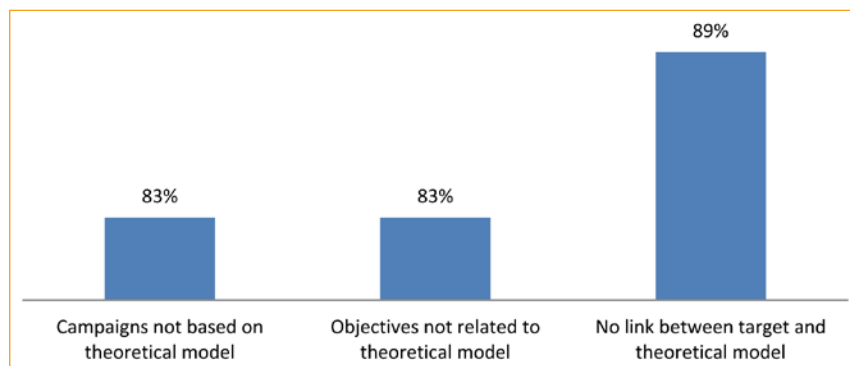
FIGURE 5 – PIARC SURVEY RESULTS: THEORETICAL BEHAVIOURAL MODEL

Most of the countries surveyed appear to assume the expected behavioural change outcomes, with a high success rate anticipated. Sustainable behavioural change is linked to understanding the appropriateness of the TBM, and how such TBM has been matched to the specific target audience and the targeted behaviour.

Attempts to influence behavioural change is therefore strongly linked to the TBM used. The absence of a TBM could therefore impede the ability to accurately assess or understand the actual behavioural change encountered.

Insert 3, following page, highlights two responses claiming the use and non-use of TBM for Belgium and Australian Road Safety Campaigns respectively. Both Road Safety Campaigns encourage a positive message, with a positive behavioural change anticipated. Both campaigns are therefore making use of TBM, although the Australian campaign has not formalised the use thereof.

ANTI-DRINK DRIVING CAMPAIGN

Behavioural and psychological reinforcement is best accomplished through use of reward and positive/normative strategies.

A link between the campaign objective and the TBM was formed by rewarding of the correct behaviour to the chance of winning a car and other prizes when having a negative breathalyzer test performed by the Police during the campaign.

Road Safety Institute, Belgium

YOUNG DRIVERS

No TBM was used. The criteria used in developing and implementing communications were:

1. Be positive no coercive when communicating
2. Use peer group members in materials
3. Explain the road safety benefit of each new road rule
4. Use language appropriate for young drivers
5. Use communications channels most used by audience

VicRoads, Australia

INSERT 3 – EXAMPLES OF USE AND NON-USE OF THEORETICAL BEHAVIOURAL MODELS (TBM)

3. TYPES OF ROAD SAFETY CAMPAIGNS

The literature review revealed various categorizations of different types of Road Safety Campaigns. The resource that proved to offer the most comprehensive Road Safety Campaign type and classification was that of the European Union initiated project, Campaigns and Awareness Raising Strategies (CAST) [3].

3.1. COMMUNICATION CAMPAIGNS

Public communication campaigns are defined as purposeful attempts to inform, persuade, or motivate people in view of changing their beliefs and/or behaviour in order to improve road safety as a whole or in a specific, well-defined large audience, typically within a given time period, by means of organised communication activities involving specific media channels often combined with interpersonal support and/or other supportive activities.

3.2. ROAD SAFETY SUPPORTING ACTIVITIES

A communication campaign is not the only intervention that serves to improve knowledge or change beliefs and behaviour. Other activities such as enforcement, education, legislation, reinforcement and engineering advances and improvements, are often added to the communication campaign in order to increase its effectiveness.

3.2.1. Enforcement

Enforcement can be used to support the campaign message. Law enforcement, particularly high-visibility enforcement, can raise audience awareness about the campaign theme.

Enforcement upholds society's expectations and standards, and imposes sanctions (penalties, fine, demerit systems, etc.) when traffic laws are broken. The threat of these sanctions is what persuades most road users to comply with the rules. Enforcement discourages people from repeating behaviour that has already earned them a sanction, and thus helps in creating a useful deterrent and in encouraging people to develop habits of compliance.

3.2.2. Legislation

Legislation concerns the adoption of new laws or the modification of existing laws. The campaign can inform people about new or modified laws, or prompt them to obey the law. Legislation is the most basic mechanism for attempting to influence road-user behaviour.

3.2.3. Education

Education can be used to communicate information and raise awareness of a specific issue. It helps people develop knowledge, skills, and changes in attitude. Road safety education, specifically from early childhood entrenched the values of responsible road usage.

3.2.4. Reinforcement

Reinforcement can be used to prompt people to adopt a safe behaviour. It focuses on specific behaviours and the external factors that influence them. Its purpose is mainly to encourage safe behaviours rather than discourage unsafe ones.

Reinforcement encourages safe behaviour with road users giving a commitment, or receiving a reward for good behaviour:

- **Commitment:** the campaign can prompt road users to commit themselves to law-abiding behaviour.
- **Rewards:** a reward system can be used as an incentive for people to adopt the safe behaviour (e.g., standing a chance of winning a prize if spotted wearing their seat belt).

3.2.5. Engineering improvements

Engineering Improvements can be either infrastructure- or vehicle-based. These may be used to inform road users about safe behaviour or directly steer their behaviour.

• **Infrastructure:** the campaign can interact with recent infrastructure measures, (e.g. encouraging the use of a newly constructed pedestrian bridge)
• **Technological innovations or enhancements,** e.g. ignition controlled breathalysers.

3.3. INTEGRATED CAMPAIGNS

Using integrated programmes involves integrating and coordinating many different communications to disseminate a clear and consistent message about a particular type of problem behaviour or about a range of issues over a longer time frame.

Such programmes can involve collaboration between several organisations likely to influence the road-safety issue addressed by the programme.

Cooperation between organisations, as well as coordination of programmes, can be very useful. Combined resources with a common objective can make Road Safety Campaigns more costs effective with better results. Integration of different agencies and programmes can be organised either vertically or horizontally:

• **Vertical integration** means, for example, that a given campaign is implemented on different scales by local, regional, and national authorities.
• **Horizontal integration** means that the campaign is implemented on the same organisational level but in different sectors. Alliances can then be formed between similar organisations. For example, the campaign can be implemented by the National Ministry of Transport and the National Ministry of Health.

3.4. SOCIAL MARKETING

Whether or not the communication campaign is combined with supportive activities, or whether or not it is part of an integrated programme, its design and implementation will mostly be based on sound social-marketing principles [3].

The international trend is to apply social marketing techniques when communicating road safety messages. Social marketing is defined as *"the use of marketing principles and techniques to influence a target audience to voluntarily accept, modify or quit behaviour for the benefit of individuals, groups or society as a whole, and marketing strategy factors which include marketing mix".*

Thus, the objective of social marketing is to influence and change social behaviours in the interest of the target audience or society in general. It may also seek to enhance knowledge and/or change attitudes as a means of influencing behaviours.

> *"Social marketing is critical because it looks at the provision of health services from the viewpoint of the consumer. We had to consider ways to entice men to come to our clinics; we found that haircuts were a good way to do that. Last year, we gave out over 1,000 free haircuts. It proved to be a great attraction."*
>
> *Eric E. Whitaker, MD, MPH Director, Illinois Department of Public Health*

INSERT 4 – EXAMPLE OF THE USE OF SOCIAL MARKETING IN THE PUBLIC HEALTH SECTOR

Social marketing is based on similar principles to product marketing, however social marketing is best described in *table 1*.

TABLE 1 – DESCRIPTION OF SOCIAL MARKETING [8]	
• A social or behaviour change strategy	• Just advertising
• Most effective when it activates people	• A clever slogan or messaging strategy
• Targeted to those who have a reason to care and who are ready for change	• Reaching everyone through a media blitz
	• An image campaign
• Strategic, and requires efficient use of resources	• Done in a vacuum
• Integrated, and works on the *"instalment plan"*	• A quick process

There are ten strategic questions that you can use to help work toward an initial marketing plan [8]. These are:

1. What is the social [or health] problem I want to address?
2. What actions do I believe will best address that problem?
3. Who is being asked to take that action? (audience)
4. What does the audience want in exchange for adopting this new behaviour?
5. Why will the audience believe that anything we offer is real and true?
6. What is the competition offering? Are we offering something the audience wants more?
7. What is the best time and place to reach members of our audience so that they are the most disposed to receiving the intervention?
8. How often, and from whom, does the intervention need to be received if it is to work?
9. How can I integrate a variety of interventions to act, over time, in a coordinated manner, to influence the behaviour?
10. Do I have the resources to carry out this strategy alone; and if not, where can I find useful partners?

If we can figure out how to make behaviour change EASY, FUN, and POPULAR it becomes easier for us to encourage it. [8]

3.5. PIARC SURVEY RESULTS: TYPES AND SUPPORTING ACTIVITIES OF ROAD SAFETY CAMPAIGNS

In a PIARC Survey question relating to the duration of the Road Safety Campaigns, at least half of the campaigns had been running for two years or less, while just over one-fourth of the countries indicated that their campaigns have been ongoing for more that five years. This is depicted in *figure 6*.
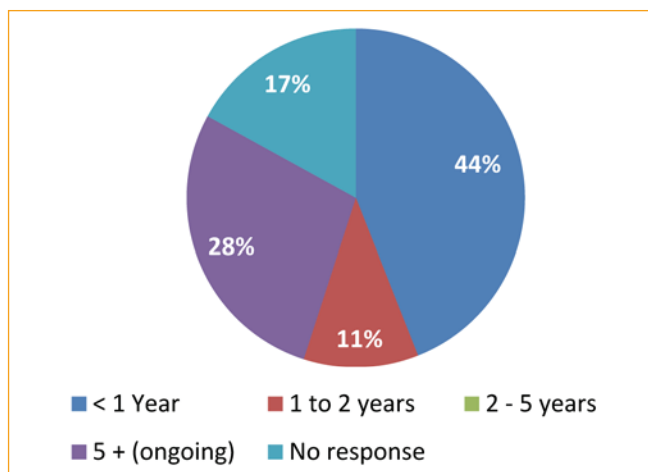
FIGURE 6 – PIARC SURVEY RESULTS: CAMPAIGN DURATION

Even though many of the campaigns are fairly new, a large number of the countries indicated that their campaigns being are part of a long-term strategy and will continue well into the future as highlighted in *figure 7* below. Road Safety Campaigns that are part of a longer term strategy allow better opportunity to be integrated with supporting activities and national or regional road safety strategies.
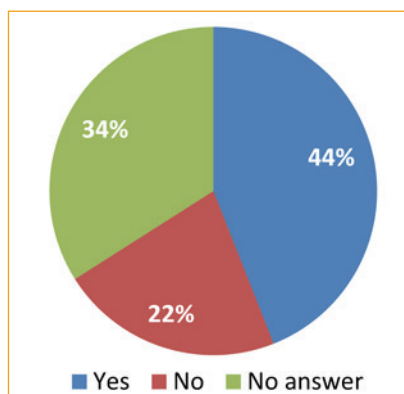
FIGURE 7 – PIARC SURVEY RESULTS: CAMPAIGN LONG TERM STRATEGY

Approximately half (47%) of the respondents indicated that their campaigns have national coverage, while 46% were only regional in coverage as indicated in *figure 8*. Although this may well be linked to the geographical and population size of the country concerned, the road safety strategy, target audience and primary campaign objectives, should to a large extent determine whether a campaign is national or regional in coverage.
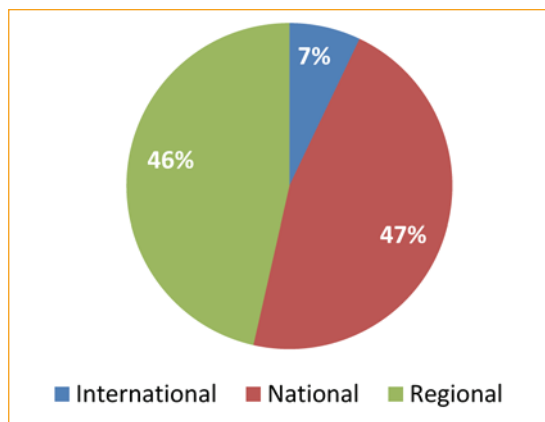
FIGURE 8 – PIARC SURVEY RESULTS: CAMPAIGN COVERAGE
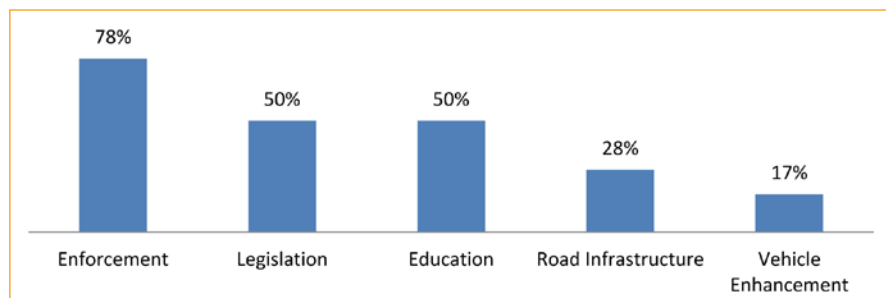
FIGURE 9 – PIARC SURVEY RESULTS: CAMPAIGN SUPPORTING ACTIVITIES

All countries stated they had one or more activities supporting their road safety communication campaign. The top examples were law enforcement, legislation and educational activities as indicated in *figure 9* above. The results to these survey question highlights the importance of supporting activities. Enforcement is the most common supporting activity used, highlighting the intention to influence road user behaviour. Using enforcement as a supporting activity, specifically, high visibility traffic enforcement, *"puts into action"*, what the campaign *"preaches"*. This gives a sense of realness and a reality check to the road user, making the message more likely to be accepted.

ROAD TO LIFE : 2002 - 2010

Implementation of the Road Safety National Plan, considering specific measures focused on all domains of activity and all the road safety factors.

Ministry of Transport, Cuba

ARRIVE ALIVE : 2008-2017

Part of government's long term road safety strategy which aims to reduce road deaths and serious injuries by 30% by 2017.

VicRoads, Australia

NO DRUNKEN DRIVING, NO DROWSY DRIVING : 1970'S TO CURRENT

Road Traffic Authority (RTA), Korea

INSERT 5 – EXAMPLES OF ROAD SAFETY CAMPAIGNS THAT FORM PART OF LONG TERM STRATEGIES

Insert 5 highlights country examples of Road Safety Campaigns which form part of the long term strategy. The Korean, *"No drunken driving, no drowsy driving"* Road Safety Campaign has been running for over 30 years, influencing and entrenching a safer road user behaviour over generations.

"YOU CAN MAKE A DIFFERENCE !" ROAD SAFETY CAMPAIGN

ENFORCEMENT

Joint enforcement during advocacy campaign (on the ground)

LEGISLATION

Specific campaigns on new regulations to reduce resistance and increase awareness among public

EDUCATION

Formal road safety education in schools and curricular activities (Road Safety Club)

ROAD INFRASTRUCTURE

Traffic calming at school areas and black spot treatment by road authorities

VEHICLE ENHANCEMENT

Enforcement of Malaysian and UNECE Standards of vehicle parts and components to increase safety and reduce injuries when accident occurs

Road Safety Department of Malaysia
Malaysia Road Safety Council

INSERT 6 – EXAMPLE OF ROAD SAFETY CAMPAIGN SUPPORTING ACTIVITIES

The Malaysian, *"You can make a difference!"* Road Safety Campaign as indicated in insert 6 demonstrates how supporting activities in Enforcement, Education and Engineering enhancements (infrastructure and vehicle), have been integrated in to the campaign.

Road Safety Campaign case studies where the effective use of supporting activities, integration and social marketing techniques and principles were made, are summarised in *inserts 7, 8 and 9*.

CAMPAIGN OVERVIEW [7]

In 2000 the UK Department for Transport (DfT) developed a marketing and communications programme to reduce the number of deaths and injuries on the roads. This broad suite of campaigns, each with its own specific behaviour change objective, was developed under the unifying 'THINK!' brand, which formed part of the Government's 2000 road safety strategy, *Tomorrow's Roads: Safer for Everyone.* The strategy set targets to reduce the number of people Killed and Seriously Injured (KSI) on UK roads by 50 per cent for children and by 40 per cent overall by 2010, as compared to the 1994 to 1998 average.

To achieve such ambitious targets, the Government pioneered a three-pronged strategy to reduce road casualties: Engineering, Enforcement and Education. THINK! formed part of the Education element, along with other measures such as driver learning and testing.

In 2008, together with the introduction of successful engineering and enforcement measures, THINK! contributed to meeting or exceeding DfT's road safety targets, with a 40 per cent reduction in KSI and a 59 per cent reduction in child KSI. This represents 3,494 people who are alive and uninjured today due to THINK! Moreover, it is estimated that for every £1 spent on THINK! £9.36 of public money was saved.

Organisation: UK Department for Transport – Location: England – Dates: 2000 to 2010
Website: www.dft.gov.uk/think

INSERT 7 – THINK! ROAD SAFETY CAMPAIGN

CAMPAIGN OVERVIEW [7]

This community-based, culturally integrated programme aimed to increase the use of child safety restraints in a Hispanic neighbourhood in the west Dallas area of Texas. Funded in part by the National Highway Traffic Safety Administration, the National Centre for Injury Prevention and Control, and the Centres for Disease Control and Prevention, the ultimate aim was to reduce the number of child injuries and fatalities occurring due to the lack of use of car seats and booster seats.

This multifaceted three-year programme incorporated a series of education and engagement activities conducted in the target area by trained bilingual staff, most of whom were residents of the local neighbourhood. Parents who attended the informational sessions were also offered subsidised car seats, which had been blessed by a local priest.

The programme was found to be most successful among parents who attended the community health centre, which was the main site of intervention activities, and in the preschool age group (children younger than five years). Based on structured observational surveys, use of safety restraints among Hispanic preschool-aged children increased from a baseline of 21 per cent to 73 per cent three years after the programme launch.

Organisation: Injury Prevention Centre of Greater Dallas (IPC) – Location: Dallas, Texas (USA)
Dates:1997 to 2000
Website: www.injurypreventioncenter.org

INSERT 8 – CAR SEAT ROAD SAFETY CAMPAIGN

CAMPAIGN OVERVIEW [7]

Based in Wisconsin, USA, Road Crew was one of five projects funded by the National Highway Traffic Safety Administration, seeking a five per cent reduction in alcohol-related crashes in the pilot communities.

Pioneered in several rural Wisconsin counties, it represents an innovative approach to drink driving. Before drinkers go out for the evening, they arrange a ride with Road Crew. Vehicles pick up customers at their home, drive them around from bar to bar, and then deliver them home safely at the end of the night. Rather than asking people not to drink or not to drive, Road Crew provides a service solution, which keeps communities safe from drink drivers whilst adding to the fun of a night out by providing a way for people to socialise.

Results:

As of 2008, Road Crew had, Given over 97,000 rides, Prevented an estimated 140 alcohol-related crashes, Saved an estimated six lives from alcohol-related crashes.

Comparing the estimated cost of avoiding a crash by implementing Road Crew at US$6,400, and the cost to a community to recover from a crash at US$231,000, Road Crew has shown savings estimated at over US$31million.

Organisation: Wisconsin Department of Transportation – Location: Wisconsin (USA) – Dates: 1997 to 2000 Website: www.roadcrewonline.org

INSERT 9 – DRINK DRIVING ROAD SAFETY CAMPAIGN

4. ROAD SAFETY CAMPAIGN TARGET AUDIENCES

4.1. DEFINING THE TARGET AUDIENCE

Depending on the road safety problem to be addressed, the target audience may be the whole population or a specific target group. A typical example of targeting the whole population would be to inform of changes in traffic legislation. However, more commonly a specific target audience is linked to a particular road safety concern. Such target audience in itself could be further segmented, such as the case of pedestrians.

It is important of understand the dynamics of the current behaviour and how such behaviour varies within a specific target audience before change can be effected. In many instances it is required to further *"unpack"* a specific target audience to better understand the Road Safety Campaign strategy. Failure to understand who the *"customers"* are, could lead to an inefficient or unsuccessful Road Safety Campaign.

4.2. SEGMENTATION OF THE TARGET AUDIENCE [3]

The target audience should be defined according to the road safety problem behaviour. This definition can be based on available data or current understanding of the road safety problem.

Segmenting consists of separating the audience into homogeneous subgroups called segments. A segment is a subset of the larger audience that shares key characteristics, making it more probable that individuals in a particular segment will respond to the same message or stimuli in a similar way.

The basic principles of segmentation are that each segment is homogeneous measurable, identifiable, accessible, actionable, and large enough to be cost-effective.

Expecting a *"one size fits all"* will have limited successes. Defining and then segmenting the target audience in relation to the road safety problem is critical.

To assess whether the message fits with the characteristics of the target audience, and how the message will be received, the campaign should be pre-tested with the target audience [5].

Pre-testing the campaign on a sample of the target audience could give valuable information and guidance to the final campaign strategy. This exercise could also prevent wasteful expenditure.

4.3. PIARC SURVEY RESULTS: PROBLEM DEFINITION AND TARGET AUDIENCES

In response to a survey question on which data was used to define the road safety problem, the majority (89%) of countries indicated that they made use of road crash data, while 67% complimented their roads safety problem definition with traffic offense data. See figure 10. In many cases the accurate crash data is simply not available and the combined use of crash and offence data could prove more useful.
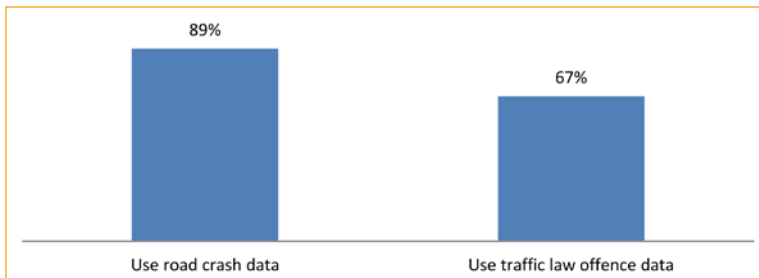

FIGURE 10 – PIARC SURVEY RESULTS: ROAD SAFETY PROBLEM IDENTIFICATION

The majority (83%) of the respondents indicated that road safety campaigns were aimed at specific target audiences, and that while developing the various campaigns, understanding the target audiences were key to the process.

Most countries (78%) indicated that a direct link existed between the target audience and the road safety problem. However, only 39% of respondents segmented the targeted audience as indicated in *figure 11*.
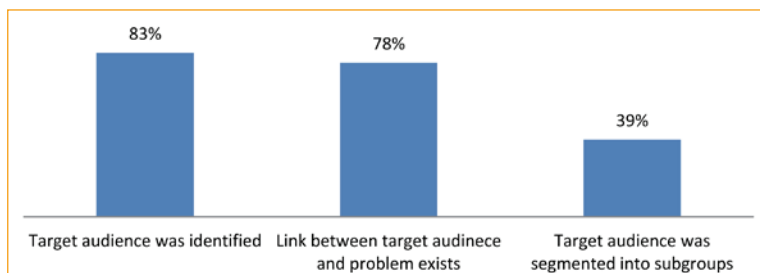
FIGURE 11 – PIARC SURVEY RESULTS: CAMPAIGN TARGET AUDIENCE

The responses highlight that the target audiences were identified by age, type of driver (car, motorcycle, professional), by behaviour (speeders, pedestrians, car thieves) or by language spoken, as indicated in *figure 12*.
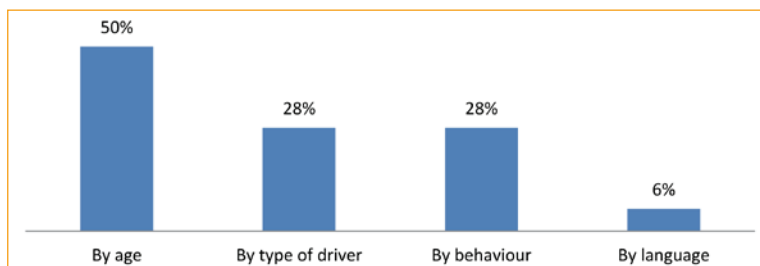
FIGURE 12 – PIARC SURVEY RESULTS: TARGET AUDIENCE SEGMENTATION

THE ROAD SAFETY CAMPAIGN FOCUSED ON CELL PHONE USAGE WHILE DRIVING BEING THE MAIN CAUSE OF ACCIDENTS

Campaign Slogans used: *"At the steering wheel, only the steering wheel"*
and "Everyone knows how to prevent it".

"Crash data was used to define the road safety problem addressed by the Road Safety Campaign. Distractions are the main cause of accidents. In 2008, distractions were the contributing (concurrent) factor in more than a third of accidents with casualties. The use of mobile telephones when driving increased the risk of an accident fourfold. Research indicated that after talking through the mobile phone device for one and a half minutes, drivers perceive only 40% of traffic signs, and their average speed decrease by 12 %.
The agents of the Traffic Police (Agrupación de Tráfico de la Guardia Civil) have reported 6 625 drivers in 2007 and 115 558 in 2008 for using mobile telephone while they were driving."
General Traffic Directorate, Ministry of the Interior, Spain

INSERT 10 – EXAMPLE OF THE USE OF CRASH, OFFENCE AND RESEARCH DATA

EXAMPLE 1

*"The campaign was focused on cell phones being the main cause of accidents.
In this instance all regular drivers were targeted due the following statistics, 46.7 million inhabitants in
Spain; 45 million of mobile telephones and 25.5 million drivers in Spain."*
General Traffic Directorate, Ministry of the Interior, Spain

EXAMPLE 2

*"While all drivers are the primary audience for the road safety campaign, teens are involved in three times
as many crashes as adults, so we developed a component of the campaign specifically targeting teens.
This campaign had a different name, feel and look that appealed to younger road users."*
Utah Dept of Transportation, Utah Dept of Public Safety, USA

INSERT 11 - EXAMPLES OF LINKS BETWEEN TARGET AUDIENCE AND ROAD SAFETY PROBLEM

In some cases the crash and offense data indicate that the entire driver population is the target audience, as demonstrated in *example 1 of insert 11*. However, segmentation of the target audience would provide value information on how to approach and strategise for the respective segments within this large target audience.

Example 2 highlights how crash data assisted with the segmentation for teen driver who are three times more prone to be involved in crashes than their adult counterparts.

TARGET AUDIENCE ANALYSIS

The campaign targeted Graduated Licensing System. *"Helping young drivers be safe drivers".*
The pre-campaign research highlighted the need for coverage of key messages in fragmented media.
Focus groups revealed that target audiences reacted differently to the same message. All responded best
to positive messaging. Response was more enthusiastic when the benefits were emphasized.

SEGMENTED TARGET AUDIENCE

The target audience segmentation also included the secondary target audience of parents and supervisor
likely to influence the young driver. The following target audience segmentation took place.

1. 15-18 before apply for learner permit
2. Learner permit & probationary drives age 18-25
3. Parents & supervisors of these young people

VicRoads, Australia

INSERT 12 – EXAMPLE OF TARGET AUDIENCE SEGMENTATION

As highlighted in *insert 12*, segmenting the target audience will guide the appropriate strategy for the Road Safety Campaign and will influence the media and medium to be used.

5. ROAD SAFETY CAMPAIGN MEDIA

5.1. TYPES OF ROAD SAFETY CAMPAIGN MESSAGES

Choosing the appropriate means of communication is essential in ensuring that the message reaches the target audience. The choice will depend on factors related to communication type, target audience, media characteristics, and costs.

Cost is likely to be the most important factor to consider. However, understanding the relationship between the media type and target audience is vital, and target audience characteristics is integral to the media choice.

It is important to understand the habits and preferred media of the target audience. When and where is the target audience most likely to be captured by the Road Safety Campaign message. Consideration should also be given to the secondary target audience, and the ability of the secondary target audience to influence the primary target audience. For example, targeting children to influence parent behaviour is a common and very successful product marketing tactic.

Understanding the message type and target audience is important. There is significant researched evidence to conclude that the effectiveness of campaigns is influenced by the message type and presentation style, as well as certain aspects of the person receiving the message. Different audiences would respond differently to the same campaign style. This has much to do with existing attitudes often shared by the members of a specific target group, or segments with such target group.

Threat appeals have been used widely in road safety advertising to provoke emotion, specifically fear. Numerous studies reveal that a fear-relief approach (fear is aroused and then reduced by a recommendation and adoption of a safer behaviour), as opposed to a fear approach (fear is aroused), is more successful. However, fear appeals should in general be used with caution and personal beliefs and experiences of the target could negatively credit the communicator [5].

There are suggestions that social threats (e.g. being branded as a causer of a road death), might be more effective among younger people although more evidence is needed [6].

5.2. TYPES OF ROAD SAFETY CAMPAIGN MEDIA

A list of the advantages and disadvantages of audiovisual, printed, outdoor, interpersonal and electronic media have been compiled by Delhomme et al. [3] and are provided in *tables 2 - 5, following pages*.

TABLE 2 – ADVANTAGES AND DISADVANTAGES OF AUDIOVISUAL MEDIA [3]						
Audiovisual media						
	Advantages			**Disadvantages**		
	Reach & selectiveness	**Information capacity, lifespan, attention**	**Cost**	**Reach & selectiveness**	**Information capacity, lifespan, attention**	**Cost**
Television	• Very large reach in general segments • Selective in specific segments • High frequency in specific audiences • Accessible to everyone	• Allows for more complex messages • Combines audio and video • Possibility of eliciting emotions in target audience	• Most cost-efficient to reach large audience	• Low useful reach	• Short-lived duration of messages (seconds)	• High production cost
Radio	**Reach & selectiveness** • Large reach • Good for reaching local audience • High selectivity • Dynamic • Allows for on-the-spot presence	**Information capacity** • Good as reminder • Stimulates imagination • Possibility of eliciting emotions in target audience	**Cost** • Low production cost	**Information capacity, lifespan, attention** • Low attention • Short lifespan • Fleeting duration of message • Not for complicated messages		
Cinema	**Reach & selectiveness** • Selective • Low noise ratio	**Information capacity, lifespan, attention** • High attention • Allows for more complex messages • Possibility of eliciting emotions in target audience		**Cost** • High production cost		

TABLE 3 – ADVANTAGES AND DISADVANTAGES OF PRINTED MEDIA [3]			
Printed media			
Advantages		**Disadvantages**	
Reach & selectiveness	**Information capacity & lifespan**	**Reach & selectiveness**	**Information capacity & lifespan**
Newspapers • Excellent at reaching mass audience • Large reach in general • Allows geographical selectivity, e.g. local audience)	• High credibility • Flexible • High information capacity • Short lead time	• Poor demographic selectivity	• Poor reproduction quality • Short lifespan
Reach & selectiveness	**Information capacity & lifespan**	**Cost**	**Information capacity & lifespan**
Magazines • Excellent at reaching segmented audience (and pass-along readership)	• Long lifespan • Excellent reproduction quality	• High insertion cost	• Slow production cycle • Not flexible • High noise ratio • Long life span • Low frequency • Long lead time • Topic of campaign • Has to rely on editorial content (can also be an advantage)

	Reach	**Information capacity**	**Cost**	**Information capacity & lifespan**
Flyers, leaflets, brochures	• High selectiveness	• Allows for complex messages	• Low cost	• Low attention

	Reach	**Information**
Direct mailing	• Selective communication • Excellent for relatively small target groups and opinion leaders • High information capacity	• *"Junk mail"* image • Need for address list

TABLE 4 –ADVANTAGES AND DISADVANTAGES OF INTERPERSONAL AND ELECTRONIC MEDIA [3]			
Printed media			
Advantages		**Disadvantages**	
Face-to-face: Events, personal discussions, group discussions, forums, lectures, speeches, exhibition stands	**Information capacity** • Effective • Involvement of target group	**Reach** • Low exposure	**Cost** • High cost per contact
Telephone	**Reach** • Possibility of reaching people more than once	**Reach** • Low reachability scale • Need for address list, people do not like it	**Cost** • High cost per contact
Electronic supports			
Advantages		**Disadvantages**	
E-newsletters, direct mailings, sms, Internet discussion forums, viral marketing	• Provides effortless transfer to others • Utilizes existing communication networks (e.g. family, friends, co-workers, customers) • Takes advantage of others' resources (relay messages by placing links on 3rd party sources) • Low cost	• Need to simplify the message so it can be transmitted easily and without degradation (*"The shorter the better"*) • Audience controls exposure	

	Reach	**Information capacity**	**Cost**	**Reach**
Internet websites	• High selectivity	• Interactive, flexible • Allows for complex messages	• Low cost	• Low impact • Audience controls exposure

TABLE 5 – ADVANTAGES AND DISADVANTAGES OF OUTDOOR MEDIA [3]				
Outdoor media				
	Advantages			**Disadvantages**
Billboard posters: Small-size posters, banners Variable message signs	**Reach**	**Lifespan**	**Cost**	**Information capacity**
	• High exposure • Able to reach the audience nearly everywhere/ exposure near (on-the-spot presence) • Geographically selective	• Long lifespan	• Low cost	• Low attention • Low information capacity

Since the type/s of media to be used is likely to be the largest cost component of the Road safety Campaign, it is important to ensure that the most appropriate and correct media choice is made. Special consideration should be given to the characteristics of a target audience, which should be understood before a media choice is made. Target audience and target audience segmentation will give guidance to media type used and ensure effectiveness.

5.3. SOCIAL MEDIA

Social media can be defined as the online technologies and practices that people use to share opinions, insights, experiences and perspectives with each other. A few prominent examples of social-media applications are Wikipedia (reference), MySpace (social networking), YouTube (video sharing), Second Life (virtual reality), Digg (news sharing), Flickr (photo sharing), Miniclip (game sharing). These sites typically use technologies such as blogs, message boards, podcasts, wikis and vlogs to allow users to interact [10].

Social media is here to stay and the key challenge is likely to be how we integrate these new technologies into existing media and communication strategies. Road safety can only be achieved with the participation of the public and social media provides the opportunity to the public to be involved in the road safety discussion and share their concerns, suggestions etc.

Social media is however only one facet of the landscape and organisations need to use the traditional media (print media and TV & Radio) in conjunction with social media [11].

Research shows the biggest divide facing our society is not a gender, racial, income or technology divide, but it is the generational divide. Reaching the different generations, is therefore an important aspect that influence the type of Road Safety Campaign Media.

5.4. MEDIA PLANS

A media plan is essential to ensure maximum reach within the constraints of a limited budget, and entails, planning of media type/s, timing and phasing. There are advantages of using a variety of media types for a single campaign, but too wider a spread could lead to dilution of the message. Media plans should be drafted on optimum frequency of placements, as well as best timing. Placements should preferably be linked to supporting activities or seasonal events.

5.5. PIARC SURVEY RESULTS: ROAD SAFETY CAMPAIGN MEDIA

Responses to the survey indicate that the content of the primary message was most often described to be rational. The primary message was also described to be educational, persuasive, emotional or humorous as highlighted in *figure 13*.
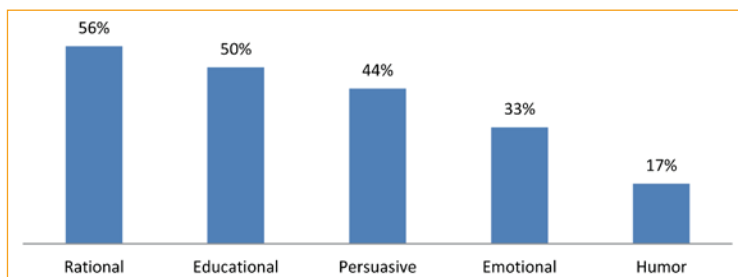
FIGURE 13 – PIARC SURVEY RESULTS: PRIMARY CAMPAIGN MESSAGE DESCRIPTION

Media plans were developed based on target audience characteristics, geographical considerations, and campaign duration and frequency. Most media plans were developed with more than one media type in order to reach specific targets within certain geographical areas. While media plans were developed more often than not, a few of the respondents pre-tested the plans prior to introducing them to the public.
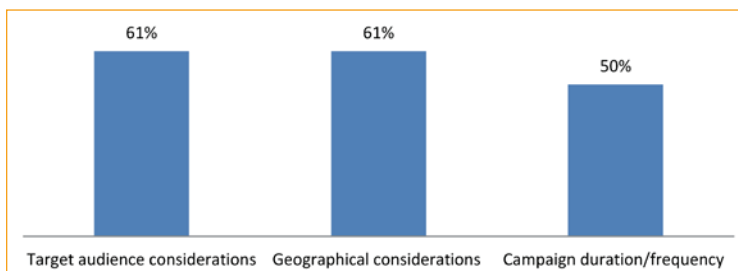
FIGURE 14 – PIARC SURVEY RESULTS: MEDIAN PLAN INFLUENCES
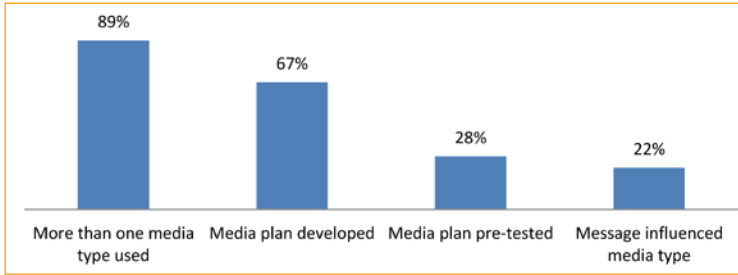
FIGURE 15 – PIARC SURVEY RESULTS: CAMPAIGN MEDIA TYPES

Campaigns went beyond traditional mass media (print and TV & radio). Online media was the second most used media type to deliver campaign messages. Other communication tools incorporated outdoor billboards, newspaper, cinema advertising and fliers to communicate the safety message.

FIGURE 16 – PIARC SURVEY RESULTS: MEDIA TYPES USED

USE OF AUDIO, VISUAL, ONLINE AND SOCIAL MEDIA

The road safety campaigns were multimedia. Broadcast hours depend on the tone of the message. Hard-hitting messages are broadcast after 9 p.m., while broader reaching messages are broadcast starting earlier in the day. Also, we have been airing more and more webisodes and have begun using social media.

Ministère des Transports du Québec

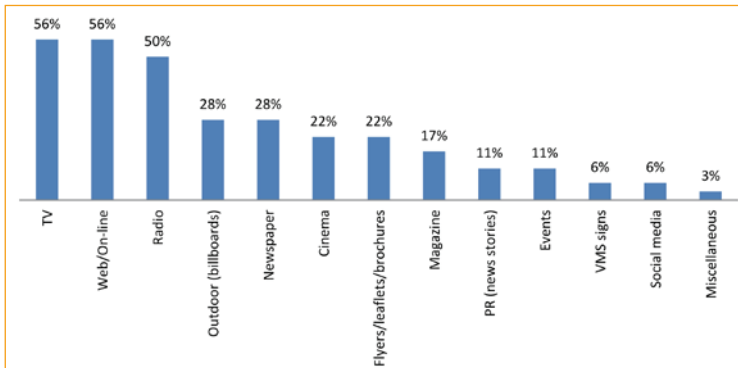15 sec video clip ran in Wal-marts and Metro grocery stores. The clip was displayed at Transport Canada and at the official kickoff for the event.

Transport Canada

YouTube video which was also shown in cinemas.

VicRoads, Australia

USE OF PRINT AND OUTDOOR

In newspapers of highest impact and widest coverage, interviews and press releases informing citizens about actions to be implemented as well as some recommendations to drivers. Placards were installed in the tollbooths of motorways, as well as in the most interesting points on the main roads.

General Director for Protection and Preventive Medicine in Transport, Mexico

OTHER MEDIA

30 sec and 15 sec videos run on the display board in each of 72 baseball games. More than 100 lectures/ presentations have been given in high schools within the past year. More than 80 high schools have some sort of involvement in the RSC in the form of presentations, posters, activities and involvement from the Zero Fatalities staff. Every year, Zero Fatalities hosts a state-wide safety summit consisting of 300 traffic safety personnel from across the state. Zero Fatalities representatives participated in more than 50 community events across the state during 2009. Participation includes setting up visual displays, distributing educational information, conducting activities, etc.

Utah Dept of Transportation, Utah Dept of Public Safety, USA

INSERT 13 – DETAILS OF MEDIA TYPES USE

MESSAGE CONTENT

Combinations of Persuasive, Rational, Educational and Humoristic

TARGET AUDIENCE INFLUENCE ON MEDIA TYPE

Because of the demographic, the website was chosen as the principal means of communications.

OTHER TYPES OF MEDIA AND FREQUENCY OF PLACEMENTS

Print, radio, outdoor and cinema media was used at the start of each of three phases. Online communications continued after this advertising ceased.

MOST IMPACTFUL MEDIA

Single most important tool was the website

VicRoads, Australia

INSERT 14 – EXAMPLE OF A MEDIA PLAN

Inserts 13 and 14 highlight how different types of media could complement each other to direct a particular targeted audience to a particular media type best suited to convey the road safety message. Understanding the capabilities of media types and

preferences of target audience to such media types allows the Media Plan to be tailored made to yield most optimum results.

6. EVALUATION OF ROAD SAFETY CAMPAIGNS

6.1. EVALUATION TECHNIQUES

In order to decide on the most appropriate method(s) of evaluation, it is necessary to first understand the primary objectives of the campaign and how these relate to the expected behavioural changes that lead to the overall goal of reduced crashes and casualties.

The importance of evaluating road safety campaigns cannot be over emphasised. Limited road safety resources should always be invested wisely. The ability to evaluate and gauge effective of campaigns guides future investment. Expensive campaigns running for many years with little or no impact is wasteful expenditure which could have otherwise have been invested in more worthy road safety causes.

6.2. TYPES OF CAMPAIGN EVALUATIONS [3]

There are several types of evaluations that can be conducted for road safety communication campaigns relating specifically to the phase of the road safety campaign. These include (i) formative, (ii) process, (iii) outcome (results) and (iv) economic evaluations.

The formative evaluation entails running a series of pre-test of the campaign to determine the objectives or goals that are measurable, and the tools required to measure such campaign objectives.

Process evaluation takes place during the campaign. It will help explain certain aspects of the outcomes evaluation, but also affords opportunity to adjust the media plan.

Caution must be taken when measuring campaign outcomes. It is necessary to use appropriate means of evaluating campaigns, as well understand the timelines associated with what is specifically is to be measured. If crash prevention/reduction is to be used as a measure, then the time interval must be great enough to pick up any effects and trends. While use of crash or casualty statistics may be appropriate, especially in the case of long term (five or ten year) campaigns, in the shorter term it is not appropriate to use crash data alone.

There are also other measures that could be used to determine how effective Road Safety Campaigns are, or have been. Wherever possible multiple measures should be used, and these may include but are not limited to the following:

- popular liking for a message;
- popular opinion of message effectiveness;
- expert opinion of message effectiveness;
- the numbers and types of road users reached;
- recall of the message used;
- change in traffic knowledge;
- change in attitudes;
- change in behaviour as reported by the individual;
- change in observed behaviour;
- change in violation rates; and
- change in crash rates.

If the assumption is made that some of the items above are causally related to crash likelihood, they can be used as a measure. Care must be taken in assuming that if there is an improvement in one of these variables, there will automatically be an improvement in crash rates. The main shortcoming of the use data linked casually to crash data is that the magnitude of the effectiveness of the Road Safety campaign cannot be measured.

There is also the possibility that *'risk compensation'* will occur. This is when an improvement in one behaviour leads to more risk taking in another area. For example, it has been seen in some cases that increased seatbelt wearing leads to less injuries to car occupants, but more crashes involving vulnerable road users. In general, going down the list above, the methods become more reliable, and more likely to be correlated to crash rates. If only crash data is used as a means of evaluation, only the stimulus i.e. the publicity, and the end result are known. It can be very informative to have information on the pathway to achieve the end result. In other words, use of attitude and knowledge measures may help to indicate why successful programmes were successful and why ineffective programmes failed [4].

Economic evaluation relates specifically to the total direct costs such as research, production, media placements which are derived from budgets or financial reports. These costs are then use in either cost-effectiveness analysis (CEA) or cost-benefit analysis (CBA) to conduct an economic evaluation of the campaign.

6.3. PIARC SURVEY RESULTS: CAMPAIGN EVALUATIONS

Most of the respondents conducted evaluations of the outcomes of their campaigns. Far less evaluated the process or economic impact that the campaigns had. When evaluating the target audiences, the top three metrics included awareness levels, followed by changes in behaviour, then reductions in injuries/deaths.
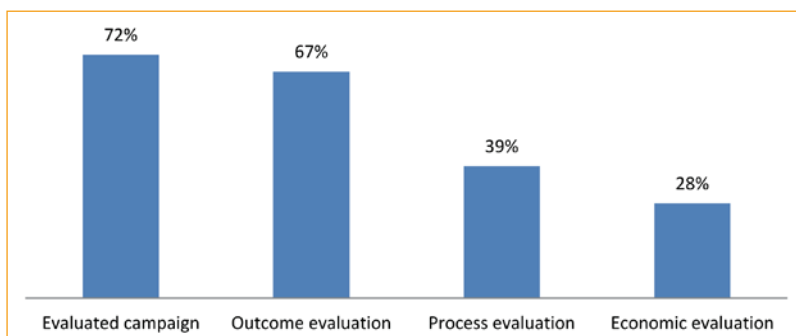
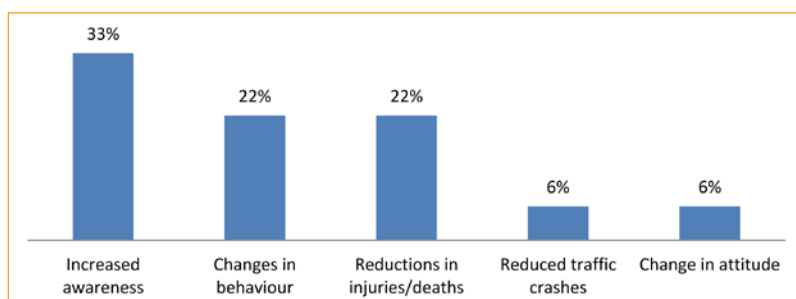FIGURE 17 – PIARC SURVEY RESULTS: CAMPAIGN EVALUATION

FIGURE 18 – PIARC SURVEY RESULTS: SUCCESS RATE INDICATORS

Insert 15, following page, highlights Road Safety Campaign evaluation techniques for various countries.

EXAMPLE OF PROCESS EVALUATION

An annual phone survey from across the state is conducted every December to evaluate campaign awareness and effectiveness. An independent third-party research firm conducts the survey. Overall awareness of the Zero Fatalities program among adults 18 - 54 has grown from 35% in 2006 to 75% in 2009. The campaign continues to show success influencing drivers to avoid dangerous driving behaviours. Each of the dangerous driving behaviours, except *"drowsy driving,"* showed strong growth influencing drivers to avoid them.
Utah Dept of Transportation, Utah Dept of Public Safety, USA

The methodology was based on on-line interviews, with a target audience of persons older than 16 years, taking a sample of 50 interviews per week in 2008, and 100 interviews per week in 2009.
General Traffic Directorate, Ministry of the Interior, Spain

EXAMPLE OF OUTCOMES EVALUATION (RESULTS)

Tested spontaneous recall of the campaign in favour of traffic light respect was 27%. Aided recall estimated to be very good for this campaign, 15% of ages 18 - 30 remembered posters. Radio spots were well remembered, but a little less than posters. 82% of those questioned admitted the dangers of not respecting traffic lights as a motorist, 85% as pedestrian road users.
Road Safety Institute, Belgium

Percentage of correct head rest positioning increased from 45 to 56% although only 8 % said that they changed position because of the campaign. Effect of the correct headrest position on whiplash probability based on dummy crash tests.
Swiss Council for Accident Prevention, Switzerland

EXAMPLE OF ECONOMIC EVALUATION

Cost benefit ratio (CBA). Calculation of whiplash injuries prevented in the two years (about 330). Cost per whiplash injury according to insurance information (about 25'000 Euro per case). CBA about 1 to 3.5
Swiss Council for Accident Prevention, Switzerland

INSERT 15 – CAMPAIGN EVALUATIONS

7. CONCLUSION

Road user behaviour has been well defined as a key contributing factor to the high rate of road injuries and deaths worldwide. The ability to positively influence such behaviour in the most efficient and effective manner is therefore much sort after. Road Safety Campaigns as a tool to change road user behaviour for the better, should therefore be seen as an indispensable part of any nation's road safety strategy.

However, complexities and challenges associated with influencing and changing human behaviour must not be underestimated, and a concerted effort must be made to understand current and desirable road user behaviour before embarking on a Road Safety Campaign.

The literature review of best practices for Road Safety Campaigns confirmed that a significant body of information including compilations of best practices and guidelines already exists. Large research programmes have been conducted with resultant best practices and guidelines to designing, implementing and evaluating Road Safety Campaigns. The extent to which campaigns have been implemented by

various countries and public administration vary significantly, and are influenced by various factors, such as limited budgets and the understanding of the *"science"* of Road Safety Campaigns.

The PIARC Survey for Road Safety Campaigns revealed many similarities and deviations to best practices by the countries that completed the survey questionnaire. The respondents provided important insight as to why campaigns are successful or unsuccessful, or whether it is even known if campaigns are effective or not.

The literature review confirmed that when developing a campaign there must be a *"common thread"* that is relatable to the target audience between the campaign theme, primary objective and overall goal. Ultimately the overall goal of any Road Safety Campaign the campaign is to affect a positive change in road safety by reducing injury and death related crashes. Campaign objectives should therefore define the specific behavioural changes required to attain these overall goals.

This report covered five key areas of Road Safety Campaigns, namely (i) Road User Behaviour, (ii) Types of Road Safety Campaigns, (iii) Target Audiences, (iv) Campaign Media, and (v) Campaign Evaluation, all of which must be properly understood and analysed in order to achieve the overall Goals of the campaign.

From the literature review and survey it became increasingly evident that anticipated behavioural changes should shape the primary objectives of the campaign, and the use of appropriate Theoretical Behavioural Models (TBM) must be strongly considered. Understanding the *"science"* of the road user behaviour to be changed or influence, as well as such behaviour's compatibility with the variables of the TBM, is critical not only for the development of an effective campaign, but also for the campaign evaluation.

There are many varying types of campaigns addressing various aspects of road safety. Given the large number of variables and complexities of road safety problems, so too will Road Safety Campaigns vary in size and complexity. The literature review and the survey confirm that most popular where combining Road Safety Campaigns with the law enforcement supporting activity. Generally these campaigns are intended to be part of a longer term strategy with wide coverage and good visible supporting activities.

As expected, most countries are developing their approaches and strategies for Road Safety Campaigns based on crash and traffic offense data which define their target audiences. However, there is still a bias to regard the entire road user population as the intended target audience of a Road Safety Campaign. This approach is viewed as being too broad and will not result in the specific behaviour changes required, if a target audience is not well defined and understood. Crash and traffic offense data

can prove to be very useful in understanding the characteristics of the target audience, and how campaigns should be developed around such characteristics. A further segmentation of the target audience will provide guidance on which media type to use and how to structure the media plan.

One of the problems in using publicity measures is that people, on the whole, are resistant to change, especially when there is no apparent personal gain for them to do so. This attitude creates the challenge to convince road users to change attitudes and habits when there is no real desire to do so. Using the appropriate type of media to convey the message can provide some advantage, and increase ones chances of reaching and affecting behavioural change on the target audience. The campaign media type choice is primarily guided by the intended target audience. However, budget will influence the media plan in terms of frequency and duration. Strong consideration should be given to the use of online and social media platforms to be used in conjunction with traditional media types of print and TV & Radio. Online and social media types could also prove to be more economically feasible than traditional media types. Developing countries are becoming more and more technologically advanced with access to online and social media increasing at high rates. Special attention should be given to understand the way young people communicate and preferred methods of being informed, as these will influence the media types to be used.

While data detailing the approaches to each campaign are available in the responses to the PIARC Surveys, information about the results are scarce. Apparently, the campaigns are seeing some success with the specified target audiences; however, the lack of comprehensive evaluation data limits the ability to identify which approaches are the most successful.

The use of crash rates as a measure can be awkward for all kinds of reasons such as under-reporting, time scale, influence of other factors, In developing countries specifically, care should be taken when using crash data to evaluate effectiveness of interventions, specifically Road Safety Campaigns. In many cases developing countries experiencing economic growth, will also experience an increase in number of vehicles. Number of crashes and associated injuries and deaths are therefore likely to increase, which would not allow the effectiveness of mass media Road Safety Campaigns to be evaluated. However, other evaluation techniques and the use of casual relationships with crash data must be strongly considered.

In conclusion, Road Safety Campaigns can play its part in influencing road user behaviour for the better, special care should however be taken to ensure key issues such as (i) Road User Behaviour, (ii) Types of Road Safety Campaigns, (iii) Target Audiences, (iv) Campaign Media, and (v) Campaign Evaluation are sufficient researched and understood before implemented by road authorities and administrations.

8. REFERENCES

[1] WORLD ROAD ASSOCIATION, PIARC *Road Safety Manual*, 2003.

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[3] DELHOMME, P. DE DOBBELEER, W., FORWARD, S., & SIMOES, A. *"Manual for Designing, Implementing and Evaluating Road Safety Communication Campaigns"*, CAST, Belgian Road Safety Institute (IBSR-BIVV), 2009.

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APPENDICES

APPENDIX A – PIARC ROAD SAFETY CAMPAIGN SURVEY QUESTIONNAIRE

Resend of Country Survey Questionnaire: June 2010

PIARC Technical Committee C.2 Safer Road Operations, Working Group 2 (C.2.2) have been tasked with a research project on *Best practices on campaigns by Road Administrations or Authorities,* which seeks to achieve an improved understanding of road safety campaigns that may yield the most favorable road safety results .

Part of the Group's work is the development and circulation of a road safety campaign survey questionnaire. The topic of road safety campaigns comprises an extremely large body of information, and the focus has been curtailed to investigate specifically the areas of (Part A) different types of campaigns, (Part B) target audiences and (Part C) different types of media. In order to inform best practice, the attached questionnaire also includes a section on (Part D) road safety campaign evaluation.

Kindly forward the questionnaire to the relevant Road Administration or Authority, who should complete for one road safety campaign that has been implemented recently (last 5 years). Should there more than one road safety campaign to be reported on, then a separate questionnaire is to be completed.

Please note that this questionnaire is being sent to selected PIARC member countries and your timely response is most important to the success of the Group's work. It is requested that completed questionnaires be submitted on or before 16 July 2010, by email to cabler@nra.co.za

Thank you for taking the time and forwarding this important questionnaire to the relevant and appropriate Road Administration / Authority. Please be so kind as to follow through and ensure that the delegated Road Administration / Authority make a timely submission.

Yours Sincerely

Randall Cable
South Africa
TC C.2.2 Group Leader

PART A – TYPE OF ROAD SAFETY CAMPAIGN

1.0 Basic Information relating to the Road Safety Campaign(RSC)
1.1 Describe briefly the campaign theme and the slogan to inform on the topic of the RSC.
1.2 Describe the overall goal of the RSC. Please state briefly the identified road safety problem(s) to be addressed.
1.3 Please State the organisation(s) responsible for running the RSC:
• Public Entity(ies):
• Private Entity(ies):
1.4 Please, give the total budget of the RSC: (Euros)

2.0 Objectives of the RSC
2.1 Please indicate the specific objective(s) of the RSC and give a brief description:
• Increasing awareness
• Increasing knowledge
• Changing attitudes
• Changing behaviour
• Decreasing rate of accidents
• Decreasing seriousness of consequences of accidents
• Other objectives

3.0 Theoretical Behavioural Model of the RSC
3.1 Was the RSC based on a particular Theoretical Behavioural Model?
Yes _____, No_____
3.2 Does the specific objective(s) of the RSC relate to the Theoretical Behavioural Model of the campaign? Yes_____, No_____
3.3 Is there a link between the target group and the Theoretical Behavioural framework of the RSC? Yes___; No_____

4.0 Campaign Strategy
4.1 Please indicate the coverage area(s) of the RSC:
• International
• National
• Regional / Local
• Other, please specify
4.2 Please indicate the duration of the RSC:
• Start date: _____
• End date: _____
• If not completed, please state expected end date: _____
4.3 Is the campaign part of a longer term strategy?

5.0 Supporting Activities
5.1 Did the RSC have supporting activities? Yes_____; No_____
5.2 If answer to 5.1 was yes, please indicate which supporting activity(ies) were involved and briefly explain the nature and level of involvement or collaboration:
  • Enforcement
  • Legislation
  • Education
  • Engineering (Road Infrastructure)
  • Engineering (Vehicle enhancement)
  • Other, please specify
5.3 If answer to 5.1 was yes, please indicate timing of supporting activity(ies) (start and end dates):
5.4 Please indicate any other relevant information relating to the Supporting Activity(ies):

PART B – ROAD SAFETY CAMPAIGN: PROBLEM DEFINITION AND TARGETED AUDIENCES

6.0 Campaign's Road Safety Problem Identification
6.1 Was road crash data used to identify and/or defined the road safety problem indentified to be addressed by the RSC? Yes_____; No_____
    If yes, please give a brief description of what the crash data revealed.
6.3 Was traffic law offence / infringement data used to identify and/or refine the road safety problem? Yes_____; No_____
    If yes, please briefly indicate the source of infringement data (offence statistics or surveys, road user behaviour surveys, number of fines issued, etc)
6.4 Please indicate briefly if any other data source or motivation that was used to identify and defined the road safety problem.

7.0 Road Safety Campaign Target Audience
7.1 Was there a specific Target Audience identified for the RSC?
    Yes_____, No_____
    If yes, please describe the Target Audience
7.2 Is there a link between the Road Safety Problem/s identified in 6.0 above, and the RSC Target Audience identified? Yes_____; No_____
    If yes, please explain.
7.2 Was additional information collected about the identified Target Audience?
    Yes_____; No_____
    If yes, please explain briefly which and how information was collected:

7.3 Was the Target Audience segmented (separating the audience into distinct, relatively homogenous subgroups)? Yes_____, No_____
If yes, please briefly describe the segmentation process:
Also, if yes, please briefly describe the resultant segmented targeted subgroup(s) (gender, age group, road user type, passengers, profile/profession, etc):

7.4 Was a specific technique / research conducted on the Target Audience to improve chances of RSC penetration? (Any pre-studies on current behaviour, beliefs, attitudes, etc) Yes_____, No_____
If yes, please describe briefly:

PART C – MEDIA TYPE USED

8.0 **Selection of Media Type(s)**

8.1 Which of the descriptions most accurately describes the content or primary message/s of the RSC?
   • Persuasive
   • Emotional
   • Rational / Factual
   • Educational
   • Humoristic
   • Other
   • Did the content or primary messages of the RSC influence the Type of Media used? Yes_____, No_____
   If yes, please explain

8.2 Did the Target Audience (including segmented target audience if applicable) have an impact on the Media Type(s) chosen? Yes_____, No_____
Please explain briefly:

8.3 Did the geographical extent of the road safety problem have an impact on the Media Type(s) chosen? Yes_____, No_____
Please explain briefly:

8.4 Did the duration and frequency of the RSC have an impact on the Media Type(s) chosen? Yes_____, No_____
Please explain briefly:

8.6 Was more than one Media Type used for the RSC? Yes_____, No_____
Please specify:
If yes, which Media Type appeared to have the most positive impact?

8.7 Was a Media Plan developed? Yes_____, No_____
If yes, please specify:

8.8 Was the Media Type(s) pre-tested? Yes_____, No_____
If yes, please specify:

9.0   Details of Media Type(s)

9.1   Was the Internet used during the RSC? Yes_____, No_____
If yes, please provide brief details

9.2   Did RSC include Audiovisual media? Yes_____, No_____
Please specify briefly (television, radio, cinema, emission, spot, timing (inside or outside prime time), number, frequency, etc):

9.3   Did the RSC include Print Media? Yes_____, No_____
If yes, please provide brief details ((which type and how many, newspaper, free or paid press, specialised press (magazines), flyers, leaflet, brochures, direct mailings, etc):

9.4   Did the RSC include Outdoor media? Yes_____, No_____
If yes, please specify (billboard posters, posters, banner, etc):

9.5   Please specify any other Media Type(s) used in the RSC:
Stickers, gadgets, Interpersonal communication, local events, discussions, lectures, speeches, etc)

PART D – EVALUATION OF THE ROAD SAFETY CAMPAIGN

10.0   Types of Evaluation

10.1   Was a Process Evaluation of the RSC undertaken? Yes_____, No____
(Process Evaluation takes place during the campaign and is intended to determine whether the campaign is working as planned)
If yes, please provide brief outcome of the Process Evaluation:

10.2   Was an Outcome Evaluation of the RSC undertaken? Yes_____, No____
(Outcome Evaluation is intended to determine if the campaign reached its objectives)
If yes, please provide brief outcome of the Outcome Evaluation:

10.3   Was an Economic Evaluation of the RSC undertaken? Yes_____, No____
(Economic Evaluation may include a cost-effectiveness (CEA) and / or cost-benefit analysis (CBA)is intended to determine if the campaign reached its objectives)
If yes, please provide brief outcome of the Economic Evaluation:

10.4   Was any other form of Evaluation of the RSC undertaken? Yes_____, No____
If yes, please provide brief details of the evaluation and outcomes:

Any other comments:
Please add any other comments relevant to the Road Safety Campaign that you deem relevant, such as:

• Lessons Learnt
• What would you have done differently?
• Important successes or failures
• Etc

APPENDIX B – GUIDELINES FOR DESIGNING, IMPLEMENTING AND EVALUATING ROAD SAFETY CAMPAIGN

The literature review identified the Campaign and Awareness Raising Strategies in Traffic Safety (CAST), *Manual for Designing, Implementing and Evaluating Road Safety Communication Campaigns,* as being the most comprehensive body of information and guideline for road safety communication campaigns.

The manual it is divided into two parts, the first part, which is mainly theoretical provides a background on the relationship between road safety and human behaviour, and detailed campaign strategies and techniques.

The second part is more practical and presents a step-by-step guide for designing, implementing, and evaluating a road safety communication campaign.

The practical step-by-step recommendations on how to design, implement, and evaluate a road safety communication campaign are based not only on interviews with practitioners, advertising agencies, and researchers in Europe and elsewhere, but also on a review of the literature and the compilers of the manuals own experiences.

This part outlines the six steps in great detail, needed to complete the entire campaign process, namely:

- Getting started.
- Analysing the situation.
- Designing the campaign and the evaluation.
- Conducting the before-period evaluation and implementing the campaign.
- Completing the evaluation and drawing conclusions.
- Writing the final report.

The manual is listed under 8. References, as resource [3]

[3] Delhomme, P. De Dobbeleer, W., Forward, S., & Simoes, A. *"Manual for Designing, Implementing and Evaluating Road Safety Communication Campaigns"*, CAST, Belgian Road Safety Institute (IBSR-BIVV), 2009

Campaigns and Awareness Raising Strategies in Traffic Safety

CAST

Manual for Designing, Implementing and Evaluating Road Safety Communication Campaigns

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