European Commission

European Road Safety Observatory
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Road Safety Country Overview

Iceland

Transport

Structure and Culture

Basic Data

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

Basic data of Iceland	EU average
- Population: 0,33 million inhabitants (2016)[2]	18,2 million (2016)
- Area: 103.000 km^2 (2015)[2]	159.678 km^2 (2015)
(2,67% water) (2015)[4]	2,94% water (2015)
- Climate and weather conditions (capital city; 2015) [3]:	(2015)
- Average winter temperature (Nov. to April): 0,7°C	5,1°C
- Average summer temperature (May to Oct.): 8°C	16,6°C
- Annual precipitation level: 798,2 mm	691,5 mm
- Exposure: 3.693 million vehicle km (2015) [1]	168.260 million vehicle km (2015)
- 0,91 vehicles per person (2015) [1]	0,57 (2015)

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

Iceland is characterised by a low population density and a cold and wet climate.

Country characteristics

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

Characteristics of Iceland	EU average
- Population density: 3.3 inhabitants/km^2 (2015) [2]	114 inhabitants/km^2 (2015)
- Population composition (2015) [2]	
20,4% children (0-14 years)	15,6% children
66,1% adults (15-64 years)	65,6% adults
13,5% elderly (65 years and over)	18,9% elderly (2015)
- Gross Domestic Product (GDP) per capita: €45.500 (2015) [2]	€27.198 (2015)
- 94,3% of population lives inside urban area (2015)[4]	72,6% (2015)
- Special characteristics[4]: mostly plateau interspersed with mountain peaks, icefields; coast deeply indented by bays and fiords	

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

Structure of road safety management

The Icelandic Road and Coastal Administration (IRCA) is responsible for about 13.000 km of main roads and country side roads in Iceland. This includes planning, design, construction, maintenance and service of those roads.

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

Table 3: Key actors per function in Iceland

Key functions	Key actors
1. - Formulation of national RS strategy - Setting targets - Development of the RS programme	- Ministry of Interior - The Icelandic Road and Coastal Administration - Icelandic Transport Authority -The Icelandic Transportation Safety Board
2. Monitoring of the RS development in the country	- The Icelandic Road and Coastal Administration - Icelandic Transport Authority
3. Improvements in road infrastructure	- The Icelandic Road and Coastal Administration
4. Vehicle improvement	- Icelandic Transport Authority
5. Improvement in road user education	- Icelandic Transport Authority - Local authorities
6. Publicity campaigns	- The Icelandic Road and Coastal Administration - Icelandic Transport Authority
7. Enforcement of road traffic laws	- The Police Districts in Iceland - The national Commissioner of the Icelandic Police
8. Other relevant actors	- safetravel.is - Icelandic Automobile Association - TMS Consultancy

Sources: national sources

The Icelandic Road and Coastal Administration is responsible for about 13.000 km of main roads and country side roads in Iceland.

Attitudes towards risk taking

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

Iceland aims to lower the number of killed and seriously injured by 5% each year and be among the best performing countries of killed per capita.

Programmes and measures

National strategic plans and targets

- In 2011, the Icelandic Parliament agreed upon a new Traffic Safety Plan for the period 2011-2022.
- Targets:

Table 4: Road safety targets for Iceland

Year	Fatalities and seriously injured	Average driving speed	Measures
2022	46% (referred to the average of 2006-2010) -5% per year 0		- The number of fatalities per 100.000 population must not exceed the rate of countries with outstanding traffic safety records - Total fatalities and serious injuries - Killed and seriously injured children - Killed due to lack of seat-belt wearing
Every year	-5%	<95 km/h	- Accidents due to influenced driving - Accidents involving 17-20 year-olds - Killed and seriously injured motorcycle riders - Injured vulnerable road users - Injured foreign road users - Accidents due to running off the road - Accidents due to lack of gap between cars - Accidents due to side impact - Average driving speed in rural area in summertime

Sources: IRTAD, 2017; national sources

- Priority topics:
  - Children
  - Adolescents
  - Drink-driving
  - Driving speed
  - Seat-belt wearing
  - Tailgating
  - Vulnerable road users
  - Motorcyclists
  - Foreign road users
  - Run-of road accidents
  - Side-impact accidents

Road infrastructure

Table 5: Description of the road categories and their characteristics in Iceland

Road type	General speed limits (km/h)
Urban roads	50
Rural roads	80/90
Motorways	n/a

Source: IRTAD, 2016

In Iceland, roads are improved by safety impact assessment, high risk site treatment, road safety inspections and audits.

- Special rules for:
  - HGVs and cars pulling trailers: 80 km/h.
  - gravel roads: 80 km/h

- Guidelines and strategic plans for infrastructure are available in Iceland.

Table 6: Obligatory parts of infrastructure management in Iceland and other EU countries

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

Sources: national sources

- Recent activities of road infrastructure improvement have been addressing:
  - elimination of high risk sites
  - separation of driving directions
  - increased use of rumble strips
  - improved winter services (as many crashes occur on icy roads)

(Source: IRTAD, 2017)

Traffic laws and regulations

Table 7: Description of the regulations in Iceland in relation to the most common regulations in other EU countries

Regulations in Iceland [1]	Most common in EU (% of countries)
Allowed BAC[1] levels:	
- General population: 0,5‰	0,5‰ (61%)
- Novice drivers: 0,5‰	0,2‰ (39%) and 0,0‰ (36%)
- Professional drivers: 0,5‰	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: obligatory up to 14 years old	Not obligatory (46%)
- Daytime running lights are mandatory.	
- A demerit point system is in place [2]	

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

Allowed BAC limits for novice and professional drivers are higher than those of most EU countries.

[1] Blood Alcohol Concentration

Enforcement

Effectiveness of speed, drink-driving and seat-belt law enforcement is below the level of most EU countries.

Table 8: Effectiveness of enforcement effort in Iceland according to an international respondent consensus (scale = 0-10)

Issue	Score for Iceland	Most common in EU (% of countries)
Speed legislation enforcement	6	7 (43%)
Seat-belt law enforcement	6	7 (25%) and 8 (25%)
Child restraint law enforcement	9	8 (39%)
Helmet legislation enforcement	9	9 (50%)
Drink-driving law enforcement	5	8 (43%)

Source: WHO, 2015

Road User Education and Training

Table 9: Road user education and training in Iceland compared to the situation in other EU countries

Education and training in Iceland	Most common in EU (% of countries)
General education programmes:	
- Primary school: compulsory	Compulsory (71%)
- Secondary school: compulsory	Compulsory (43%)
- Other groups: kindergarten programme	-
Driving licences thresholds:	
- Passenger car: 17 years	18 years (82%)
- Motorised two wheeler: 15 years for mopeds, 17 years for A1 category; 19 years for A2 category; 24 years for A category	16 years for low categories (68%) and 18 years for higher categories (64%)
- Buses and coaches: 21 years for <=16 passengers, 23 years for >16 passengers	21 years (89%)
- Lorries and trucks: 18 years for up to 7,5t, 21 years for > 7,5t	21 years (71%)

Sources: [1] ROSE25, 2005; [2] national sources; [3] EC website

Public Campaigns

Road safety education is compulsory at all school levels in Iceland.

Table 10: Public campaigns in Iceland compared to the situation in other EU countries

Campaigns in Iceland	Most common issues in EU (% of countries)
Organisation:	
- The Road Traffic Directorate	
- Municipalities	
- Insurance companies	
Main themes:	
- speeding	Drink-driving (96%)
- drink-driving	Speeding (86%)
- seat-belts	Seat-belt (79%)
- mobile phones	
- reduction of foreign drivers crashes	
- the Traffic Safety School called the Grunda school project	

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

Mandatory vehicle inspection periods differentiate by vehicle type in Iceland.

Vehicles and technology (national developments)

Table 11: Developments of vehicles and technology in Iceland, compared to the situation in other EU countries

Mandatory technical inspections:	Most common in EU (% of countries)
Passenger cars: 4-2-2-1-1 etc. years	Every 12 months (39%)
Motorcycles: 4-2-2-1-1 etc. years	Every 24 months (32%)
Buses or coaches: every 12 months	Every 12 months (61%)
Lorries or trucks: every 12 months	Every 12 months (68%)

Sources: EC website, national sources

Road Safety Performance Indicators

Speed

No information is available on speed in Iceland.

Table 12: Number of speed tickets per population in Iceland versus the EU average

Measure	2006	2015	Average annual change	EU average (2015)
Number of speed tickets/1.000 population	n/a	n/a	-	94

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

Table 13: Percentage of speed offenders per road type in Iceland compared to the EU average

Road type	2004	2013	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 14: Mean speed per road type in Iceland 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

No information is available on drink-driving in Iceland.

Table 15: Road side surveys for drink-driving in Iceland compared to the EU average

Measure	2007	2015	Average annual change	EU average (2015)
Amount of tests/1.000 population	n/a	n/a	-	209
% tested over the limit	n/a	n/a	-	2,2%

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

Vehicles

Iceland has relatively many vehicles between 6 and 10 years.

Table 16: State of the vehicle fleet in Iceland compared to the EU average

Vehicles	EU average
Cars per age group (2008) [1]:	Passenger cars (2008) [2]
- ≤ 2 years: 8%	≤ 2 years: 14%
- 3 to 5 years: 15%	3 to 5 years: 18%
- 6 to 10 years: 39%	6 to 10 years: 26%
- > 10 years: 38%	>10 years: 42%
EuroNCAP occupant protection score of cars (new cars sold in 2013) [2]:	
- 5 stars: no information	5 stars: 52,5%
- 4 stars: no information	4 stars: 4,5%
- 3 stars: no information	3 stars: 2,9%
- 2 stars: no information	2 stars 0,5%
- not tested: no information	not tested: 39,6%[2]

Source: [1] EUROSTAT, 2015; [2] ETSC, 2016

Protective systems

Seat-belt wearing rates are lower than the EU average.

Table 17: Protective system use in Iceland versus the average in EU

Protective systems	EU average[3]
Daytime seat-belt wearing in cars and vans (2016):	(2016)
- no information on % front	not available
- 86% driver (2013)	91,6% driver
- 89% front passenger	92,4% front passenger
- 80% rear	70,9% rear
- 93% child restraint system	not available
Helmet use (2016):	
- No information on % powered two-wheelers riders	not available
- no information on % cyclists	

Source: IRTAD, 2017

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

[3] Based on data of 17 EU countries; data of AT, DE, IE, IT, LT, FI, SE (2016); data of BE, CZ, HU, LU, PL, SI (2015); data of DK, HR, UK (2014); data of PT (2013)

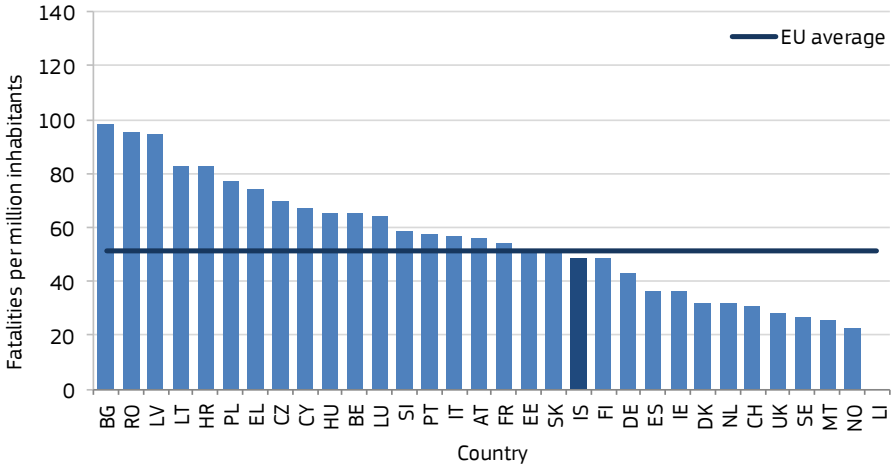
Road Safety Outcomes

General positioning

The fatality rate of Iceland is lower than the EU average (around 49 fatalities per million population in 2015), however it has been subject to large fluctuation during the period 2001 to 2015 due to small fatality figures.

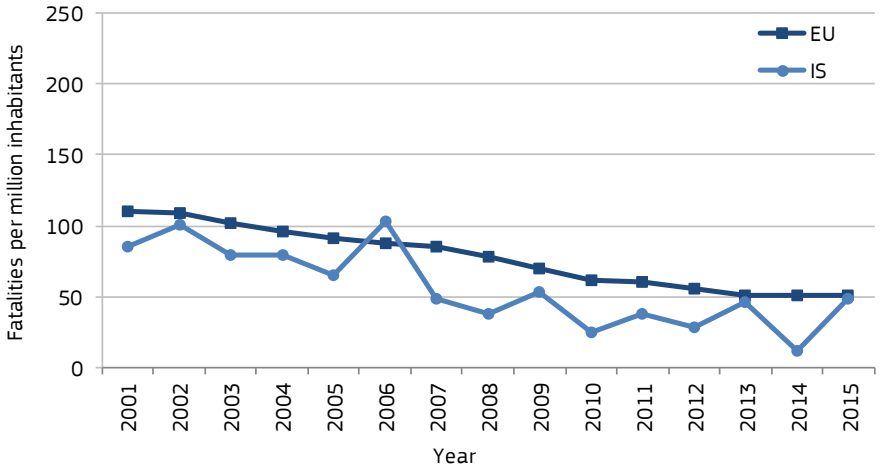
The fatality rate of Iceland is currently the lowest in the EU, however it has been subject to large fluctuations during the period 2001 – 2015.

Figure 1: Fatalities per million inhabitants in 2015 with EU average



Sources: CARE, Eurostat

Figure 2: Development of fatalities per million inhabitants between 2001 and 2015 for Iceland and the EU average



Sources: CARE, Eurostat

Transport mode

The share of car occupant fatalities is much higher than the EU average. The average annual reduction of car occupants was 5%.

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

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

Transport mode	2002	2016	Average annual change	Share in 2016	EU avarage (2016)
Pedestrians	1	2	5%	11%	21%
Car occupants	26	13	-5%	72%	45%
Motorcyclists	0	2	-	11%	15%
Mopeds	0	0	-	0%	3%
Cyclists	0	0	-	0%	9%
Bus/coach occupants	0	0	-	0%	0%
Lorries or truck occupants	1	1	0%	6%	5%

Sources: CARE, national sources

Age, gender and nationality

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

Age and gender	2002	2016	Average annual change	Share in 2016	EU average (2016)
Females					
0 - 14 years	4	1	-10%	6%	1%
15 – 17 years	0	0	-	0%	1%
18 – 24 years	0	0	-	0%	3%
25 – 49 years	4	0	-100%	0%	6%
50 – 64 years	2	1	-5%	6%	4%
65+ years	4	3	-2%	17%	10%
Males					
0 - 14 years	1	0	-100%	0%	1%
15 – 17 years	0	2	-	11%	2%
18 – 24 years	4	0	-100%	0%	11%
25 – 49 years	4	5	2%	28%	29%
50 – 64 years	4	3	-2%	17%	15%
65+ years	2	3	3%	17%	17%
Nationality of killed person					
National	n/a	n/a	n/a	n/a	n/a
Non-national	n/a	n/a	n/a	n/a	n/a

Sources: CARE, national sources

Iceland has a similar share of road fatalities by gender to the EU average.

Location

Fatalities in rural areas are over-represented in Iceland compared to the EU average.

Fatalities in rural areas are over-represented in Iceland.

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

Location	2001	2016	Average annual change	Share in 2016	EU average (2016)
Built-up areas	2	5	7%	28%	37%
Rural areas	27	13	-5%	72%	53%
Motorways	n/a	n/a	-%	-	8%
Junctions	n/a	n/a	-	-	20%

Sources: CARE, national sources

Lighting and weather conditions

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

Conditions	2002	2016	Average annual change	Share in 2016	EU average (2016)
Lightning conditions					
During daylight	18	9	-5%	50%	52%
During night-time	4	5	2%	28%	31%
Weather conditions					
While raining	4	1	-10%	6%	9%

Sources CARE, national sources

Single vehicle accidents

The share of fatal single vehicle accidents in Iceland is substantially higher than the EU average.

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

Accident Type	2002	2016	Average annual change	Share in 2016	EU average (2016)
Single vehicle accidents	16	6	-7%	33%	29%

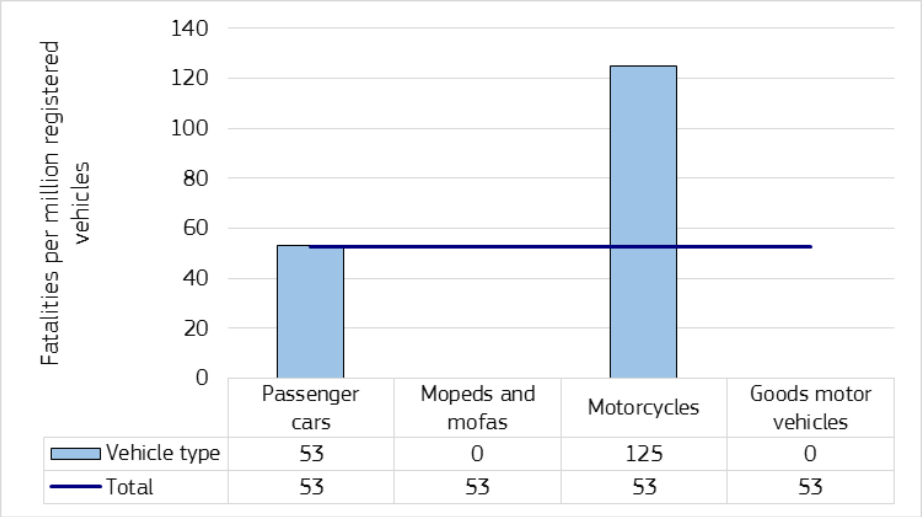
Sources: CARE, national sources

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 Iceland in 2015

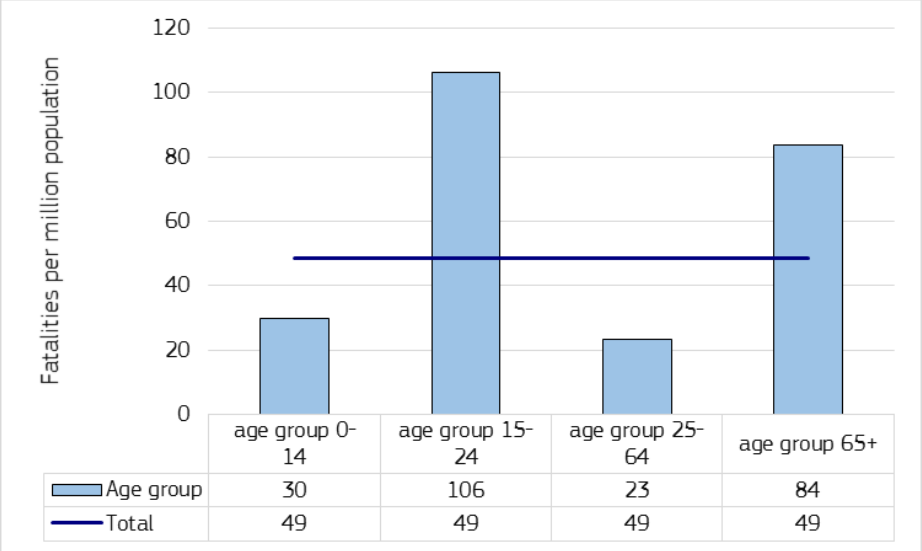


	Passenger cars	Mopeds and mofas	Motorcycles	Goods motor vehicles
Vehicle type	53	0	125	0
Total	53	53	53	53

Sources CARE, IRTAD

In Iceland risk is highest for drivers of goods motor vehicles, youngsters and the elderly.

Figure 4: Fatalities per million inhabitants in Iceland in 2015



	age group 0-14	age group 15-24	age group 25-64	age group 65+
Age group	30	106	23	84
Total	49	49	49	49

Sources: CARE, EUROSTAT

Social Cost

- The total cost of road accident casualties (fatalities and injuries) is estimated at 48,5 billion euros (2014).

Estimated costs of road injuries (especially fatal) are higher in Iceland than on average in Europe.

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

Injury type	Value	European average[4]
Fatal	1,88	1,28
Hospitalised	0,22	0,18
Slightly injured	0,04	0,02

Sources: Bickel et al., 2006; national experts

[4] Based on data of 20 countries (excl. BG, DE, FI, FR, HU, IS, LT, NO, RO and SK)

Synthesis

Iceland aims to lower the number of killed and seriously injured by 5% each year and to be among the best performing countries of killed per capita.

Safety position

- The fatality rate of Iceland is lower than the EU average (around 49 fatalities per million population in 2015).
- Because of the low numbers, road safety data of Iceland should be handled with care, especially when comparing Iceland with other countries.

Scope of problem

- Given the small size of the country, the absolute number of fatalities is also relatively small.
- Most fatalities in Iceland are among car occupants. The share of car occupants is significantly higher than the EU average.
- In Iceland, fatalities in rural areas are over-represented.
- The small number of fatalities does not allow further identification of particular groups or types of accidents that may be problematic.

Recent progress

- The fatality rate of Iceland is subject to substantial fluctuation due to the country's small accident figures.
- Effectiveness of law enforcement is at or above the level of most EU countries.

Remarkable road safety policy issues

- Iceland aims to lower the number of killed and seriously injured by 5% each year and be among the best performing countries of killed per capita.
- In Iceland, roads are improved by safety impact assessment, high risk site treatment, safety inspections and audits.
- Allowed BAC limits for novice and professional drivers are higher than those of most EU countries.

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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
	Iceland	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 2017.

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 2017 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 - Iceland, European Commission, Directorate General for Transport, September 2017.

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