Road Safety in South-East European Regions

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Abstract
South-East European (SEE) countries are among the “worst road safety performers in Europe” based on road fatalities per population. The objective of this paper is the comprehensive presentation of the current road safety conditions in SEE as recorded within the EU co-funded project “ROSEE-Road safety in South-East European regions”. Basic road safety trends, the assessment of road safety legislation, policy and institutional capacity and of needs and availability of road safety data and information in the project partner countries are recorded. Key issues on road infrastructure and road users’ behaviour are also explored and road safety priorities are set. This analysis provides a better understanding of the current road safety situation in SEE countries. Despite the great differences in road safety management, road network conditions, road user behaviour, social and economic background, legislation, enforcement etc, several common road safety problems exist and common priorities are set to tackle them.

Keywords: road safety, South-East Europe, ROSEE.
1. INTRODUCTION

Worldwide, the improvement of road safety is attracting more and more interest as road accidents have become one of the major causes of death in many countries and road safety is regarded as an issue of public health. In an area where road safety standards as well as rules and regulations vary widely, the European Union sees approximately 30,000 fatalities and 1.7 million injuries from road accidents each year. Specifically, in 2012, more than 28,000 fatalities and about 1.4 million injuries occurred in more than 1.1 million car accidents in the European Union (EU) (CARE, 2014).

The road safety level differs a lot among the members of the European Union. North-west countries perform best with Sweden, the United Kingdom and the Netherlands having the lowest number of fatalities per million passenger cars during the last years. Countries in southern Europe (Italy, Greece, Spain and Portugal) display a clearly lower road safety level. Finally, eastern countries have the highest values of the examined ratio (Yannis et al, 2007; Bialas-Motyl, 2007; ETSC, 2006).

In 2012, the number of road fatalities per million of population in almost all EU countries of the South East regions was higher than the respective EU average. This shows that road accidents is a common serious problem of the countries of South-East Europe and common action should be taken in order to improve road safety in this wider part of Europe and not only in particular countries. Although the analysis of road accidents per country may reveal differences and special characteristics that formulate the final road safety performance of each country, there are also common key road safety factors, such as road infrastructure management and road user behaviour that may as well need to be explored in order to improve road safety in this part of Europe. Moreover, knowledge and experience gained in countries of the central and northern Europe that perform well in road safety, should be exploited and further developed.

Within this framework, the project titled “Road safety in South East European regions – ROSEE” was approved under the South East Europe Transnational Cooperation Programme which applies to the countries shown in Figure 1. The ROSEE project has been commissioned to a consortium of ten project partners from Italy, Romania, Hungary, Greece, Slovenia and Bulgaria and two project observers from Serbia and FYROM.

![Figure 1: South East Europe (SEE) countries](image-url)
In the framework of the ROSEE project, basic road safety data and information from South-East European regions were obtained aiming at providing an overall presentation of road safety in the area. The procedure followed involved the identification of key road safety trends based on statistical data, the assessment of road safety legislation, policy and institutional capacity in the six project countries, the assessment of needs and availability of road safety related data and information in the partner countries, recording basic information concerning road infrastructure and identifying road users’ behaviour in the area. Based on the outcomes of this procedure, road safety priorities in the partner countries were presented and discussed. The objective of this paper is the comprehensive presentation of the results of this work, meaning the presentation of road safety conditions in South-East European regions.

2. ROAD SAFETY SITUATION IN SOUTH-EAST EUROPEAN REGIONS

South East Europe (SEE) is an area comprising sixteen countries which have been members of the European Union (EU) for decades or for few years, candidate countries and others. This diversity is also reflected on the current road safety situation in SEE. The examination of road fatalities per million population shows that the highest rates of fatalities are found in the non-EU members of the SEE. Fatalities per population in these countries range from 122 in Moldova to 84 in FYROM. It is noted that the most recent available data from these countries refer to 2011. On the other hand, EU members show lower rates and specifically, lower than 100 road fatalities per population with the exception of Romania which slightly surpassed this limit with 101 road fatalities per million population in 2012. The best performing EU country is Slovakia with 55 fatalities per million population in 2012. Among the ROSEE partners, the best performing country is Hungary with 61 road fatalities per million population in 2012. The most important conclusion is that the fatalities per population rate, in almost every SEE country, is higher than the average EU rate. Based on data from CARE, the EU average rate in 2012 was 56. This is lower than the actual rate in almost all EU members in the SEE. Among the rest of the EU members, Romania and Greece show the highest rates with 101 and 97 fatalities respectively while the rest are much closer to the EU average (Figure 2) (Yannis & Laiou, 2014).

![Figure 2: Road fatalities per million population in SEE countries, 2012 (*2011)](image)

*Sources: CARE, IRTAD, IRF, Processing: NTUA - Road Safety Observatory*
The above data provide an overall picture of the road safety level in South-East Europe. Within the ROSEE project, the road safety situation in Italy, Romania, Hungary, Greece, Slovenia and Bulgaria (the ROSEE countries) was explored. Figure 3 provides a depiction of the evolution of road fatalities per million population in the ROSEE countries from 2000 to 2012 and different trends can be identified. The newest EU members, Romania and Bulgaria, show very similar trend with an increase until 2008 and a decrease starting in 2008 and continuing until 2011. This might somehow be related with the fact that the two countries became members of the EU in 2007 or with other similarities of the two Balkan countries. Older EU members such as Italy, Hungary, Slovenia and Greece show different trends. In particular, Italy shows a continuous decrease. In Hungary, an increase is recorded in early 2000s and a decrease after 2007. In Slovenia, the trend was rather unstable with ups and downs until 2007 after when an important decrease was recorded until 2010. Greece started with the highest number of road fatalities per million population in 2000 and achieved an important decrease until 2003. Then, the rate was almost stable for the following three years and started to decrease again in 2007. It should be noted that the results presented herein could be quite different if fatalities per vehicles or vehicle kilometres were used, given the different situations in motorization, etc. in SEE countries. Therefore expanding the indicator base in such a way should be considered (Yannis & Laiou, 2014).

Figure 3: Road fatalities per million population in ROSEE partner countries, 2000 – 2012
Sources: CARE, Processing: NTUA - Road Safety Observatory

Road fatalities in the ROSEE countries were also examined in relation to basic road user and other characteristics based on the most recent available data for each country. As far as the gender of road users is concerned, small differences were found among the different countries with the highest percentage of males found in Greece and of females in Hungary (Table 1) (Yannis & Laiou, 2014).

Table 1: Road fatalities per gender in ROSEE partner countries, 2012 (*2011)
Source: CARE, National Sources, Processing: NTUA - Road Safety Observatory

<table>
<thead>
<tr>
<th>Italy</th>
<th>Romania</th>
<th>Hungary</th>
<th>Greece*</th>
<th>Slovenia*</th>
<th>Bulgaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>78%</td>
<td>77%</td>
<td>73%</td>
<td>81%</td>
<td>80%</td>
</tr>
<tr>
<td>Female</td>
<td>20%</td>
<td>24%</td>
<td>27%</td>
<td>19%</td>
<td>20%</td>
</tr>
</tbody>
</table>
As expected, middle aged people have the highest fatality rates in all countries. The highest fatality rates of young road users (18-24 years old) are found in Bulgaria while for older people (over 65 years old) the highest fatality rates were recorded in Italy (Table 2) (Yannis & Laiou, 2014).

**Table 2**: Road fatalities per age in ROSEE partner countries, 2012 (*2011)
*Source: CARE, Processing: NTUA - Road Safety Observatory*

<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th>Romania</th>
<th>Hungary</th>
<th>Greece*</th>
<th>Slovenia*</th>
<th>Bulgaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15</td>
<td>1%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
<td>4%</td>
<td>3%</td>
</tr>
<tr>
<td>15 - 17</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>18 - 24</td>
<td>11%</td>
<td>11%</td>
<td>7%</td>
<td>14%</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>25 - 49</td>
<td>37%</td>
<td>36%</td>
<td>39%</td>
<td>40%</td>
<td>44%</td>
<td>59%</td>
</tr>
<tr>
<td>50 - 64</td>
<td>17%</td>
<td>23%</td>
<td>28%</td>
<td>16%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>29%</td>
<td>22%</td>
<td>20%</td>
<td>23%</td>
<td>16%</td>
<td>20%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Pedestrians are over-represented in road fatalities in Romania. For passengers, the highest fatality rate is recorded in Bulgaria. On the other hand, most drivers are killed in Italy and Slovenia (Table 3) (Yannis & Laiou, 2014).

**Table 3**: Road fatalities per road user category in ROSEE partner countries, 2012 (*2011)
*Source: CARE, National Sources, Processing: NTUA - Road Safety Observatory*

<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th>Romania</th>
<th>Hungary</th>
<th>Greece*</th>
<th>Slovenia*</th>
<th>Bulgaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver</td>
<td>70%</td>
<td>40%</td>
<td>54%</td>
<td>62%</td>
<td>70%</td>
<td>49%</td>
</tr>
<tr>
<td>Passenger</td>
<td>15%</td>
<td>24%</td>
<td>20%</td>
<td>18%</td>
<td>16%</td>
<td>28%</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>15%</td>
<td>36%</td>
<td>26%</td>
<td>20%</td>
<td>15%</td>
<td>23%</td>
</tr>
</tbody>
</table>

The highest fatality rate on motorways is recorded in Slovenia and on rural roads in Bulgaria and Hungary. The high fatality rates on urban roads in Romania can be partially explained by the increased number of pedestrians in the country (Table 4) (Yannis & Laiou, 2014).

**Table 4**: Road fatalities per road type in ROSEE partner countries, 2012 (*2011)
*Source: CARE, National Sources, Processing: NTUA - Road Safety Observatory*

<table>
<thead>
<tr>
<th></th>
<th>Italy</th>
<th>Romania</th>
<th>Hungary</th>
<th>Greece*</th>
<th>Slovenia*</th>
<th>Bulgaria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorway</td>
<td>9%</td>
<td>1%</td>
<td>5%</td>
<td>7%</td>
<td>14%</td>
<td>3%</td>
</tr>
<tr>
<td>Rural</td>
<td>48%</td>
<td>38%</td>
<td>60%</td>
<td>44%</td>
<td>52%</td>
<td>61%</td>
</tr>
<tr>
<td>Urban</td>
<td>43%</td>
<td><strong>61%</strong></td>
<td>35%</td>
<td>49%</td>
<td>33%</td>
<td>35%</td>
</tr>
</tbody>
</table>
3. ROAD SAFETY LEGISLATION, POLICY AND INSTITUTIONAL CAPACITY IN SEE REGIONS

The existing road safety legislation, policy and institutional capacity in the SEE countries participating in the ROSEE project were assessed using the methodology developed in the DaCoTA project. The assessment revealed important similarities and differences among the partner countries. Similarities are identified mainly on issues related to institutional organization, coordination and stakeholders’ involvement as well as policy formulation and adoption while policy implementation and funding, monitoring and evaluation, scientific support and information and capacity building are issues addressed in various ways.

In the SEE countries, the need of taking road safety action has been advocated by government agencies, primarily ministries, public authorities and several non-governmental organisations (NGOs). Local authorities have a more or less active role in the various countries. An Inter-ministerial Committee or Council for Road Safety has been legally created in all the examined countries to serve as the high level inter-section decision-making institution which prepares policy orientations or directions for road safety. Most of the governmental sectors involved in road safety are represented in these institutions which are presided by the Minister of Transport in most countries. In Romania and Greece, the Committee operates under the Prime Minister. In Romania, Hungary, Slovenia and Bulgaria non-governmental stakeholders are also represented in the high-level decision-making institution and meetings take place regularly. Still, in most countries, it seems that these institutions have a general consulting character while their authority on road safety stakeholders is limited. In Romania, Hungary and Slovenia, a lead agency has also been formally appointed to take responsibility for road safety while in Romania and Slovenia a technical inter-sectoral road safety institution, endowed with a statutory budget is in charge of coordinating road safety actions (Yannis & Laiou, 2014).

In all the examined countries, except from Hungary, a national "vision" for improved road safety performance in the long term has been also adopted. However, such a vision is compelling for the government only in Slovenia and in Bulgaria where it is approved by the Parliament and by the Council of Ministers respectively. The Safe System approach has been taken into consideration for the development of Road Safety National Plans in all countries except Bulgaria. These National Plans cover shorter or longer periods up to 2020 but, in most cases, they are not triggered yet as they have not been officially adopted or they do not have a compulsory character. National medium-term (four to ten years) quantitative targets have been set in all countries apart from Italy. Specifically, the quantitative EU target for halving road fatalities by 2020 compared to 2010 has been adopted. Regional road safety programs or policy components are integrated into the national road safety policy only in Italy (Yannis & Laiou, 2014).

Funding for road safety seems to be a critical issue in South East Europe. In half of the examined countries (Romania, Greece and Bulgaria), although national road safety programs have been elaborated, the budget needed for the program implementation has not been
estimated. Furthermore, the necessary budget to move towards the long term vision for improving road safety has been estimated only in Slovenia, while a decision to ensure availability of a budget for a medium term road safety program has also been made in Hungary. The product of fines is allocated to road safety interventions or related activities only in Italy and Romania. However, in Italy, Romania, Hungary and Slovenia an amount of the national budget is allocated specifically to road safety activities, interventions and capacity building. In Greece, the annual or multi-year budget of the Ministries and of Regional and Local Authorities sometimes includes a budget for road safety activities. Formal resource allocation procedures to support road safety management tasks and interventions have been established in all countries apart from Greece and Bulgaria. Still, evaluation of road safety activities is funded only in Hungary and Slovenia. A key finding concerning road safety funding is that funds allocated to the various road safety program/policy components are considered sufficient only in Hungary and only for very few issues (driver training and licensing, road safety campaigns and enforcement) (Yannis & Laiou, 2014).

As far as monitoring and evaluation of road safety in South East Europe are concerned, sustainable systems to collect and manage data on road accidents, fatalities and injuries are in place in all the examined countries. On the other hand, in-depth accident investigations for road safety purposes are not conducted in any country. Concerning data on behavioral indicators, a sustainable system for their collection and management is in place only in Romania, Slovenia and Bulgaria. A national Observatory centralizing the data systems for road safety is available in Italy, Hungary and Bulgaria. However, data included in it vary per country. A reporting procedure to monitor the road safety interventions carried out in the country has been set up in Hungary and Slovenia. In both countries, the procedure is linked to intermediate phases of the national road safety program. In Slovenia, it applies to all areas of intervention while, in Hungary, planning and engineering interventions in urban areas are not covered. Identified needs for program modification or changes in implementation conditions are addressed by the procedures in both countries. Compliance with the timetable of implementation is addressed only in Hungary and delivery by the relevant authorities only in Slovenia. Collected information has been exploited for limited changes in the action program of both countries as well as for allocation of funds or human resources in Slovenia and for training in Hungary. A procedure to evaluate safety performances of the global program or policy has been set up in Italy, Hungary and Slovenia. Performance is assessed on the basis of performance indicators and against national quantitative targets. A "process evaluation" of safety interventions takes place during the implementation period of the program only in Hungary and Slovenia again. This means it is checked whether measures have the expected results and or they generate undesired side-effects. In both countries, process evaluation is performed by scientific teams however; the evaluation results are available to all stakeholders only in Slovenia. Action on the basis of the outcome of this information has been taken in both Hungary and Slovenia and concerned partial changes in the action program and improvement of implementation conditions (Yannis & Laiou, 2014).

In each one of the examined countries there is at least one institute or university performing multi-disciplinary road safety research and/or studies as well as steady research teams. In all countries but Italy, results of safety analyses and research are used in formulating the national road safety policy and the research teams are systematically requested by policy-makers to contribute knowledge for policy formulation. In Italy and Greece, citizens lack factual and valid information on road accidents, injuries and risk as well as on the national road safety policy and interventions and their effects. This comes also in combination with the lack of
media articles or programs on road accidents and/or activities to review, criticize or challenge current policies. Finally, multi-disciplinary courses on road traffic safety for students are provided in all countries at either under or post-graduate level. In Italy, Slovenia and Bulgaria further-training sessions addressed to key road safety professionals are also offered (Yannis & Laiou, 2014).

4. ROAD SAFETY RELATED DATA AND INFORMATION

In the framework of the ROSEE project, the availability, needs and priorities of road safety data and information to stakeholders in the partner countries were explored using a specially designed questionnaire. The approached stakeholders came from all types of bodies involved in road safety such as competent Ministries, road operators, universities and research institutes, scientific associations and NGOs. In total, more than 100 road safety stakeholders participated in the relevant survey providing an adequate sample almost evenly distributed across the ROSEE countries (Italy 23, Romania 23, Hungary 14, Greece 22, Slovenia 20, Bulgaria 10). The analytic results of this survey are available in the respective deliverable of the project (Yannis & Laiou, 2014).

Based on the stakeholders’ responses it was found that there is a significant demand for data and knowledge in order to be used for road safety-related decision making. Currently, such information is poorly available in the partner countries. This fact makes the work of road safety stakeholders difficult, therefore their discontent was expressed. In several cases, it was found that stakeholders are not even aware of the availability status of items that they consider to be irrelevant to their work. Generally, stakeholders seem to be poorly informed about the availability of road safety data and tools (Yannis & Laiou, 2014).

A more detailed look in the results reveals several issues for which most stakeholders declare high need but low availability of relevant data (Yannis & Laiou, 2014). Such issues are:

- The underreporting of road accidents
- Road accident databases that link data from the Police and the hospitals.
- Information on road user behaviour and accidents.
- Information on the costs and benefits of a road safety measure.
- Information on the acceptance of road safety measures by the public.
- Good practice catalogue of measures including implementation conditions
- Tools for simulating road user behaviour.
- Comparisons of driver training programmes across Europe.
- Good practice and methodologies for monitoring implementation of road safety measures and policies.
- Information on potential funding sources for road safety measures.
- Focusing on seriously injured counts in addition to fatality counts.
- Accident prediction models for various road types and layouts.

On the other hand, there are other issues for which a great number of road safety stakeholders declared an adequate availability of the needed data. However, important differences between countries may exist. For example, road safety stakeholders are interested in acquiring
information on road accident causation factors in order to be able to select the most appropriate countermeasures. An interesting finding on this issue is that such information is already available to almost 70% of road safety stakeholders in Hungary, to almost 35% and 30% in Slovenia and Bulgaria respectively, but to approximately only 10% in Romania and Italy and to even fewer stakeholders in Greece (Yannis & Laiou, 2014).

Another important issue is to have standardised procedures and methods for carrying out evaluations of road safety measures. Such procedures are currently available in all countries, although to a rather low percentage of road safety stakeholders, and partially available to the majority of them with the exemption of Greece and Slovenia (Yannis & Laiou, 2014).

More than 50% of stakeholders in almost all countries gave a high priority to the availability of specific methods to evaluate the measures and particularly their safety impact. At the moment such methods are partially available to the majority of stakeholders (Yannis & Laiou, 2014).

In addition to the above, stakeholders are interested in identifying the effects of specific policies or measures. Therefore, the statistical methods for isolating the effects of particular actions are of high priority for more than 20% and up to almost 50% of the stakeholders in the different countries. On the other hand, such statistical methods are available at maximum to less than 20% of the stakeholders and in some cases (Slovenia and Bulgaria) they are not available at all (Yannis & Laiou, 2014).

5. ROAD NETWORK CONDITIONS IN SEE REGIONS

Procedures for integrating the EU Directive on Road Infrastructure Safety Management (2008/96/EC) into national legislation have been completed or are in progress in all the ROSEE partner countries. However, there are several issues about the safety of road infrastructure, that have not been dealt with yet (Tira et al, 2013; Caraman et al, 2013; Mészáros el al, 2013; Yannis & Laiou, 2013; Marinko et al, 2013; Vankov et al, 2013).

Road infrastructure assessment is not regularly conducted in the examined countries. In Italy and Slovenia, there are on-going relative procedures mainly in the framework of the EuroRAP programme, however, the entire road network has not been assessed yet. In Greece, road assessment has been fragmentally implemented. For the remaining partner countries such procedures are either not adopted or data are not available yet.

The examination of the current status of road safety audit in the partner countries revealed significant differences on RSA/RSI practices. The Directive 2008/96/EC on road infrastructure safety management which determines several RSA/RSI issues, has been incorporated to the national legislative framework to a different extent in the various countries with Slovenia being the most advanced in this issue.
Training and certification of road safety auditors also differs among the partner countries. In Greece and Italy, there are no licensed auditors yet. In Hungary, there are 80 licensed auditors, in Bulgaria 73, in Slovenia 23 and in Romania 12. The duration of the relevant professional courses’ vary, ranging from 6 days in Slovenia, 6+2 days in Hungary, a minimum of 180 hours in Italy, 150 hours during 5 weeks in Bulgaria and 146 hours during 3 months in Romania.

So far, few RSA/RSIs have been conducted in Italy and Greece but mainly at local level or they are not organized by an authorized agency. In Bulgaria, audits have been performed by the Agency for Road Network.

In total, all partners have pointed out the need for full integration of the EU Directive 2008/96/EC to the national legislation and its implementation to the whole road network and not only to the TEN-T. In order for that to be successfully accomplished, several requirements have been reported. These requirements include the identification of an appropriately staffed and equipped body that will be in charge of all the necessary activities, the training and certification of staff that will be able to implement the procedures foreseen in the Directive, the appropriate funding of the activities and the availability of the necessary statistical data.

6. ROAD USERS’ BEHAVIOUR IN SEE REGIONS

Road safety stakeholders from the ROSEE partner countries have identified several key road user behaviour problems in their countries. Particularly, the most commonly reported problems are (Tira et al, 2013; Caraman et al, 2013; Mészáros et al, 2013; Yannis & Laiou, 2013; Marinko et al, 2013; Vankov et al, 2013):

- Non use of seat belts and helmets
- Speeding
- Drink-driving
- The use of mobile phones while driving
- Aggressive driving
- Lack of compliance to traffic rules
- Insufficient driver training

Although a number of enforcement measures have been implemented in all the ROSEE countries, it seems that the expected results are not achieved in full and the need for even more measures was reported. The measures implemented, so far, concern mainly the conduct of random controls for seat belt and helmet use, speeding, use of mobile phones and drink-driving, the use of speed cameras and radars, and the improvement of the organisation of the competent agencies (e.g. keeping better registries of drivers, offenders, controls and their results etc).

The communication and training measures that have already been implemented in the ROSEE countries are also considered fair, but not very effective. To this point, several informational and awareness raising campaigns have been organised targeting either specific road user groups or specific road safety problems. Many of them are organised at national level and reach a large audience through television, radio, schools etc. In addition, special training
courses are organised. Many of them are organised and delivered in schools aiming at the improvement of road safety education and others are addressed to different road user groups (cyclists, novice or older drivers, professional drivers etc) and aim to tackle specific problems related to these groups. Stakeholders approached within the ROSEE project expressed a rather low level of satisfaction considering the effectiveness of such measures.

7. DISCUSSION

South-Eastern European regions are among the worst performers in road safety in Europe. Although some improvement has been achieved during the last years, the numbers of road accidents, fatalities and injuries remain higher than the respective average in the EU.

This poor performance may be partially attributed to several deficiencies in road safety legislation, policy and institutional capacity in these countries. An important diversity in the structures and processes at the higher level of road safety management were identified despite the implementation of several successful good practices. The main problems that were identified, in almost all the examined countries, are the lack of a road safety dedicated budget, difficulties in the coordination of road safety stakeholders and difficulties in the implementation of programmes and measures. In addition, an important lack of availability of data and information necessary to road safety stakeholders for effective decision-making further prevents the improvement of road safety.

Road infrastructure safety management in all the ROSEE countries is undertaken following the guidelines of the EU Directive on Road Infrastructure Safety Management (2008/96/EC). However, not all the foreseen procedures are fully implemented yet and not to the entire road network. Especially concerning Road Safety Audits, important differences on training and licensing of auditors as well as on the conduct of audits were identified. The assessment of the road network in terms of road safety is not performed on a regular basis.

Considering road user behaviour, it was found that there are common main problems such as the non use of seat belts and helmets, speeding, drink-driving, the use of mobile phones while driving and aggressive driving. Efforts to improve road user behaviour are mainly focussed on enforcement and communication and training measures. In all the countries, a number of police controls are conducted. In addition, informational and awareness raising campaigns are organised by several bodies of the public and the private sector. Still, a need for improvement of road users’ behaviour was identified.

Road safety priorities in each examined country were identified within the ROSEE project. Given the common main road safety problems in the partner countries, there were also several common priorities. Such common priorities include:
• Set-up of a National Strategy and a National Road Safety Authority.
• Ensure sustainable funds for road safety.
• Improvement of road infrastructure.
• Implementation of the Directive 2008/96/EC on the whole road network and not only on TEN-T.
• Effective regulation of Road Safety Audit / Inspection.
• Road safety education and training (in all schools, continuous/periodical training for all ages, reorganization of the training- and licensing system).
• Effective enforcement of traffic rules.
• Raising road safety awareness through information campaigns.

Additional priorities were set, based on specific road safety problems prevailing in each partner country. Examples of such priorities are:
• Development of a common definition of slight and serious injuries (Italy)
• Improvement of Powered Two Wheelers’ safety (Italy)
• Improvement of pedestrians’ safety (Romania)
• Introduction of compulsory Occupational Road Safety Programmes (Romania)
• Improvement of children and youngsters’ safety (Hungary)
• Improvement of the safety of the elderly (Hungary)
• Systematic implementation of measures within the context of the wider policies on development and mobility inside and outside urban areas (Greece)
• Increase of road safety stakeholders’ accountability in relation to the implementation of measures (Greece)
• Strengthened management of systemic high risk road sections (Slovenia)
• Tackle speeding (Slovenia)
• Tackle driving under the influence of substances (Bulgaria)
• Increased use of seat belts and child restraint systems (Bulgaria)

The results presented in this paper provide an overall description of the road safety situation in countries of the South-East Europe. They can be useful for better understanding the particular characteristics and needs in the specific countries and may serve as a basis for decision making by local road safety stakeholders concerning future actions for the improvement of road safety in the area. Further research covering more countries of South-East Europe and including more analytic comparisons to other European countries is needed to provide an even more complete picture of road safety in the area.

8. ACKNOWLEDGEMENT

This research was carried out within the project ROSEE-ROad safety in South-East European regions, co-funded by the South East Europe Transnational Cooperation Program.

9. REFERENCES


