



Road Safety Country Overview



Romania



Structure and Culture

Basic Data

Table 1: Basic data of Romania in relation to the EU average

Basic data of Romania	EU average
- Population: 19,87 million inhabitants (2015) [2]	18,15 million (2015)
- Area: 238.391 km ² (2015) [2] (Water 3,57%) (2015)[4]	159.663 km ² (2015) 2,94% water (2015)
- Climate and weather conditions (capital city; 2015)[3]:	(2015)
- Average winter temperature (Nov. to April): 5,8°C	6,5°C
- Average summer temperature (May to Oct.): 20,7°C	17,8°C
- Annual precipitation level: 595 mm	651 mm
- Exposure ¹ : 99,25 billion passenger km (2014) [2]	189 billion passenger km (2014)
- 0,29 vehicles per person (2014) [2]	0,62 (2014)

Sources: [1] IRTAD; [2] EUROSTAT; [3] national sources; [4] CIA; [5] DG MOVE

Romania has a low GDP per capita and few vehicles per person.

Country characteristics

Table 2: Characteristics of Romania in comparison to the EU average

Characteristics of Romania	EU average
- Population density: 83 inhabitants/km ² (2015) [2]	114 inhabitants/km ² (2015)
- Population composition (2015) [2]: 15,5% children (0-14 years) 67,5% adults (15-64 years) 17,0% elderly (65 years and over)	15,6% children 65,5% adults 18,9% elderly (2015)
- Gross Domestic Product (GDP) per capita: €7.000 (2015)[2]	€26.300 (2015)
- 54,6% of population lives inside urban area (2015)[4]	73,3% (2015)
- Special characteristics [4]: about 25% of the roads in Romania is well passable and the motorway network is small but still expanding	

Sources: [1] IRTAD; [2] EUROSTAT; [3] national sources; [4] CIA

¹ No data available for traffic. Exposure is measured by billion passenger kilometres instead.

Structure of road safety management

Policy making is centralised in Romania.

The following key-actors are responsible for Road Safety (RS) policy making:

Table 3: Key actors per function in Romania

Key functions	Key actors
1. - Formulation of national RS strategy - Setting targets - Development of the RS programme	- The Sectoral Operational Programme "Transport" - Romanian Road Authority - Ministry of Transports and Infrastructure – Directorate for Road Transport Ministry of Transports and Infrastructure - Directorate for Road Transport
2. Monitoring of the RS development in the country	- Romanian Road Authority
3. Improvements in road infrastructure	- Romanian Road Authority
4. Vehicle improvement	- Romanian Automotive Register
5. Improvement in road user education	- Romanian Road Authority - Road Traffic Assistance Association
6. Publicity campaigns	- Traffic Police
7. Enforcement of road traffic laws	- The Traffic Police (under Ministry of Administration and Interior)
8. Other relevant actors	

Sources: national sources

Road safety policy is centralised in Romania.

Attitudes towards risk taking

As Romania is not part of the ESRA survey, there is no information on attitudes that is comparable to other European countries.

The national road safety plan of Romania has not yet been approved.

Programmes and measures

National strategic plans and targets

- The national road safety plan of Romania has not yet been approved in the parliament.
- Targets (referred to 2010):

Table 5: Road safety targets for Romania

Year	Fatalities
2020	-50%

- Priority topics:
 - Measures based on human factor insights
 - Strengthening and consolidating the institutional capacity
 - Training and examination of drivers
 - Improving psychological evaluation
 - Law enforcement
 - Vehicle and road infrastructure safety
 - Mobility in transport

(Sources: DG-TREN, 2010; national sources)

Road infrastructure

Table 6: Description of the road categories and their characteristics in Romania

Road type	General speed limits (km/h)
Urban roads	50
Rural roads	90/100
Motorways	110/130

Source: EC DG-Move, 2015

- Special rules for: no information
- Guidelines and strategic plans for infrastructure: no information

Table 7: Obligatory parts of infrastructure management in Romania and other EU countries

Obligatory parts in Romania:	EU countries with obligation
Safety impact assessment: -	32%
Road safety audits: yes	81%
Road safety inspections: yes	89%
High risk site treatment: -	74%

Sources: DG-TREN, 2010; national sources

- Recent activities of road infrastructure improvement have been addressing: no information

Romania has already implemented road safety audits and inspections.

Romania has a zero tolerance for drink-driving.

Child restraint and speed law enforcement are below average in Romania.

Traffic laws and regulations

Table 8: Description of the regulations in Romania in relation to the most common regulations in other EU countries

Regulations in Romania [1]	Most common in EU (% of countries)
Allowed BAC ² levels:	
- General population: 0,0‰	00,5‰ (61%)
- Novice drivers: 0,0‰	0,2‰ (39%) and 0,0‰ (36%)
- Professional drivers: 0,0‰	0,2‰ (36%) and 0,0‰ (36%)
Phoning:	
- Hand held: not allowed	Not allowed (all countries)
- Hands free: allowed	Allowed (all countries)
Use of restraint systems:	
- Driver: obligatory	Obligatory (all countries)
- Front passenger: obligatory	Obligatory (all countries)
- Rear passengers: obligatory	Obligatory (all countries)
- Children: obligatory	Obligatory (all countries)
Helmet wearing:	
- Motor riders: Obligatory	Obligatory (all countries)
- Moped riders: Obligatory	Obligatory (all countries)
- Cyclists: not obligatory	Not obligatory (46%)
- Daytime running lights are mandatory on motorways, expressways and E-roads.	
- A demerit point system is in place. [2]	

Sources: [1] EC DG-Move, 2016; [2] WHO, 2013

Enforcement

Table 9: Effectiveness of enforcement effort in Romania according to an international respondent consensus (scale = 0-10)

Issue	Score for Romania	Most common in EU (% of countries)
Speed legislation enforcement	5	7 (43%)
Seat-belt law enforcement	7	7 (25%) and 8 (25%)
Child restraint law enforcement	7	8 (39%)
Helmet legislation enforcement	9	9 (50%)
Drink-driving law enforcement	8	8 (43%)

Source: WHO, 2015

² Blood Alcohol Concentration

Road User Education and Training

Table 10: Road user education and training in Romania compared to the situation in other EU countries

Education and training in Romania	Most common in EU (% of countries)
General education programmes:	
- Primary school: provided	Compulsory (71%)
- Secondary school: provided	Compulsory (43%)
- Other groups: no special groups.	-
Driving licences thresholds:	
- Passenger car: 18 years	18 years (79%)
- Motorised two wheeler: 18-21 years	18 years (low categories) and higher ages (32%)
- Buses and coaches: 21years	21 years (86%)
- Lorries and trucks: 21 years	21 years (75%)

Sources: [1] ROSE25, 2005; [2] ETSC, 2011; [3] national sources

Road user education in Romania is provided at schools, but it is not compulsory.

Public Campaigns

Table 11: Public campaigns in Romania compared to the situation in other EU countries

Campaigns in Romania	Most common issues in EU (% of countries)
Organisation:	
- CISR	
- CNADNR	
- The Traffic Police	
- NGOs	
Main themes:	
- speed	
- fatigue	
- children	Drink-driving (96%)
- drink-driving	Speeding (86%)
- seat-belts	Seat-belt (79%)
- vulnerable road users (pedestrians- cyclists)	

Sources: [1] SUPREME, 2005; [2] ETSC, 2011; [3] national sources

Vehicles and technology (national developments)

Table 12: Developments of vehicles and technology in Romania, compared to the situation in other EU countries

Mandatory technical inspections:	Most common in EU (% of countries)
Passenger cars: no information	Every 12 months (39%)
Motorcycles: no information	Every 24 months (32%)
Buses or coaches: no information	Every 12 months (61%)
Lorries or trucks: no information	Every 12 months (68%)

Sources: EC website, national sources

No information is available on the mandatory vehicle inspection periods in Romania.

The number of speed tickets per population in Romania is lower than the EU average and has decreased over time.

Road Safety Performance Indicators

Speed

Table 13: Number of speed tickets per population in Romania versus the EU average

Measure	2007	2014	Average annual change	EU average (2014)
Number of speed tickets/1.000 population	49	38	-3,6%	94

Sources: [1] ETSC, 2010; [2] ETSC, 2016

Table 14: Percentage of speed offenders per road type in Romania compared to the EU average

Road type	2004	2012	Average annual change	EU average
Motorways	n/a	n/a	-	n/a
Rural roads	n/a	n/a	-	n/a
Urban roads	n/a	n/a	-	n/a

Sources: [1] ETSC, 2010; [2] ETSC, 2015

Table 15: Mean speed per road type in Romania compared to the EU average

Road type	2004	2012	Average annual change	EU average
Motorways	n/a	n/a	-	n/a
Rural roads	n/a	n/a	-	n/a
Urban roads	n/a	n/a	-	n/a

Sources: [1] ETSC, 2010; [2] ETSC, 2015

Alcohol

Table 16: Road side surveys for drink-driving in Romania compared to the EU average

Measure	2013	2015	Average annual change	EU average (2015)
Amount of tests/1.000 population	75	72	-2,0%	209
% tested over the limit	1,0%	1,8%	34,2%	2,2%

Sources: [1] ETSC, 2010; [2] ETSC, 2016

The amount of alcohol tests per population is lower in Romania than in the EU on average.

Romanian vehicle fleet has a much lower EuroNCAP occupant protection score than the EU on average.

Helmet wearing rate for PTW riders is quite high in Romania, but seat-belt wearing rates are low.

Vehicles

Table 17: State of the vehicle fleet in Romania compared to the EU average

Vehicles	EU average
Cars per age group (2009) [1]:	Passenger cars (2009)
- ≤2 years: 3%	≤2 years: 11%
- 3 to 5 years: 12%	3 to 5 years: 18%
- 6 to 10 years: 31%	6 to 10 years: 26%
- >10 years: 53%	>10 years: 45%
EuroNCAP occupant protection score of cars (new cars sold in 2013) [2]:	
- 5 stars: 38,3%	5 stars: 52,5%
- 4 stars: 4,7%	4 stars: 4,5%
- 3 stars: 7,3%	3 stars: 2,9%
- 2 stars: 0,6%	2 stars: 0,5%
- not tested: 49,1%	not tested: 39,6% ³

Source: [1] EUROSTAT; [2] ETSC, 2016

Protective systems

Table 18: Protective system use in Romania versus the average in EU

Protective systems	EU average ⁴
Daytime seat-belt wearing in cars and vans (2010):	(2015)
- 49% front	89,7% front
- 47% driver	not available
- no information on % front passenger	not available
- no information on % rear	69,5% rear
- no information on % child restraints	not available
Helmet use (2010):	
- 89% motor drivers	
- 76% motor passengers	not available
- no information on % cyclists	

Source: WHO, 2013

³ Based on data of 25 EU countries (excl. HR, LU and MT).

⁴ Based on data of 15 EU countries; data of AT, BE, IE, IT, LU, HU, FI, SE (2015); data of CZ, DE, DK, HR, LT, PL, UK (2014); data of PT (2013)

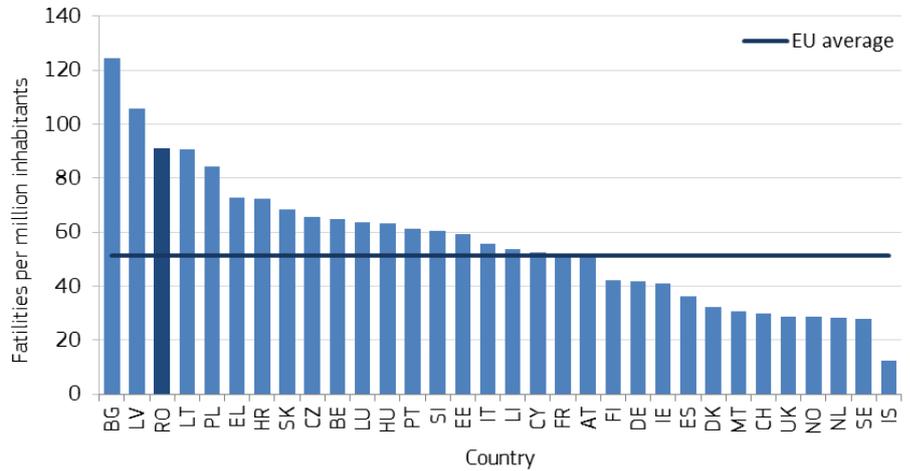
Road Safety Outcomes

General positioning

The fatality rate of Romania is substantially higher than the EU average (around 91 fatalities per million population in 2014). Marked increases have been recorded in the period 2004-2008.

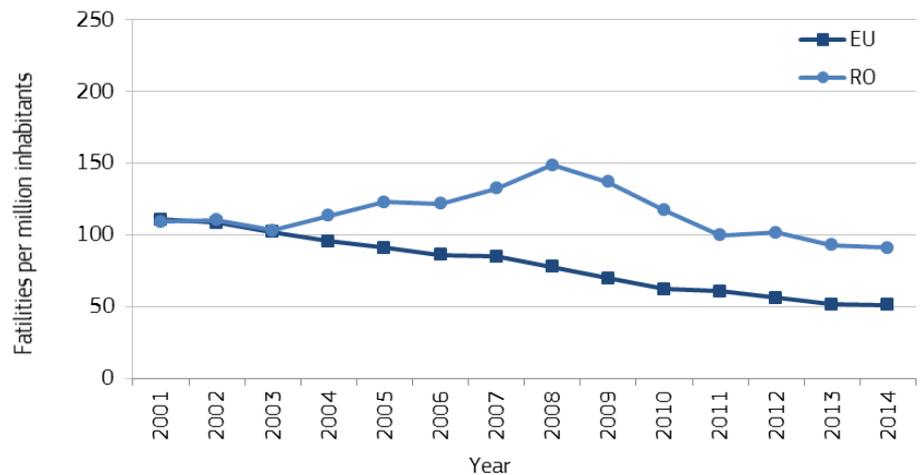
The fatality rate of Romania is substantially higher than the EU average. Marked increases have been recorded in the period 2004-2008.

Figure 1: Fatalities per million inhabitants in 2014 with EU average



Sources: CARE, Eurostat

Figure 2: Development of fatalities per million inhabitants between 2001 and 2014 for Romania and the EU average



Sources: CARE, Eurostat

The share of pedestrian fatalities is much higher than the EU average.

Transport mode

The share of pedestrian fatalities is substantially higher than the EU average. While the average annual reduction of motorcyclist fatalities between 2001 and 2015 was 4%, it was only 1% for car occupants. In the same period, the annual reduction rate of pedestrian fatalities was 4%.

Table 19: Reported fatalities by mode of road transport in Romania compared to the EU average

Transport mode	2001	2015	Average annual change	Share in 2015	EU average (2015)
Pedestrians	1.088	649	-4%	34%	21%
Car occupants	933	787	-1%	42%	45%
Motorcyclists	9	5	-4%	0%	14%
Mopeds	4	4	0%	0%	3%
Cyclists	145	161	1%	9%	8%
Bus/coach occupants	15	18	1%	1%	0%
Lorries or truck occupants	145	92	-3%	5%	5%

Sources: CARE, national sources

Age, gender and nationality

Table 20: Reported fatalities by age, gender and nationality in Romania versus the EU average

Age and gender	2001	2015	Average annual change	Share in 2015	EU average (2015)
Females					
0 - 14 years	67	33	-5%	2%	2%
15 - 17 years	21	13	-3%	1%	1%
18 - 24 years	75	35	-5%	2%	2%
25 - 49 years	172	134	-2%	7%	7%
50 - 64 years	87	81	-1%	4%	4%
65+ years	157	166	0%	9%	8%
Males					
0 - 14 years	120	43	-7%	2%	2%
15 - 17 years	35	27	-2%	1%	1%
18 - 24 years	236	172	-2%	9%	10%
25 - 49 years	835	569	-3%	30%	28%
50 - 64 years	385	328	-1%	17%	16%
65+ years	260	284	1%	15%	14%
Nationality of driver or rider killed					
National	2.408	1.847	-2%	98%	n/a
Non-national	42	46	1%	2%	n/a

Sources: CARE, national sources

The share of road fatalities by age and gender of Romania is similar to the EU average.

Fatalities in built-up areas are over-represented in Romania.

Location

Fatalities in built-up areas are over-represented in Romania compared to the EU average.

Table 21: Reported fatalities by location in Romania compared to the EU average

Location	2001	2015	Average annual change	Share in 2015	EU average (2015)
Built-up areas	1.841	1.154	-3%	61%	37%
Rural areas	603	720	1%	38%	53%
Motorways	6	19	9%	1%	7%
Junctions	71	202	8%	11%	20%

Sources: CARE, national sources

Lighting and weather conditions

Table 22: Reported fatalities by lighting and weather conditions in Romania compared to the EU average

Conditions	2001	2015	Average annual change	Share in 2015	EU average (2015)
Lightning conditions					
During daylight	1.130	1.024	-1%	54%	50%
During night-time	1.149	751	-3%	40%	30%
Weather conditions					
While raining	88	193	6%	10%	10%

Sources CARE, national sources

The share of fatal single vehicle accidents in Romania is similar to the EU average.

Single vehicle accidents

Table 23: Reported fatalities by type in Romania compared to the EU average

Accident Type	2001	2015	Average annual change	Share in 2015	EU average (2015)
Single vehicle accidents	968	512	-5%	27%	24%

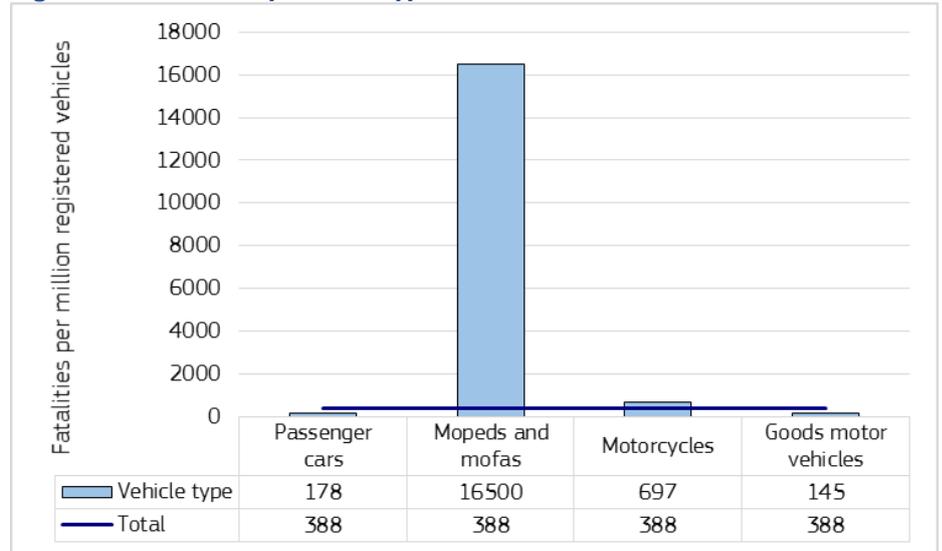
Sources: CARE, national sources

Under-reporting of casualties

- Fatalities: 100%, due to improvements of the data recording systems.
- Hospitalised: no studies with quantitative information exist.

Risk Figures

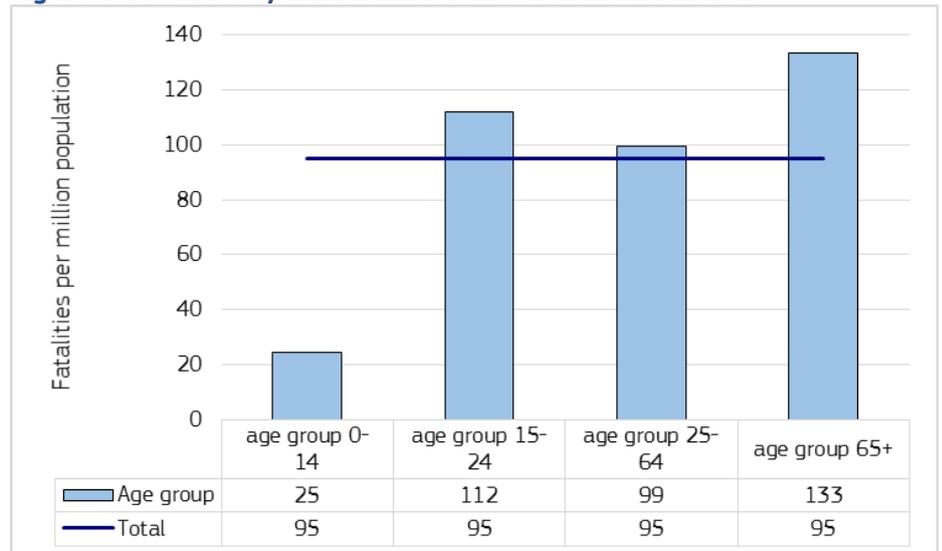
Figure 3: Fatalities by vehicle type in Romania in 2012



Sources CARE, UNECE

In Romania risk is highest for drivers of mopeds and mofas as well as for the elderly and youngsters.

Figure 4: Fatalities by million inhabitants in Romania in 2015



Sources: CARE, EUROSTAT

Social Cost

- The total cost of road accident casualties (fatalities and injuries) is estimated at 48,5 billion euros (2014).
- The following costs are an update of the values in Table 5.3 of the HEATCO Deliverable D5 (2006) to base year 2010. Each figure includes the value of safety per se (VSL⁵ for fatality, 13% of VSL for severe, 1% for light injury) and the value of direct and indirect economic costs (10% of VSL for fatality, severe and slight injury based on HEATCO (2005)). EU average based on the VSL of €1,7 million.
- The costs per casualty for 2010 are as follows:

Table 24: Cost (€) per injury type in Romania versus the EU average

Country	Fatality	Severe injury	Slight injury
Austria	2.395.000	327.000	25.800
Belgium	2.178.000	330.400	21.300
Bulgaria	984.000	127.900	9.800
Croatia	1.333.000	173.300	13.300
Cyprus	1.234.000	163.100	11.900
Czech Republic	1.446.000	194.300	14.100
Denmark	2.364.000	292.600	22.900
Estonia	1.163.000	155.800	11.200
Finland	2.213.000	294.300	22.000
France	2.070.000	289.200	21.600
Germany	2.220.000	307.100	24.800
Greece	1.518.000	198.400	15.100
Hungary	1.225.000	164.400	11.900
Ireland	2.412.000	305.600	23.300
Italy	1.916.000	246.200	18.800
Latvia	1.034.000	140.000	10.000
Lithuania	1.061.000	144.900	10.500
Luxembourg	3.323.000	517.700	31.200
Malta	2.122.000	269.500	20.100
Netherlands	2.388.000	316.400	25.500
Poland	1.168.000	156.700	11.300
Portugal	1.505.000	201.100	13.800
Romania	1.048.000	136.200	10.400
Slovakia	1.593.000	219.700	15.700
Slovenia	1.989.000	258.300	18.900
Spain	1.913.000	237.800	17.900
Sweden	2.240.000	328.700	23.500
Great Britain	2.170.000	280.300	22.200
EU average	1.870.000	243.100	18.700

Source: Update of the Handbook on External Costs of Transport. Final Report. Report for the European Commission: DG MOVE. Ricardo-AEA/R/ ED57769 Issue Number 1; 8th January 2014

⁵ Value of Statistical Life

Estimated costs of road accident casualties are lower in Romania than on average in the EU.

PTW and pedestrian safety
are major issues in Romania.

Synthesis

Safety position

- The fatality rate of Romania is substantially higher than the EU average (around 91 fatalities per million population in 2014).

Scope of problem

- The highest shares of road fatalities in Romania are among the car occupants and the pedestrians. Pedestrians are significantly over-represented compared to the EU average.
- The risk of being killed in a road accident for moped and motorcycle users is extremely high.
- Much more fatalities in Romania occur inside built-up areas.
- Seat-belt wearing rates are low in Romania.

Recent progress

- No substantial improvement has been achieved in road safety between 2001 and 2014 in Romania. Moreover, marked increases in fatality rates have been recorded in the period 2004-2008.

Remarkable road safety policy issues

- The national road safety plan of Romania has not yet been approved.
- Romania has already implemented road safety audits and inspections.
- Romania has a zero tolerance for drink-driving.
- Child restraint and speed law enforcement are below average in Romania.

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Notes

1. Country abbreviations

	Belgium	BE		Italy	IT		Romania	RO
	Bulgaria	BG		Cyprus	CY		Slovenia	SI
	Czech Republic	CZ		Latvia	LV		Slovakia	SK
	Denmark	DK		Lithuania	LT		Finland	FI
	Germany	DE		Luxembourg	LU		Sweden	SE
	Estonia	EE		Hungary	HU		United Kingdom	UK
	Ireland	IE		Malta	MT			
	Greece	EL		Netherlands	NL		Iceland	IS
	Spain	ES		Austria	AT		Liechtenstein	LI
	France	FR		Poland	PL		Norway	NO
	Croatia	HR		Portugal	PT		Switzerland	CH

2. Sources: CARE (Community database on road accidents), EUROSTAT, ITF-IRTAD, National sources.

The full glossary of definitions of variables used in this Report is available at: http://ec.europa.eu/transport/road_safety/pdf/statistics/cadas_glossary.pdf

3. Data available in September 2016.

4. Average annual change is calculated with the power function between the first and last years:

[aac = (b/a)^{1/n}-1, where aac: annual average change, a: first year value, b: last year value, n: number of years].

5. Explanation of symbols in Tables:

n/a: not available

"-": not applicable (e.g. calculation cannot be performed)

6. This 2016 edition of Road Safety Country Overviews updates the previous version produced in 2012 within the EU co-funded research project [DaCoTA](#).

7. Disclaimer

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8. Please refer to this Report as follows:

European Commission, Road Safety Country Overview – Romania, European Commission, Directorate General for Transport, September 2016.



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