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## SIGNIFICANCE OF THE ROSEE PROJECT – ROAD SAFETY IN SOUTH EAST EUROPEAN REGIONS 2012 – 2014

## ЗНАЧАЈ ПРОЈЕКТА ROSEE – БЕЗБЕДНОСТ САОБРАЋАЈА У РЕГИОНИМА ЈУГОИСТОЧНЕ ЕВРОПЕ 2012 – 2014

Jovica Vasiljević<sup>1</sup>, George Yannis<sup>2</sup>, Alberto Milotti<sup>3</sup>

**Abstract:** In this paper is given review of the International ROSEE project – Road Safety in South East European Regions, in which together participates ten partners from six countries (Bulgaria, Greece, Italy, Romania, Slovenia and Hungary) and more than ten national and international organizations acting as observers, including representatives from Serbia. The project started in October 2012 and will be completed in September 2014. Goal of the project is to provide support to governments at the national and regional level in the selected South-East European regions to improve coordination in promoting, planning and operation of primary and secondary road networks with an emphasis on improving traffic safety performance and network accessibility. ROSEE project (<http://www.rosee-project.eu/>) is supported by the South East Europe Programme (<http://www.southeast-europe.net/en/>).

**Keywords:** ROAD SAFETY, PRIMARY AND SECONDARY ROAD NETWORKS, LOCAL COMMUNITY, PROJECT, ACTIVITIES

**Резиме:** У раду је дат приказ међународног пројекта ROSEE – Безбедност саобраћаја у регионима југоисточне Европе, у коме заједно учествује десет партнера из шест држава (Бугарска, Грчка, Италија, Румунија, Словенија и Мађарска) и више од десет националних и интернационалних организација у својству посматрача, међу којима су и представници из Србије. Пројекат је започет у октобру 2012. године и биће завршен у септембру 2014. године. Циљ реализације пројекта јесте да пружи подршку владама на националном и регионалном нивоу у одабраним регионима југоисточне Европе, да унапреде координацију у промовисању, планирању и активностима на примарној и секундарној путној мрежи са акцентом на побољшање перформанси безбедности саобраћаја и доступности мреже. ROSEE пројекат (<http://www.rosee-project.eu/>) је подржан у оквиру Програма за југоисточну Европу (<http://www.southeast-europe.net/en/>).

**Кључне речи:** БЕЗБЕДНОСТ САОБРАЋАЈА, ПРИМАРНА И СЕКУНДАРНА ПУТНА МРЕЖА, ЛОКАЛНА ЗАЈЕДНИЦА, ПРОЈЕКАТ, АКТИВНОСТИ

### 1. INTRODUCTION

Road networks are crucial for the economic, political and social development of the South East European Space. Road transport networks create a lifeline - including access to economic resources, health care and educational opportunities. In addition, the road transport networks in the region enable transnational communication and exchange including closer cooperation and interaction with the countries of the region and with the larger European Union. The SEES is becoming a preferred destination for tourism and many tourist travel to and throughout the countries using the primary and secondary road networks.

Transport and motorization levels are increasing throughout the South East European space. The motorisation rate has been increased by 8% in the European Union in the period 2001-2009 and in many SEE countries this

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<sup>1</sup> Assistant Director, Vasiljević Jovica, Ph.D., Road Traffic Safety Agency, Boulevard Mihajlo Pupin 2, Belgrade, Serbia, [jovica.vasiljevic@abs.gov.rs](mailto:jovica.vasiljevic@abs.gov.rs)

<sup>2</sup> Associate Professor, Yannis George, Ph.D., National Technical University of Athens, Iroon Polytechniou Street 5, Zografou, Athens, [geyannis@central.ntua.gr](mailto:geyannis@central.ntua.gr)

<sup>3</sup> Consultant, Milotti Alberto, ALOT s.c.a.r.l. - Agency of East Lombardy for Transport and Logistics, Via Cipro 16, Brescia, Italy, [alberto.milotti@alot.it](mailto:alberto.milotti@alot.it)

increase is particularly marked. This is the case of Slovenia (17%), Hungary and Slovakia (23%), Bulgaria (29%), Romania (37%)<sup>4</sup>.

Numerous national and transnational road infrastructure projects financed by governments in the region and the donor community aim to make road transport fluid and promote accessibility within the SEES and with the EU. Many of the road infrastructure development projects focus on strengthening and extending the main corridor networks in the region and primary roads and secondary roads. On the positive side, the development of the network is underway. On the down side, road safety has not consistently been considered in the design, maintenance and operation of the road networks in the region. As a consequence the region is experiencing an increase in the negative side effects of transport including congestion, pollution, noise and road crash injury. The negative side effects of transport have enormous social and economic cost implications to national and regional government budgets and they contribute to a decrease the accessibility and liveability of regions and communities in the South East European Space. According to estimates by the World Health Organization, road crashes cost national governments annually about 2% of GDP.

Road crashes create tremendous losses for businesses operating vehicle fleets as indirect costs such as lost productivity and legal fees are not generally covered. A large portion of those killed and injured are the most vulnerable, including pedestrians, cyclists, and riders/drivers of powered two-wheelers, children and the elderly. In the EU, 44% of road crash casualties are unprotected road users. The WHO estimates that for each fatality, 70 people in a community are negatively affected.

South-East Europe regions are among the worst road safety performers in Europe, suffering higher road crash injury and mortality rates and slower and causality reduction trends than the EU average. 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<sup>5</sup>. While road deaths have been reduced by 43% on average in the EU27 in the period 2001-2010, SEE countries members of the European Union are generally lagging behind with reductions in the range of 44% (Slovakia and Italy) to 3% (Romania). The only exception is represented by Slovenia (-50%).

In the South-East Europe (SEE) countries that are currently not members of the European Union, crash and fatality rates are even higher, showing the criticalness of the situation in the region and the need of urgent improvements. In Bosnia-Herzegovina, Serbia and Croatia rates are above 100 deaths per million populations in 2009<sup>6</sup>. For the EU member states, the poor performance in the SEE countries is slowing down overall progress at EU level. It emerges clearly that the EU needs to step up efforts particularly in the member states in SEE to reach the 2020 EU road safety target.

Road crashes are a significant public health and economic burden and influence people's travel choices. People are less likely to choose sustainable forms of mobility such as walking and cycling when they feel threatened by a road crash. Those who are dependent on walking and cycling as a regular mode of travel due to economic reasons are at the greatest risk of a road crash. Studies show that road crashes disproportionately affect the poor and can push a family into poverty when a main bread winner is involved in a road crash.

Because of the mentioned problems, ROSEE started and builds on the experience of SOL project - Save Our Lives Project which is intended to enhance capacities of local and regional stakeholder to prevent road accidents in Central Europe. The principle of applying a data led road safety management to Central Europe will be transferred to South East Europe regions.

The project ROSEE will support pilot communities in the selected South-East European regions to strengthen their approaches to road safety and sustainable mobility in order to prevent deaths and injuries caused by road crashes. Road safety and sustainable mobility are key issues to improve accessibility of SEE regions.

The project ROSEE is approved under the 4<sup>th</sup> Call for Proposals in the South East Europe Transnational Cooperation Programme.

## **2. PARTNERS IN THE ROSEE PROJECT**

In ROSEE project together participates ten partners from six countries (Bulgaria, Greece, Italy, Romania, Slovenia and Hungary) and more then ten national and international organizations acting as observers, including representatives from Serbia.

Partners in the project are:

1. ALOT s.c.a.r.l. - Agency of East Lombardy for Transport and Logistics from Italy, Brescia, as a coordinator.
2. EUCon, Association EU CONCEPTS R&D – Romania.
3. GRSP, Global Road Safety Partnership Association– Hungary.

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<sup>4</sup> Source: Eurostat

<sup>5</sup> Source: CARE database and national data of the partners and observers in the project

<sup>6</sup> Source: OECD-ITF and national data of the partners and observers in the project

4. UniBS, DICATAM, , University of Brescia, Department of Civil, Engineering, Architecture, Land, Environment and Mathematics – Italy.
5. KTI Institute for Transport Sciences Non Profit Ltd. – Hungary.
6. NTUA - National Technical University of Athens / School of Civil Engineering / Department of Transportation Planning and Engineering – Greece.
7. AMZS, Automobile Association of Slovenia – Slovenia.
8. AVP, Slovenian Traffic Safety Agency – Slovenia.
9. UL FGG-PTI, University of Ljubljana, Faculty of Civil and Geodetic Engineering – Slovenia.
10. OY, Open Youth – Bulgaria.

On the list of the observers, among others are:

1. RTSA, Road Traffic Safety Agency of the Republic of Serbia – Serbia.
2. RSBSP, National Council for Road Traffic Safety Former Yugoslav Republic of Macedonia- FYROM.
3. FIAF, FIA Foundation for the Automobile and Society – United Kingdom.
4. iRAP, International Road Assessment Programme – United Kingdom.
5. FMTC, Federal Ministry of Transport and Communications - Bosnia and Herzegovina.
6. ACA, Automobile Club of Albania – Albania.
7. HAK, Croatian automobile club – Croatia.
8. AMSCG, Automobile Association of Montenegro – Montenegro, etc.

### 3. MAIN OBJECTIVES OF THE ROSEE PROJECT

The main objective of ROSEE is to improve coordination in promoting, planning and operation of national and regional road networks with an emphasis on improving accessibility and traffic safety.

Specific objectives are as follows:

1. Policies and data
  - Generate a better understanding of how the countries in the region are aligned with EU road safety and network management policies and objectives (EU transport white paper, Road safety policy orientations) by undertaking a rapid assessment.
  - Make recommendations for strengthening policy and legislation so as to strengthen the overall promotion, planning and operation of the primary network from a road safety perspective.
  - Make recommendations for strengthening and broadening the type and quality of road safety data collected on the networks and improving use of the data to guide decision-making on road crash and injury prevention along the networks (primary and secondary).
  - Place road safety policies in the context of promoting sustainable forms of mobility and in the scope of different sectors (such as Health, Environment, Transport, Roads and Justice).
2. Network coordination with an emphasis on road safety
  - Make individual recommendations for strengthening coordination of the primary network at the national and transnational levels with particular consideration given to accessibility and road safety. These recommendations will be incorporated into an investment proposal at the end of the project.
  - Implement a pilot to strengthen road safety management on key secondary networks (one in each country) and contribute to better coordination, planning and operation for the network to ensure safety performance.
  - Increase knowledge and understanding among decision-makers and professionals in the participating countries about the benefits and need for road safety as an integral part of network management.
  - Strengthen opportunities for regular dialogue among the countries of the SEES and with regional donors network development and network priorities for the corridors.
  - Increase knowledge among professionals through training programmes about effective multi-component approaches to network coordination, planning and operation with an emphasis on road safety.
3. Safer roads and mobility
  - On the primary network the main objective is to support national and transnational decision making on network safety priorities and standards that include infrastructure and other relevant issues such as enforcement, communications/information and rescue. Based on these a transnational investment proposal can be developed that will contribute to strengthening the overall safety performance of the network.
  - Strengthen professional knowledge on road safety infrastructure management and contribute to a common understanding among professionals in the South East European Space about road safety benefit, the role of road designers and engineers in contributing to safety on the network, how to conduct a high quality road safety assessment, methods for integrating the information into the planning and maintenance schemes.

- Strengthen synergies between national policies on safety in road design and maintenance and the implementation of concrete measures.
- Contribute to increased safety for unprotected road users especially in linier villages.

#### 4. Road user behaviour

- Create a common understanding among relevant professions in the countries in the SEES about effective approaches to influencing road user behaviour, both the population and transit drivers.
- Strengthen capacity in the SEES to implement integrated programmes to positively influence road user behaviour including social marketing and enforcement campaigns. Knowledge gained in the training courses will be tested by undertaking an integrated infrastructure, enforcement and social marketing campaign focusing on speed.

All major outputs of ROSEE will be evaluated and validated regarding their transferability in other SEE regions.

## 4. METHODOLOGICAL APPROACH

Infrastructure safety management and improvement of driver behaviour are key components to improve the accessibility of SEE networks. ROSEE is structured into 6 Work packages (WP) and for each WP a leader is nominated for ensuring that WP tasks and deliverables are carried out entirely and according to schedule.

WP1 and WP2 will ensure well structured and efficient work, good documentation and effective dissemination of the activities. WP3, WP4 and WP5 represent the core elements of the project: While WP3 will take stock and analyse the institutional and policy framework of participating SEE regions and propose a data-led approach to strengthen road safety management, WP4 and WP5 will enhance road safety through the implementation of dedicated pilot projects based on adaptation of well known best practices to local needs. WP4 and WP5 will deal with infrastructure safety management and driver behaviour respectively. Evaluation of pilot projects, validation and transferability of project results will be the focus of WP6.

Since project inception the transnational cooperation will play a crucial role and project partners will be closely and intensively involved to put forward expected results. The partnership will be able to demonstrate, and inspire, European and EU candidate regions, how to better plan and promote transnational strategies to improve accessibility by enhancing road safety and transport sustainability.

## 5. TRANSNATIONAL APPROACH

Road safety is an area where transnational cooperation for mutual learning and the exchange of good practice is beneficial in terms of designing effective interventions and in terms of advocating for improvements. Globally and regionally, opportunities to share lessons and experience across borders has proved to be a crucial factor in raising awareness, motivating action and implementing effective solutions. The World report on road traffic injury prevention (WHO, 2004) clearly states the importance of international cooperation on road safety. The countries of the EU have decades of successful experience in managing road safety. This experience can be helpful to the new member states and states outside of the EU. There is no need to reinvent the wheel. In addition, comparisons across multiple countries can help motivate action by poorer performing countries.

The Road Safety Performance Index Programme (PIN) by the European Transport Safety Council (ETSC) is a good example of how comparisons among multiple countries can spark action by countries that are underperforming. ROSEE will take the examples to date one step further by enabling communities in a region to exchange experience and compare data on road safety. ROSEE foresees the transfer of road safety know how among different stakeholders and among different government levels with a country as well. The Project will provide SEE regions with tools and opportunities for sharing experiences and lessons learned among decision-makers, experts, practitioners, mobility managers and relevant stakeholders involved in road safety and sustainable transport issues. Good practice examples that exist in the SEE but are not easily accessible or readily available to other SEE regions will be identified and disseminated for the to benefit the whole programme area.

In addition to this, also well-known experiences from safer and/or best performing countries of Western Europe will form the basis for the exchange of knowledge. The transnational approach is placed at the core of Project Partners working strategy through the establishment of permanent Transnational Working Groups. The ROSEE partnership is a transnational network in which each partner brings together public administrations and communities with different needs in each country, in order to enhance road safety in SEE regions. The transnational cooperation is vital for ROSEE as the issue the project is dealing with is of common and relevant interest to all partners. National Agencies and Road safety councils are critical partners to develop and support policies while universities, research centers and NGOs can bring the technical knowledge that is needed to support policy-makers in effective network safety management, to adopt a data-led approach, to compare

different best practices and best case studies and take out of them the best solution applicable to local needs of SEE regions.

## **6. EXPECTED OUTPUTS AND RESULTS**

WP3 on Policy and data analysis will deliver 1 Assessment tool to map relevant EU network safety priorities with national road safety policies in the participating countries and 1 Assessment tool to assess the robustness of network coordination, planning and operation in regards to road safety vis a vis European and international good practice. A Professional development course on results focused road safety management and the safe systems approach to road safety will also be delivered. This WP will produce a network management system focused on safety performance of the network that involves stakeholders from relevant disciplines and sectors such as roads, transport, health, environment, road hauliers, tourism.

In WP2 a SEES internet site for continued communication about issues on the network that are relevant to road safety including laws and penalties for each country on key issues such as speed and drink-drive, construction, weather, crashes, petrol and rest stops will be established.

WP4 will produce a Manual on conducting road safety assessments for the SEES based on European and international good practice and 2 professional development courses:

1. On road safety assessments and
2. On Speed management.

In WP5, partners will jointly develop and deliver a Professional development course on unprotected road users, effective road safety social marketing campaigns, strategic traffic law enforcement along corridors, first-aid, incident management, approaches to monitoring and evaluating interventions aimed at improving road user behaviour to understand impact of the interventions. At the end of the project a Project proposal investment planning tool for integrated road safety projects will be formulated.

## **7. CONSISTENCY WITH THE LOCAL, REGIONAL AND NATIONAL POLICIES OF THE INVOLVED PARTNERS**

ROSEE is consistent with National and local policies on road safety. First of all, all EU Countries involved in the partnership need to implement the EU Directive 2008/96/EC on infrastructure safety management. For instance in Hungary the implementing Edict n.176/2011 got into place on 15. 09. 2011. The information-exchange established through this project can add much to the smooth implementation of this directive. The provisions of the Edict 176/2011 are operative on the roads of the TEN-T road network. It will be operative on the main Hungarian roads from 2014, then, from 2015 on the roads that have a higher traffic volume then 10000 PCU/day. The road safety professionals working at or with local governments have to be prepared to implement the regulations. The traffic features, the road networks of a community differ from the national primary road networks, in the same time they do connect (e.g.: trespassing main road, roads governed nationally within the territory of the community), so it can be very important if traffic can be calmed in the community. It affects the inward traffic to the community and the transit traffic as well, form which the later does not request the passing through the community. In the same the local public transport can be confronted, it can suffer from the transit traffic (especially in case of a very busy main road). In the same time in case of larger communities (having more complicated road network) it can cause problems to supply the stores, etc. with goods in the city center and the difference between parking needs and possibilities have to be considered.

In Serbia, the coordination of different stakeholders in traffic safety is poor and there is a problem of responsibilities between different administrative levels. This is a gap that ROSEE can help to overcome. In Slovenia a national strategy for cyclists safety is under preparation and ROSEE is expected to gather best practice examples and identify positive measures from EU putting them into practice at national and local level.

ROSEE is perfectly consistent with the Italian Road Safety Plan and its objectives in particular with regards to the improvements of vulnerable road users safety. Vulnerable PTW's are more popular in southern European countries and in the EU the mileage-related risk of being killed in a road traffic accident is 18 times higher for motorcyclists than it is for other road users.

The objectives of the ROSEE project are also fully aligned with the Greek national road safety policy, as reflected in the national strategic plan (NTUA, 2011). Integrating road safety to environmental and health concerns is one of the Greek road safety policy objectives and will be assisted by the participation at the ROSEE project. Especially during the economic crisis the optimization of costs and resources in addressing the road safety and mobility issues is of crucial importance and the ROSEE project will contribute to this direction.

Finally the road safety audit and inspection proposed for the pilot project is expected to lead to important improvements at the road network concerned in all SEE countries concerned.

## **8. CONCLUSION**

European and international experience show that road crashes are predictable, road crashes are preventable and road crash injury is preventable. When networks are managed well road crashes are infrequent and the severity of road crash injury can be reduced. Several European countries are excellent examples of this including France, Switzerland and Germany.

In the interest of ensuring efficient management of the primary and secondary road networks in the region, issues such as responsibility (e.g. who is responsible for ensuring safety outcomes overall irrespective of road type and who is responsible on individual road types), common standards and common practices for network development, management and maintenance also in respect to road safety are essential. Responsible professionals must be working based on the same international standards, share a common understanding of the need for safe roads for all road users and share common understanding of good practice approaches. In terms of the transnational networks, regular communications among the agencies and individuals operating the network is crucial.

For the secondary networks it is essential that political leaders at the regional and community governments levels along these networks develop shared objectives and strategy for managing the network based on the safe systems approach.

ROSEE will help improve coordination in promoting, planning and operation of national and regional road networks with an emphasis on improving road safety performance by means of a two pronged approach on Primary and Secondary networks.

## **9. LITERATURE**

- [1] Peden, M. et al., eds. (2004). World report on road traffic injury prevention, Geneva, World Health Organization.
- [2] Directive 2008/96/EC of the European Parliament and of the Council of 19 November 2008 on road infrastructure safety management.
- [3] ETSC (2011), 5<sup>th</sup> PIN Report, 2010 Road Safety Outcome: 100,000 fewer deaths since 2001, Brussels.
- [4] Text of the ROSEE project-ROad safety in South East European regions, Application Form, 4<sup>th</sup> Call for Proposals, South East Europe Transnational Cooperation Programme, Document reg. no.: INTRA-5108829.