

Road Safety Assessment Tools

Road Safety in South East European Regions Workshop
Munich Transport and Logistics Fair
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Project Structure



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Policy and data analysis (WP3) - Objectives

Understand how SEE countries are aligned with EU road safety and network management policies and objectives.

Make recommendations:

- on policy and legislation for the promotion, planning and operation of the primary network from a road safety perspective
- on the type and quality of collected road safety data
- on the use of data to guide decision-making on road crash and injury prevention
- on coordination at the national and transnational level with focus on accessibility and road safety

Policy and data analysis (WP3) - Purpose

To develop a more comprehensive understanding:

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

To create a basis:

- for monitoring and evaluating the progress of road safety policies and road safety performance in each country
- for strengthening the content of pilot project activities, communication material and recommendations regarding institutional and legislative strengthening.

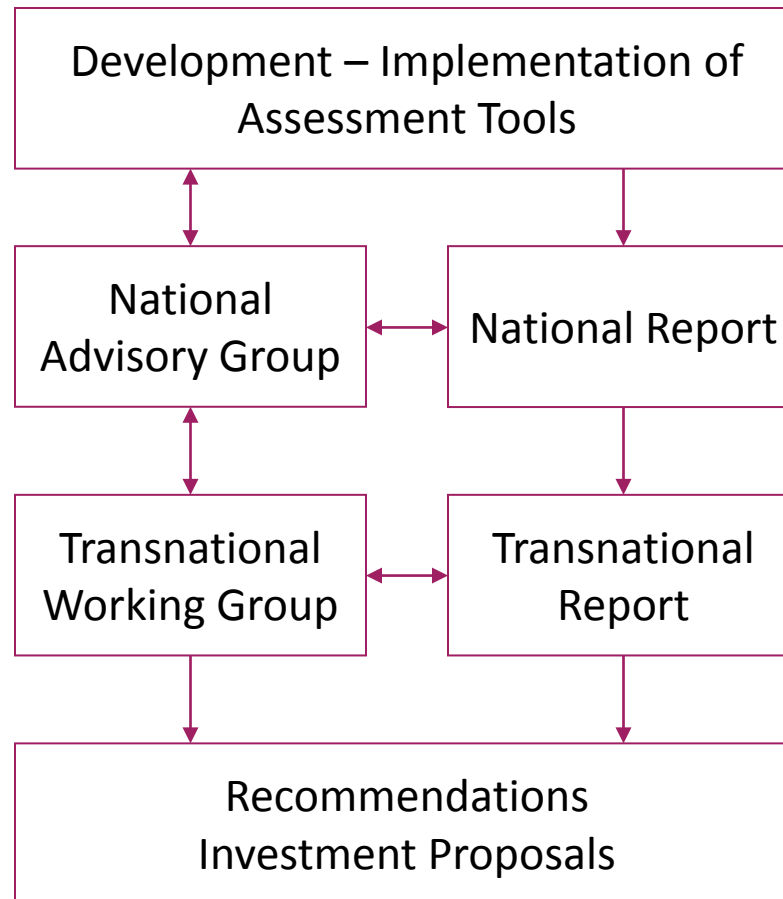
Policy and data analysis (WP3) - Actions

- 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



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Policy and data analysis (WP3) - Workflow



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Policy and data analysis (WP3)

3.1 National Advisory Groups (NAG)

One NAG of relevant national / regional decision-makers and key stakeholders (e.g. roads -transport administration, NGOs, education, research etc.) has been established in each partner country.

Tasks:

1. to ensure the project fits within national policies
2. to contribute to overall objectives
3. to determine national or regional safety priorities
4. to discuss standards for road safety applicable at the transnational level
5. to oversee the development and testing of a model approach for improving promotion, coordination and operation of the primary and secondary network

NAG meetings have already taken place in every partner country.

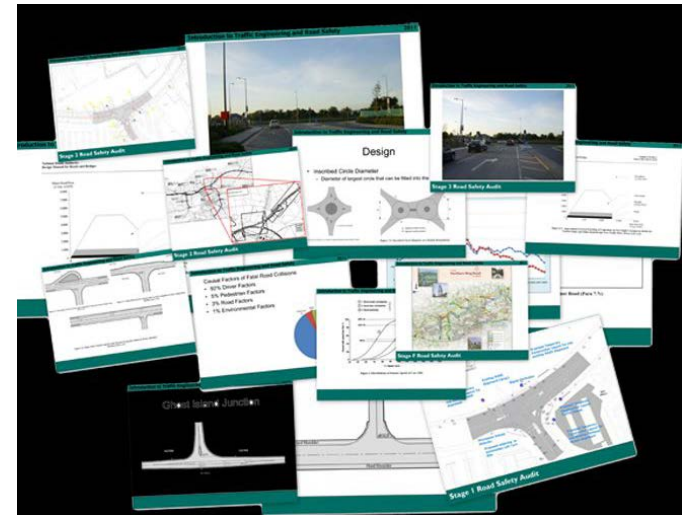
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Policy and data analysis (WP3)

3.2 Development and implementation of Road Safety Assessment Tools

Exploitation of existing work at European level:

- Legislation, Policy and Institutional Capacity questionnaire
- Stakeholders' Needs and Priorities questionnaire
- Rapid road safety review tool - Data Master Files



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3.2.1 Legislation and policy assessment tool

3.2.3 Institutional capacity review tool

Extensive questionnaire (LPIC) developed within the DaCoTA project for the assessment of road safety management, legislation and policies in the European countries.

Questionnaire filled-in by one governmental representative and one independent expert in 14 European countries in 2010

- Mostly Northern and Western countries
 - AT, BE, CH, EL, ES, FI, FR, IE , IT, IL, LV, NL, PL, UK
- ROSEE updated (IT, EL) and complemented (more southern and eastern countries) an existing European legislation and policy assessment framework using the LPIC questionnaire.

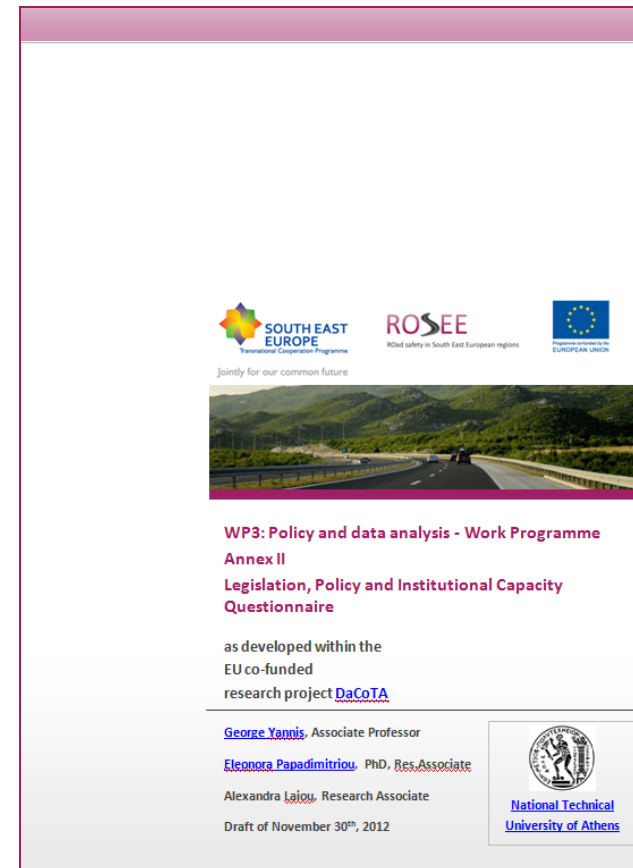
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LPIC questionnaire

Tool for the assessment of road safety legislation, policy and institutional capacity in partner countries.

Subject areas:

- Institutional organization, coordination and stakeholders' involvement
- Policy formulation and adoption
- Policy implementation and funding
- Monitoring and evaluation
- Scientific support and information, capacity building



The image shows the cover page of a document titled "LPIC questionnaire". At the top, there are logos for "SOUTH EAST EUROPE Transnational Cooperation Programme", "ROSEE Road safety in South East European regions", and the "EUROPEAN UNION". Below the logos is the slogan "Jointly for our common future". The central part of the cover features a photograph of a road winding through a green, hilly landscape. Below the photo, the text reads: "WP3: Policy and data analysis - Work Programme Annex II Legislation, Policy and Institutional Capacity Questionnaire". It also states "as developed within the EU co-funded research project [DaCoTA](#)". At the bottom, there are names and titles: "George Yannis, Associate Professor", "Eleonora Papadimitriou, PhD, Res.Associate", and "Alexandra Lajou, Research Associate". The date "Draft of November 30th, 2012" is also present. On the right side, there is a logo for the "National Technical University of Athens".

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LPIC questionnaire analysis

	ITALY		ROMANIA		HUNGARY	GREECE		SLOVENIA	BULGARIA
	General Information:								
Date of interview	12/03/2013	12/03/2013	13/1/2013	12/2/2013	27/12/2013	12/2/2013	12/2/2013	18/12/2013	15/2/2013
Person interviewed:									
Name	Michele Pezzagno	Luisa Zavarella	Savu Constantin	Urjan Serban Dumitru	Prof Dr. Péter Holló-Pausz Ferenc-Tamás Berta	George Yannis	Stratos Georgiopoulos	Vesna Marinko-Andraž Murkovič	Vladimir Todorov
Current position	Researcher at Brescia University	Engineer at Province of Brescia - Infrastructures department	Urban Traffic Advisor	Head of Research Department		Associate Professor, NTUA, Greece	Secretary of the Inter-ministerial Committee on Road Safety	Head of department for development and coordination of traffic safety-Area Counsellour	
Previous positions if relevant				Head of Inspections Control Service					
Country	Italy	Italy	Romania	Romania	Hungary	Greece	Greece	Slovenia	Bulgaria
Type of representative	Independent Expert	Government Representative	Independent Expert	Government Representative		Independent Expert	Government Representative	Government Representative	
Preliminary question:									
Can you describe in a few words how the responsibilities for road safety management are divided between the national, regional and local levels in your country	Legally, the Government is the main authority responsible for Road Safety. Regions are	Legally, the Government is the main authority responsible for Road	Road safety lies under the responsibility of the Inter-ministerial Council for Road Safety (CISR) set up in 1995 through Government	The Inter-ministerial Council for Road Safety (CISR) is the consultative body to the Government, without juridical personality, assuring the general concept and coordination at national level based on the national strategy for road safety and on the national priority actions programme for implementing	In Hungary, the road accident prevention is a state responsibility defined by the Road Traffic Act No.1/1988. The minister responsible for transport is in charge with the co-ordination of public duties relating to road safety defined by the Act. In 2007, Government Decision No. 2261/2007 (XII. 29.) was entailed on public	Raise the awareness and shape the cultural attitudes of road traffic participants who	Increase the effectiveness of the measures aimed at RS improvement in	Road safety in Slovenia is shared responsibility at governmental level between European Union, national and local level. While Ministry of Infrastructure and Spatial Planning has legal responsibility for national road	On the national level the road safety responsibility is divided mainly between the Ministry of Regional Development and Public Works, the Ministry of
1. Institutional organization, coordination and stakeholders' involvement									
1. Has a high level inter-section decision-making institution been established to prepare policy orientations or directions for RS? (Name of the institution?)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Comitato per l'indirizzo ed il coordinamento delle attività connesse alla sicurezza stradale	Comitato per l'indirizzo ed il coordinamento delle attività connesse alla sicurezza stradale	The Inter-ministerial Council for Road Safety (CISR) under the prime-minister.	The Inter-ministerial Council for Road Safety (CISR)	The state secretariat responsible for traffic and transport of the Ministry of National Development	Inter-Ministry Committee on Road Safety (since 1999), supported by a Special Secretariat (since 2010), however they never performed actively.	Inter-ministerial Committee - minister of Infrastructure, Transport and Networks	The Interdepartmental working group	The State-Public Consultative Commission on the Problems of Road Safety is established on the basis of a section in the Road Traffic Act and its statute is laid out in details in a Decree of the Bulgarian Council of Ministers
If yes:									
1a) Has it been created legally (law, decree)? (Since when?)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
	Since 2010 (Law L. 29/7/2010 n. 120)	Since 2010 (Law L. 29/7/2010 n. 120)	Established in 1995 through Government Decision no. 437/1995 and modified and completed through Decision no. 901/2008.	1995	1992	Law (see above)	2010	2002	10.10.2003
1b) Does it operate:									
- Under the Prime Minister?			Yes	Yes		Yes	No		No

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LPIC questionnaire analysis

- Analysis and cross-checking of the questionnaire responses and related comments of both the governmental representatives and the independent experts.
- Draw a reliable and accurate picture or “profile” for each country:
 1. Overview of road safety management good practices
 2. Structures, processes and outputs
 3. Good practice “diagnosis”
- In-depth country comparisons for selected key items.



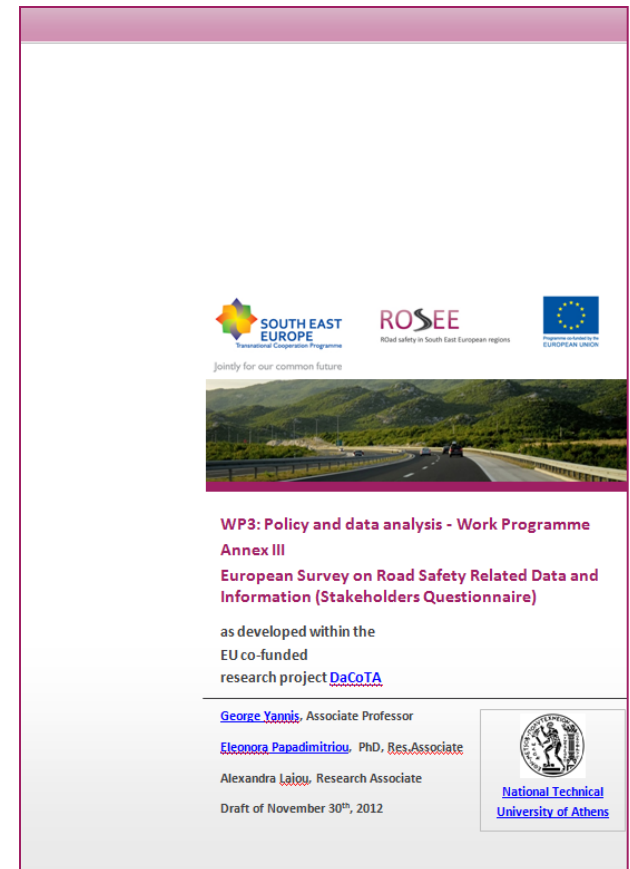
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STA questionnaire

Tool to assess demands and views of road safety stakeholders in each partner country.

Sections:

- Field of Work
- Use of tools
- Data and resources for fact finding and diagnosis of road safety issues
- Data and resources for the development of road safety related programmes
- Data and resources for the implementation of road safety related measures
- Data and resources for the monitoring and evaluation of road safety measures



The image shows the cover page of a report. At the top, there are logos for South East Europe, ROSEE, and the European Union. Below the logos is the text 'Jointly for our common future'. The main image is a photograph of a road winding through a green landscape. Below the image, the text reads: 'WP3: Policy and data analysis - Work Programme Annex III European Survey on Road Safety Related Data and Information (Stakeholders Questionnaire) as developed within the EU co-funded research project [DaCoTA](#)'. At the bottom, there are names and titles: 'George Yannis, Associate Professor', 'Eleonora Papadimitriou, PhD, Res. Associate', and 'Alexandra Laiou, Research Associate'. The date 'Draft of November 30th, 2012' is also present. The logo of the National Technical University of Athens (NTUA) is in the bottom right corner.

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STA questionnaire analysis

	ITALY										ROMANIA						
Date of interview	6/3/2013	6/4/2013	6/3/2013	6/3/2013	28/2/2013	6/3/2013	6/3/2013	6/3/2013	6/3/2013	6/3/2013	6/2/2013	5/2/2013	11/2/2013	20/2/2013	20/2/2013	12/2/2013	4/1/2013
Person interviewed:																	
Name	Gabriella Barreca	Claudio de Viti	ENNIO FERRI	PIERO NIGRELLI	M. Pezzagno	GUIDO PICCOLI	SILVIA ROSSETTI, ANNA FRASCAROLO, ANNA RICHELDEI	MICHELA TIBONI	MAURIZIO TIRA	LUISA ZAVANELLA	Dorinela COSTESCU	Mihaela POPA	Ion Dedu	Constantin Savu	CONSTANTIN TITI AUR	Urjan Serban Dumitru	Octavian Udriste
Current position	Technician at Municipality of Brescia	Powered two wheelers director in confindustria ANCMA	BICYCLE DIRECTOR AT CONFINDUSTRIA ANCMA (National Association for bicycle and motorcycle manufacturers)	Assistant Professor	DIRECTOR, ALOT	PhD candidates at DICATAM (Brescia University)	Associated Professor at Brescia University	FULL PROFESSOR	TECHNICIAN AT PROVINCE OF BRESCIA - INFRASTRUCTURES DEPARTMENT	Lecturer in the field of Transportation Engineering	Professor in Transport Economy, Traffic in regulated access networks	Head of Transport, Roads and Traffic Systemization Direction, Bucharest Municipality	Urban Traffic Advisor	Owner and Trainer at the Titi Aur school for defensive driving and piloting	Head of Research Department	Transport Expert	
Previous positions if relevant											Project director Research for estimating and improving the integral safety performance of urban traffic networks* (SafeNet) PN-II-PT-CACM-2011-3.2-1439						
Country of work	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Italy	Romania	Romania	Romania	Romania	Romania	Romania	
Type of organisation he/she works for	Municipality of Brescia - Mobility & Traffic Department	REPRESENTATIVE OF MANUFACTURERS (CATEGORY ASSOCIATION)	SELF-EMPLOYED ENGINEER IN THE FIELD OF ROAD DESIGN	MANUFACTURERS ASSOCIATION	University	EU PROJECTS, CONSULTING	DICATAM - Brescia University	University & Research	UNIVERSITY	PROVINCE OF BRESCIA - GOVERNAMENTAL BODY	University	University	Public institution - Local Government	Private company - Research, development and consultancy in the field of transport	Private driving school	Romanian Automobile Register - technical specialized body designated by the Ministry of Transport as competent authority in the field of road vehicles, road safety, environment protection and quality	Non-governmental association targeting the continuous development of urban and suburban transport. In accordance with its articles of association, CODATU-
What are your main road safety related activities? (select all that apply)																	
Data collection and analysis	x	x		x	x	x		x	x	x	x	x				x	x
Campaigns	x			x		x									x		x
Communication																	x
Education	x																x
Training																	x
Monitoring and evaluation	x	x				x		x									x
Planning and design		x	x		x	x		x									x
Infrastructure safety																	
Vehicle safety		x															x
Enforcement																	x
Research (commissioning)		x			x	x		x									x
Research (conducting myself)					x		x	x									x
Management		x															
Policy making					x												
Government lobbying		x				x											x
Other (please specify)																	x
To what extent do you think your organization influences the following:																	
a. The European Commission																	
Very influential																	
Quite influential	x			x													
Only a little influential						x	x	x	x								x
No influence			x		x			x		x	x	x		x	x		x
b. National Government																	
Very influential				x													x
Quite influential	x																
Only a little influential					x		x										x
No influence			x					x	x	x	x	x	x				
c. Regional/local authority																	
Very influential	x					x				x							
Quite influential		x			x												
Only a little influential																	
No influence																	

STA questionnaire analysis

Descriptive analysis

- Combined priority and availability ratings
- Ranking of priorities- identification of highest priorities
- Separate analysis of policy makers' priorities

	Medium/high priority, limited/no availability		Medium/high priority, already available		Low priority/not relevant		No answer	
	Count	%	Count	%	Count	%	Count	%
Statistical methods for isolating effects of specific policies or measures	9	47%	0	0%	8	42%	2	11%
Methods to assess the training needs of individuals involved in road safety implementation processes	8	42%	1	5%	7	37%	3	16%
Information on the public acceptance of a road safety measure	8	42%	1	5%	8	42%	2	11%
Data on the under-reporting of road traffic crashes	7	37%	4	21%	6	32%	2	11%
Focusing on seriously injured counts, in addition to fatality counts	7	37%	4	21%	6	32%	2	11%
Statistical models and tools for target setting	7	37%	3	16%	6	32%	3	16%
User-friendly interfaces to assist new users in finding road safety materials on the internet	7	37%	3	16%	7	37%	2	11%
Comparisons of the frameworks in which road safety policies and measures are implemented	7	37%	2	11%	7	37%	3	16%
Detailed information from road safety audits and road safety inspections	7	37%	2	11%	8	42%	2	11%
Long term forecast models (up to 10 years)	7	37%	2	11%	8	42%	2	11%

3.2.2 Rapid road safety review tool

- All available road safety data was collected and a 'Data Master Tables' file, including all European countries, was developed within the DaCoTA project.
- Tool for transnational comparisons of the safety situation on the primary and secondary road networks across the SEE.

Time Series Road Safety Data (1975 -2010)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Number of persons killed										
1 total figures	2,112	2,158	2,159	2,253	2,411	2,157	2,105	2,182	2,116	2,037
2 drivers killed	1,114	1,186	1,212	1,256	1,361	1,207	1,199	1,261	1,228	1,193
3 passengers killed	525	509	450	518	569	528	497	504	489	469
4 pedestrians killed	473	464	498	479	481	422	409	417	399	375
5 age group 0-14 (children)	30	31	30	38	24	23	25	25	18	14
6 age group 15-17	11	11	9	4	11	5	5	9	5	5
7 age group 18-24	28	15	27	30	19	20	15	18	13	16
8 age group 25-49	58	78	70	77	99	62	73	58	68	61
9 age group 50-64	105	90	103	83	80	63	75	68	67	58
10 age group 65+	242	238	256	248	243	237	204	223	209	210
11 unknown	0	1	4	1	6	12	12	16	19	11
12 Total vehicle occupants killed	1,639	1,694	1,661	1,774	1,929	1,735	1,696	1,765	1,717	1,662
13 vehicle age < 1 year	110	144	94	101	97	80	76	88	83	104
14 vehicle age 1-2 years	245	251	284	250	221	257	245	273	305	310
15 vehicle age 3-5 years	412	430	510	512	558	303	298	271	280	270
16 vehicle age 6-10 years	473	452	407	454	512	320	323	358	335	318
17 vehicle age 11-15 years	399	418	366	455	542	208	242	215	206	202
18 vehicle age >15 years	-	-	-	-	-	187	177	230	217	177
19 unknown	-	-	-	0	-	380	335	330	291	281
20 passenger car occupants	723	835	784	848	896	871	872	892	866	911
21 vehicle age < 1 year	55	91	39	50	52	33	34	30	38	40
22 vehicle age 1-2 years	92	133	151	143	111	138	132	141	158	177
23 vehicle age 3-5 years	156	178	241	249	261	188	175	149	162	168
24 vehicle age 6-10 years	203	224	178	199	185	149	189	218	183	189
25 vehicle age 11-15 years	217	209	175	208	287	126	146	139	126	145
26 vehicle age >15 years	-	-	-	-	-	116	121	156	133	123
27 unknown	-	-	-	-	-	121	75	59	66	69
28 motorcyclists killed	316	316	320	367	391	419	392	455	453	406
29 vehicle age < 1 year	34	34	31	28	21	31	30	43	33	54
30 vehicle age 1-2 years	83	68	83	83	66	80	76	98	112	101
31 vehicle age 3-5 years	135	124	130	151	158	69	74	82	86	65
32 vehicle age 6-10 years	52	55	58	79	117	86	78	84	100	67
33 vehicle age 11-15 years	13	34	19	26	28	36	43	37	30	24
34 vehicle age >15 years	-	-	-	-	-	21	16	14	21	14
35 unknown	-	-	-	-	-	96	75	97	71	81
36 moped riders killed	177	185	211	205	237	122	114	114	108	90
37 cyclists killed	24	27	37	28	34	28	32	34	23	22
38 buses or coaches occupants killed	22	9	4	12	14	9	10	23	13	9
39 lorries or trucks occupants killed	203	188	179	176	230	195	159	149	145	134

Data Master Tables file

- Background country characteristics (e.g. socioeconomic indicators)
- Fatality data (1975-2010) per road user, vehicle and road characteristics
- Exposure data (1990-2010) per road user, vehicle and road characteristics
 - Population, vehicle fleet, vehicle- and person-kilometres of travel
- Safety Performance Indicators (most recent data)
 - Alcohol and drugs, speeding, seatbelt/helmet use, enforcement, DRL, vehicle protection
- Traffic laws and measures (most recent data)
 - Infrastructure, traffic rules, education and training, campaigns

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Data Master Tables file

Data Master Tables are reference docs and will be gradually exploited.

Updated/ completed data will be used for comparison of basic road safety data / trends between partner countries.

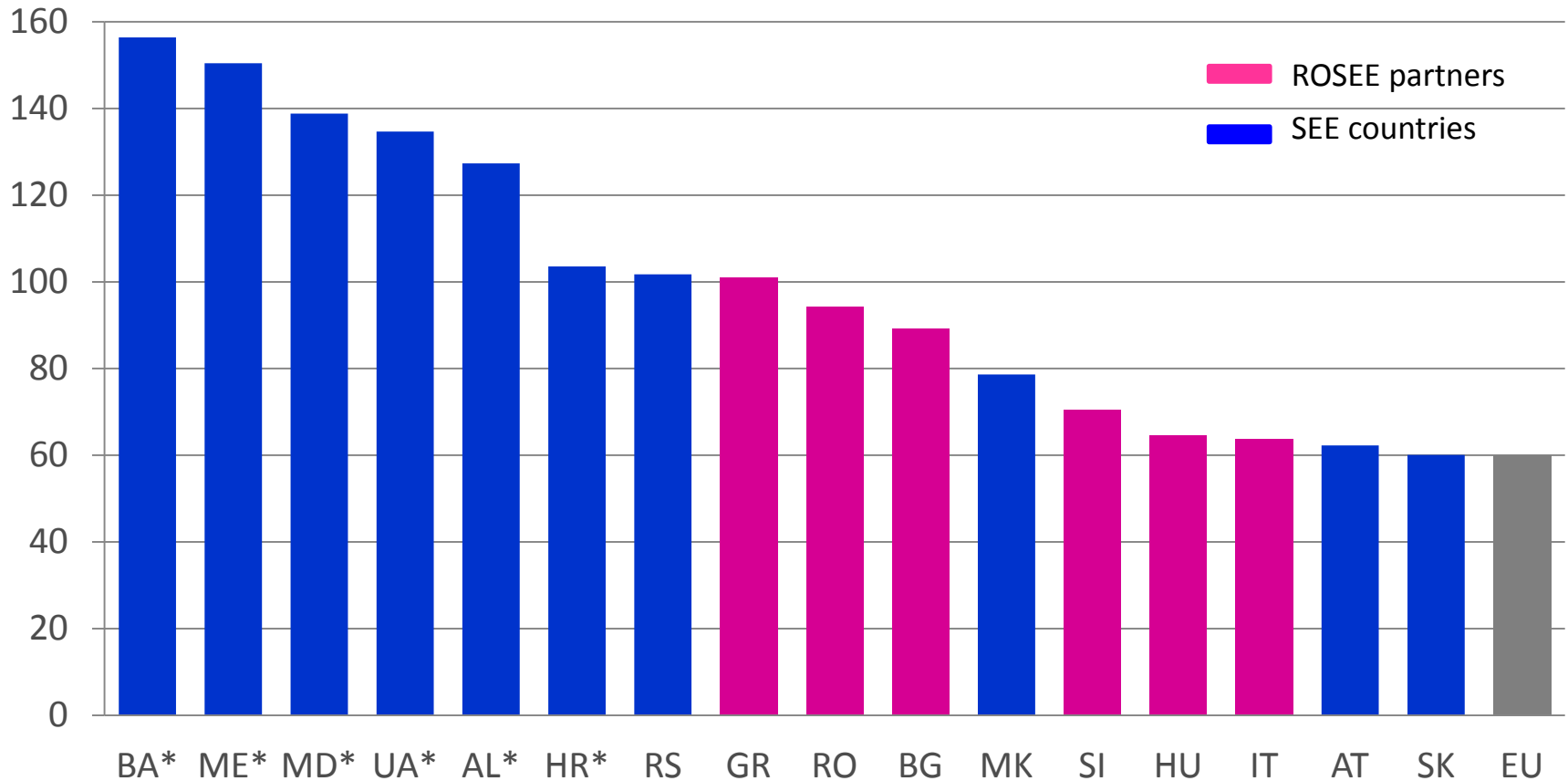
Basic road safety performance indicators in partner countries will be developed and compared.

Knowledge and experience from the DaCoTA country overviews will be further exploited.



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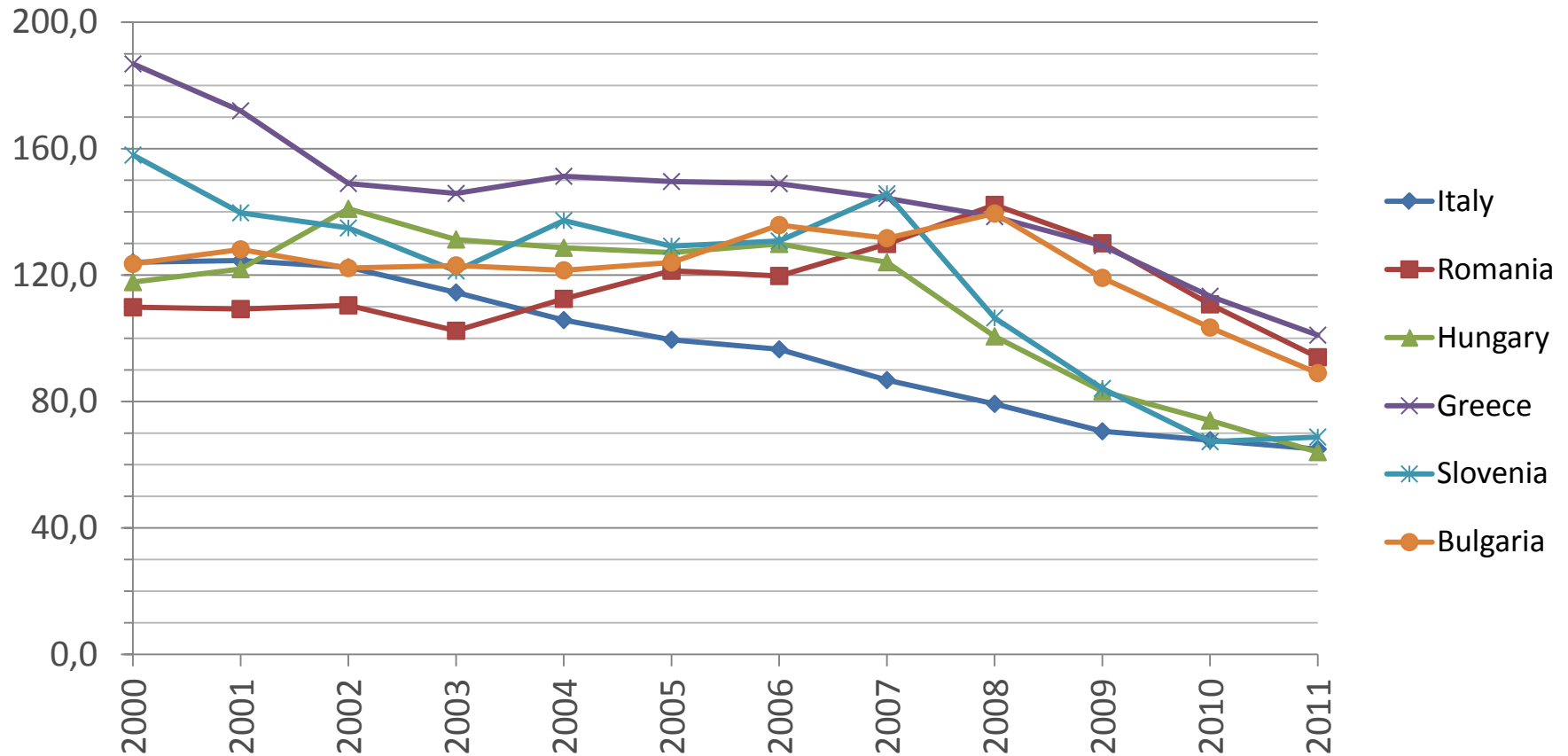
Road fatalities per million population in SEE countries (2011) (*2010)



Sources: IRTAD, ETSC, WHO

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Road fatalities per million population in ROSEE countries 2000-2011



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Legislation, Policy, Institutional Capacity (1/3)

	IT	RO	HU	GR	SI	BG
High level decision-making body responsible for RS policy	✓	✓	✓	✓	✓	✓
Legally created	✓	✓	✓	✓	✓	✓
Parliament involved in RS decision-making	✓	✓		✓	✓	✓
Lead Agency appointed responsible for road safety		✓	✓		✓	
NGOs actively promoting road safety	✓	✓	✓	✓	✓	✓
Regional RS programmes integrated into national RS policy	✓					
Local RS programmes integrated into national RS policy	✓				✓	✓
National vision for long term RS performance improvement	✓	✓		✓	✓	✓

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Legislation, Policy, Institutional Capacity (2/3)

	IT	RO	HU	GR	SI	BG
National medium-term quantitative RS targets set		√	√	√	√	√
National medium term RS program adopted at high level	√		√			√
Budget estimated to move towards the long term vision					√	
High level decision taken to ensure availability of a budget for road safety			√		√	
Sufficient human resources adopted to implement the program or policy components			√		√	√
Training plans designed to support implementation of the national road safety program or policy components						

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Legislation, Policy, Institutional Capacity (3/3)

	IT	RO	HU	GR	SI	BG
Sustainable systems to collect/manage data on road accidents, fatalities and injuries	√	√	√	√	√	√
National Observatory centralizing data systems for RS	√		√			√
Procedure set up to monitor RS interventions			√		√	
Government or RS institutions providing valid information on road accidents, injuries and risk to the citizens		√	√		√	√

LPIC questionnaire - Conclusions

- 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 - Conclusions

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.

Next steps

The results of the use of the Road Safety Assessment Tools will be exploited for the development of:

- **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.
- **Investment proposal** outlining where investments in infrastructure and other measures will enhance the safety outcomes.

Road Safety Assessment Tools

ROSEE Project Workshop
within Transport Logistic Fair
Munich, 4-7 June 2013

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