ROSEE – A road safety initiative to improve infrastructure and behaviour in South East Europe

Safe Transport Infrastructure 2013 Conference
Prague, 11-12 November 2013
George Yannis, NTUA, Guido Piccoli ALOT
ROSEE - ROad safety in South East European regions

• Approved under the 4th call of the SEE Programme
• Application ID: SEE/D/0097/3.1/X
• EoI Reference number: SEE/D/0097/3.1/X
• Priority Axis: Improvement of the accessibility
• Area of intervention: Improve co-ordination in promoting, planning and operation for primary & secondary transportation networks
• Project duration: 10/2012 - 9/2014 (24 months)
• Project budget: 2,191,853.44 € total; 1,863,075.42€ ERDF contribution (85%)
South East Europe
Background

ROSEE builds on the experience of SOL - Save Our Lives Project which is strengthening the ability of local and regional stakeholders to manage road safety and reduce road crash deaths and injuries.

Transport and **motorization levels are increasing** throughout the South East European space. The motorization rate has increased by 8% in the EU (2001-2009). In many SEE Countries this increase is particularly high e.g. Slovenia (17%), Hungary and Slovakia (23%), Bulgaria (29%), Romania (37%) (Source: Eurostat).
Main Problem to be addressed

South-East Europe regions are among the worst road safety performers in Europe.

Greece, Bulgaria, Romania, and to a less extent Slovakia and Hungary, have a fatalities/population rate by far above the EU average of 62 deaths (2010) (source: CARE database and national data).

Reduction in road fatalities (2001-2010) ranging from 50% (Slovenia) and 44% (Slovakia, Italy) to 3% (Romania) while average EU reduction was 43%.

Jointly for our common future
Road fatalities per million population in SEE countries (2011)

Sources: IRTAD, ETSC, WHO

Jointly for our common future
Road fatalities per million population in ROSEE countries 2000-2011

Jointly for our common future

11.11.2013 - G.Yannis NTUA, G.Piccoli ALOT
### Road fatalities per road user type in ROSEE countries (2010)

<table>
<thead>
<tr>
<th></th>
<th>IT</th>
<th>RO</th>
<th>HU</th>
<th>GR</th>
<th>SI</th>
<th>BG</th>
<th>CZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drivers</td>
<td>69%</td>
<td>39%</td>
<td>52%</td>
<td>65%</td>
<td>65%</td>
<td>47%</td>
<td>62%</td>
</tr>
<tr>
<td>Passengers</td>
<td>16%</td>
<td>24%</td>
<td>22%</td>
<td>19%</td>
<td>16%</td>
<td>31%</td>
<td>17%</td>
</tr>
<tr>
<td>Pedestrians</td>
<td>15%</td>
<td>37%</td>
<td>26%</td>
<td>14%</td>
<td>19%</td>
<td>22%</td>
<td>21%</td>
</tr>
</tbody>
</table>
# Road fatalities per vehicle type in ROSEE countries (2010)

<table>
<thead>
<tr>
<th>Vehicle Type</th>
<th>IT</th>
<th>RO</th>
<th>HU</th>
<th>GR</th>
<th>SI</th>
<th>BG</th>
<th>CZ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Passenger car</strong></td>
<td>53%</td>
<td>65%</td>
<td>60%</td>
<td>51%</td>
<td>39%</td>
<td>66%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Motorcyclists</strong></td>
<td>27%</td>
<td>4%</td>
<td>9%</td>
<td>34%</td>
<td>15%</td>
<td>8%</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Moped riders</strong></td>
<td>6%</td>
<td>8%</td>
<td>3%</td>
<td>3%</td>
<td>4%</td>
<td>1%</td>
<td>0.5%</td>
</tr>
<tr>
<td><strong>Cyclists</strong></td>
<td>8%</td>
<td>12%</td>
<td>17%</td>
<td>2%</td>
<td>14%</td>
<td>5%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Buses/coaches</strong></td>
<td>0.3%</td>
<td>0.7%</td>
<td>2.2%</td>
<td>0.2%</td>
<td>0%</td>
<td>0.6%</td>
<td>0.1%</td>
</tr>
<tr>
<td><strong>Lorries/trucks</strong></td>
<td>1%</td>
<td>5%</td>
<td>6%</td>
<td>7%</td>
<td>2%</td>
<td>6%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Jointly for our common future
Road fatalities per area type in ROSEE countries (2010)

<table>
<thead>
<tr>
<th></th>
<th>IT</th>
<th>RO</th>
<th>HU</th>
<th>GR</th>
<th>SI</th>
<th>BG</th>
<th>CZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside built up areas</td>
<td>43%</td>
<td>63%</td>
<td>37%</td>
<td>46%</td>
<td>43%</td>
<td>40%</td>
<td>36%</td>
</tr>
<tr>
<td>Outside built up areas</td>
<td>57%</td>
<td>37%</td>
<td>63%</td>
<td>52%</td>
<td>57%</td>
<td>60%</td>
<td>64%</td>
</tr>
</tbody>
</table>

11.11.2013 - G.Yannis NTUA, G.Piccoli ALOT
## Road fatalities per gender and age in ROSEE countries (2010)

<table>
<thead>
<tr>
<th></th>
<th>IT</th>
<th>RO</th>
<th>HU</th>
<th>GR</th>
<th>SI</th>
<th>BG</th>
<th>CZ</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td>79%</td>
<td>76%</td>
<td>75%</td>
<td>79%</td>
<td>75%</td>
<td>74%</td>
<td>77%</td>
</tr>
<tr>
<td><strong>Age group 0-14</strong></td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Age group 15-17</strong></td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>2%</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Age group 18-24</strong></td>
<td>14%</td>
<td>14%</td>
<td>10%</td>
<td>15%</td>
<td>15%</td>
<td>-</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Age group 25-49</strong></td>
<td>41%</td>
<td>39%</td>
<td>44%</td>
<td>44%</td>
<td>41%</td>
<td>-</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Age group 50-64</strong></td>
<td>16%</td>
<td>26%</td>
<td>25%</td>
<td>14%</td>
<td>21%</td>
<td>-</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Age group 65+</strong></td>
<td>24%</td>
<td>16%</td>
<td>17%</td>
<td>20%</td>
<td>19%</td>
<td>-</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Unknown</strong></td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>-</td>
<td>1%</td>
</tr>
</tbody>
</table>
ROSEE Project Objectives

Main objective:
improve coordination in promoting, planning and operation at national and regional road networks in terms of road safety.

Additional objectives:
- Strengthen institutional capacity to plan and operate the network from a road safety perspective and contribute to increased future funding for enhancing institutional capacity.
- Contribute to safer roads and mobility and increased future funding possibilities for safe infrastructure.
- Increase capacity to deliver effective and multi-component road user behavior interventions and strengthen transnational cooperation and dialogue on road safety.

Jointly for our common future
## Project Partners and Observers

<table>
<thead>
<tr>
<th>Partner role</th>
<th>Official name in English</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP</td>
<td>ALOT s.c.a.r.l., Agency of East Lombardy for Transport and Logistics</td>
<td>Italy</td>
</tr>
<tr>
<td>PP1</td>
<td>EUCon, Association EU CONCEPTS R&amp;D</td>
<td>Romania</td>
</tr>
<tr>
<td>PP2</td>
<td>GRSP Hungary Association</td>
<td>Hungary</td>
</tr>
<tr>
<td>PP3</td>
<td>UniBS, DICATAM Department of Civil Engineering, Architecture, Land, Environment and Mathematics</td>
<td>Italy</td>
</tr>
<tr>
<td>PP4</td>
<td>KTI Institute for Transport Sciences Non Profit Ltd.</td>
<td>Hungary</td>
</tr>
<tr>
<td>PP5</td>
<td>NTUA, National Technical University of Athens / School of Civil Engineering / Department of Transportation Planning and Engineering</td>
<td>Greece</td>
</tr>
<tr>
<td>PP6</td>
<td>AMZS, Automobile Association of Slovenia</td>
<td>Slovenia</td>
</tr>
<tr>
<td>PP7</td>
<td>AVP, Slovenian Traffic Safety Agency</td>
<td>Slovenia</td>
</tr>
<tr>
<td>PP8</td>
<td>UL FGG-PTI, University of Ljubljana, Faculty of Civil and Geodetic Engineering</td>
<td>Slovenia</td>
</tr>
<tr>
<td>PP9</td>
<td>OY, Open Youth</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>OP1</td>
<td>ABS-RTSA, Road Traffic Safety Agency of the Republic of Serbia</td>
<td>Serbia</td>
</tr>
<tr>
<td>OP2</td>
<td>RSBSP, National Council for Road Traffic Safety</td>
<td>FYROM</td>
</tr>
</tbody>
</table>
Project WP Structure (1/4)

- Work Package 1 / LP - ALOT / Transnational project and financial management
- Work Package 2 / LP - ALOT / Communication activities
- Work Package 3 / NTUA / Policy and data analysis
- Work Package 4 / UL FGG-PTI / Safe roads and mobility
- Work Package 5 / AMZS / Safe road users
- Work Package 6 / KTI / Monitoring and evaluation

Jointly for our common future
WP 1: Transnational project and financial management

- Support effectively the project management and implementation process and constitute a coherent mechanism referring to all aspects of managing the project.

WP 2: Communication activities

- Promote and disseminate project achievements and results:
  - Website; Communication Manual;
  - CD; Dissemination Events; Press released; Brochures;
  - Project Folder; Roll-ups
Project WP Structure (3/4)

**Policy and data analysis**

WP 3

Understand the legislative situation and policies pertaining to the coordination, planning and operation of the networks from a road safety perspective and the road safety situation in each of the countries.

**Safe roads and mobility**

WP 4

Improve quality of road networks (Training courses; RS Audit and speed management; Low cost investment proposal; ...)

**Safe road users**

WP 5

Improve road user behavior (Surveys and interviews; Training courses; courses on RS behaviour issues; Pilot interventions; ...)

Jointly for our common future
Monitoring and evaluation

- Structure and system for process monitoring
- System, indicators and process for monitoring and evaluating the pilots
- Analysis of appropriateness for transnational replication of tools
WP3: Policy and data analysis

3.1 Establishment of project implementation groups at the national, local and transnational level

3.2 Development and implementation of Road Safety Assessment Tools

3.3 National reports

3.4 Transnational report and Workshop

3.5 Recommendations and investment proposals
• Establishment of a National Advisory Group of relevant national key stakeholders (e.g. roads-transport administration, NGOs, education, research etc.) per partner country.

• Development and implementation of Road Safety Assessment Tools.

• National reports on the findings of the assessments and other available information on road safety performance of the networks.

• Transnational report summarizing the national reports.

• Recommendations on the institutional and legislative strengthening to enhance overall capacity to coordinate, promote and operate the networks, from a road safety perspective.

• Road safety investment proposal outlining where investments in infrastructure and other measures may enhance safety outcomes.
Legislation, Policy and Institutional Capacity in partner countries

- Although a number of “good practice” elements can be identified, it is not possible to identify one single “good practice” model at national level.

- There are differences between expert’s and government’s responses, the latter tending to be more positive.

- Variation in the structures and processes at the higher level of road safety management.

- Coordination and budget are the most critical factors for effective road safety management.

- Implementation of programmes and measures seems to be the weakest component of road safety management systems in SEE.
Road safety stakeholder’s needs and priorities in partner countries

More than 100 stakeholders from the partner countries filled-in the STA questionnaire.

- Stakeholders expressed significant demand for data and knowledge in road safety-related decision making.
- Stakeholders expressed discontent about the current poor availability of such information.
- Stakeholders generally appear to ignore the availability status of items that they consider to be irrelevant for their work.
- Stakeholders also seem to be poorly informed about the availability of data and tools in general.
WP4: Safe roads and mobility

4.1 Development and delivery of courses on road safety audit and speed management

4.2 Road safety audit and report

4.3 Low cost infrastructure improvements

4.4 Investment proposal

4.5 Transnational meeting
Safe Roads and Mobility - Indicative Outputs WP4

• Development and delivery of courses on road safety audit and speed management.

• Develop a tool for conducting road safety audit on selected sections of the primary and the secondary road network.

• Proposal of low costs infrastructure improvements as part of the pilot project (WP 5) to slow traffic and to improve the safety of unprotected road users.

• Draft of recommendations for comprehensive infrastructure improvements and the related investment proposals.
WP5: Safe road users

5.1 Surveys and interviews

5.2 Professional development courses on road user behaviour issues

5.3 Pilot intervention - national network

5.4 Pilot project - secondary network

5.5 Investment proposal and transnational meeting
Safe Road Users - Indicative Outputs WP5

- Development and implementation of surveys on road user behavior.
- Development and delivery of courses on main road safety issues and road safety management.
- Development and delivery of courses on strategic enforcement.
- Implementation of Pilot Interventions on the primary or secondary networks in partner countries.
- Draft of recommendations for a comprehensive model approach for improving the coordination, operation and planning of the road networks by increasing safety performance. Recommendations will be finally incorporated into a project investment proposal.
Promote road safety and improve road network accessibility in South East Europe.

In the South East Europe area, injuries and road crashes are answerable for social and economic losses. South-East Europe regions are among the worst road safety performers in Europe: countries such as Greece, Bulgaria, Romania and, to a less extent Slovakia and Hungary, have a road deaths rate per population by far above the EU average of 62 deaths per million population in 2010 (source: CARE database and national data). In the South-East Europe (SEE) countries that are currently not members of the European Union crash and fatality rates are even higher: in Bosnia-Herzegovina, Serbia and Croatia rates are above 100 deaths per million populations in 2009 (Source: OECD ITF). This situation is holding down the development of the SEE region and requires urgent improvements. In order to reach the 2020 EU road safety target.

http://www.rosee-project.eu/