Road Safety Country Overview October 2012

Austria





About 60% of Austria is occupied by the mountains of the Alps.

Structure and Culture

Basic data

Table 1: Basic data of Austria in relation to the European average. (Sources: [1]OECD/ITF, 2011; [2] Eurostat; [3] DG-TREN, 2005; [4] CIA)

Basic data of Austria	European average
 Population: 8.4 million inhabitants (2010) 	17.1 million (2010 [']) [1,2]
 Area: 82 500 km2 (2010) (1.7% water) (2010) 	156 225 km ² (2010) [1,3] 3% water (2010) [4]
 Climate and weather conditions (capital city; 2010): Average winter temperature (Nov. to April): 5°C Average summer temperature (May to Oct.): 14°C Annual precipitation level for the capital city: 842 mm 	(2010) 6°C 16°C 747 mm
 Exposure: 75.7 billion vehicle km (2008) (82% passenger cars, 16% goods motor vehicles) 0.71 motorised vehicles per person (2010) 	168 billion vehicle km (2010 ⁱⁱ) [1] 0.7(2010 ^{1, III}) [1,2]

Country characteristics

Table 2: Characteristics of Austria in comparison to the European average. (Sources: [1] OECD/ITF, 2011; [2] Eurostat; [3] national sources)

Characteristics of Austria	European average
 Population density: 102 inhabitants/km² (2010) 	110 inhabitants km^2 (2010 ⁱ)
	[1,2,3]
 Population composition (2009): 	
15% children (0-14 years),	16% children,
68% adults (15-64 years),	67% adults,
17% elderly (65 years and over)	17% elderly (2009 ⁱⁱⁱ) [1,2]
 Gross Domestic Product (GDP) per capita: €33 900 	€26 100 (2010) [1,2]
(2010)	
 35% of population lives inside urban area (year) 	42% (2010 ^{IV}) [1,2]
 Special characteristics: The largest part of Austria (62%) 	
is occupied by the mountains of the Alps.	



Based on 30 European countries; data of HU = 2009.

- ⁱⁱ Based on 15 European countries (excl. BG, CY, EE, EL, ES, HU, IT, LT, LU, LV, MT, PL, PT, RO, SK);
 - data of CZ, IE, SE, NO (2009); data of AT, BE, DK (2008); Data of UK (2006); data of NL (2003). ⁱⁱⁱ Based on 27 European countries (excl. LT, NO, PL); data of BE, UK (2008).
 - ^{iv} Based on 29 European countries (excl. 15).

Structure of road safety management

- Road safety policy is centralised in Austria, but with close involvement of representatives of regions and municipalities.
- Austria has 9 federal states (Bundesländer) that act as regional road authority.

The following key-actors are responsible for road safety (RS) management:

Key functions	Key actors
 Formulation of national RS strategy Setting targets Development of the RS programme 	 The Austrian Federal Ministry for Transport, Innovation and Technology (BMVIT) is the lead agency. Others involved are: the Ministry for the Interior, the Austrian Road Safety Board (non-governmental organisation), representatives from the regions, representatives from local municipalities.
2. Monitoring of the RS development in the country	 BMVIT at the national level Regional and local road authorities are free to monitor their own plans.
3. Improvements in road infrastructure	 BMVIT (DG for National Roads and Motorways) Austrian motorway authority (ASFINAG): motorways 9 Federal states (Bundesländer): regional roads
4. Vehicle improvement	BMVIT: responsible for overall policy and legislation, and for implementing federal road safety strategy and related policies for vehicle standards regulation.
5. Improvement in road user education	 BMVIT: responsible for overall policy and legislation and for implementing the federal road safety strategy and related policies for road haulage licensing, driver licensing and driver testing. Kuratorium für Verkehrssicherheit (KFV): responsible for the promotion of road safety awareness and education.
6. Publicity campaigns	DG for National Roads and Motorways, ASFINAG, Austrian Road Safety Board, KFV, Car Driver Associations (ÖAMTC, ARBÖ), police
7. Enforcement of road traffic laws	The Ministry of the Interior has responsibility for the Police, which is responsible for enforcement.
8. Other relevant actors	 Forschungsgemeinschaft Straße und Verkehr (FSV): responsible for development of highway standards; ÖNORM (Austrian Institute for Standards) responsible for all standardization.

The federal Ministry for Transport, Innovation and Technology (BMVIT) is the central coordinator for road safety in Austria.



Attitudes towards risk taking

- Austrian drivers report to drive hazardous less often than drivers in other countries
- Austrian drivers are not so supportive for stricter legislation on speeding and drink-driving than drivers in other countries.

Table 4: Road safety attitudes and behaviour of drivers (Source: SARTRE, 2004)

	Austria	SARTRE average
Self-reported driving behaviour	% of drivers that show behaviour	
	often or more	
Too close following	4%	9%
Inappropriate overtaking	2%	5%
Exceeding speed limit on motorways	19%	25%
Exceeding speed limit on main inter-urban roads	11%	18%
Exceeding speed limit on country roads	11%	13%
Exceeding speed limit in built-up areas	6%	8%
Support of stricter legislation	legislation % of drivers that support stricter	
	legislation	
Higher penalties for speeding offences	53%	60%
Higher penalties for drink-driving offences	79%	88%
Lower BAC levels	7%	8%
Perceived probability of being checked	% of drivers that believe that	
	probability is high	
Speeding	18%	18%
Alcohol use	10%	9%

Legend

(comparison of country attitude in relation to average attitude of other SARTRE countries):



10-19% worse

 \geq 20% worse



Austrian drivers are less supportive for stricter legislation on speeding and drink-driving than drivers in other countries.





responsibility.

Road inspections are an obligatory part of

part of infrastructure management in Austria.



Programs and measures

Road safety strategy of the country

 Austria aims for a safe road system for *all* users through responsible cooperation and shared responsibility.

National strategic plans and targets

- The latest Austrian Road Safety Plan (2011-2020) was accepted in 2011.
- Targets (referred to the average of the years 2008-2010):

Table 5: Road safety targets for Austria

Year	Fatalities	Serious injuries	Injury accidents
2015	-15%	-20%	-10%
2020	-50%	-40%	-20%

- Priority topics: stepwise implementation of over 250 measures in the following fields of action:
 - o Road safety education and campaigns, Driver training
 - o Enforcement
 - o Children, Young road users, Elderly road users
 - o Pedestrians, Bicycles, Motorcycles, Mopeds, Lorries
 - Level crossings
 - Post accident care, Rehabilitations and diagnostics
 - o Infrastructure and roadside telematics
 - o Vehicle safety and equipment
 - o Databases and accident data collection

(Source: national sources)

Road infrastructure

Table 6: Description of the road categories and their characteristics in Austria (Source: TiS.PT, 2003).

Road type	Speed limit (km/h)
Urban roads	50
Rural roads	100
Motorways	130

- Special rules for:
 - Light motorcycles (A1): no information available.
- Guidelines and strategic plans for infrastructure are available in Austria.

Table 7: Obligatory parts of infrastructure management in Austria and other European countries. (Sources: DG-TREN, 2010; national sources)

Obligatory parts in Austria:	European countries with obligation
Safety impact assessment: -	-
Road safety audits: no	50%
Road safety inspections: yes	60%
Black spot treatment: -	47% ^v

^v Based on data of 18 countries (excl. AT, BE, CH, CZ, FI, FR, HU, IE, MT, NO, RO, SE).



Recent activities of road infrastructure improvement have been addressing:

- Level crossings (railroad crossing),
- o Road safety programmes at regional and local level for rural roads,
- Black spot treatment,
- o Road safety inspection,
- Tunnel safety,
- o Avoiding ghost drivers,
- Urban road safety management.

(Sources: DG-TREN, 2010)

Traffic laws and regulations

Table 8 : Description of the regulations in Austria in relation to the most common
regulations in other European countries. (Sources: [1] DG-TREN, 2005; [2] national
sources; [3] DG-TREN, 2010)

Regulations in Austria	Most common in Europe (% of countries)
Allowed BAC level: 0.5%;	0.5‰ (60%)
 Novice drivers: 0.1‰; 	0.5‰ and 0.2‰ (both 30%)
 Professional drivers: 0.1‰. [1] 	0.5‰ (30%) [1,2]
Phoning:	
 Hand held: prohibited 	Not allowed (97%) [2,3]
 Hands free: allowed [3] 	-
Use of restraint systems:	
 Driver: obligatory 	Obligatory (all countries)
 Front passenger: obligatory 	Obligatory (all countries)
 Rear passenger: obligatory 	Obligatory (all countries)
 Children: obligatory [3] 	Obligatory on all seats (73%) [2,3]
Helmet wearing:	
 Motor riders: obligatory 	Obligatory (all countries)
 Moped riders: obligatory 	Obligatory (all countries)
 Cyclists: obligatory up to 12 years [3] 	Recommended (25% ^{VI}) [2,3]
 A demerit point system is in place [3] 	

• Enforcement

Table 9: Effectiveness of enforcement effort in Austria according to an international respondent consensus (scale = 0-10) (Source: DG-TREN, 2010)

Issue	Score for Austria	Most common in Europe (% of countries)
Speed legislation enforcement	7	7 (35%)
Seat-belt law enforcement	7	7 (43%) ^{vii}
Child restraint law enforcement	9	6 (27% ^{viii})
Helmet legislation enforcement	9	9 (39% ^{ix})



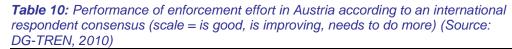
^{vi} Based on data of 24 countries (excl. CH, CY, HU, LU, NO, PT).

- vii Based on data of 23 countries (excl. DE, DK, IE, IS, LU, NL and UK).
- viii Based on data of 22 countries (excl. DE, DK, IE, IS, LU, NL, RO and UK).



Child restraint law enforcement is assessed as more effective in Austria than in other European countries.

The minimum age for driving a car or a moped is lower in Austria than in most other European countries.



Issue	Score for Austria	Most common in Europe (% of countries)
Speeding	Is improving	Is improving (50%)
Drink driving	Is improving	Is improving (79%) ^{ix}
Seat belt use	Is improving	Is improving (52% [×])

Road user education and training

Table 11: Road user education and training in Austria, compared to the situation in other European countries. (Sources: [1] ROSE25, 2005; [2] ETSC, 2011; [3] national sources)

Education and training in Austria	Most common in Europe (% of countries)
 General education programmes: Primary school: Compulsory Secondary school: Voluntary Other groups: no information [1] 	Compulsory (65% ^{xi}) Compulsory (50% ^{xii}) [1,2] -
 Driving licences thresholds: Passenger car: 17 years Motorised two wheeler: 16 years for mopeds (<50ccm); 20 years else Busses and coaches: 21 years Lorries and trucks: 21 years [2] 	18 years (79%) 18 years (low categories) and higher ages for faster vehicles (66%) 21 years (76%) ^{xiii} 21 years (79% ^{xiv}) [2,3]

Public campaigns

Table 12: Public campaigns in Austria, compared to the situation in other European countries. (Sources: SUPREME, 2007; national sources)

Campaigns in Austria	Most common issues in Europe (% of countries)
Organisation:	
 DG for National Roads and Motorways; 	
– ASFINAG;	
 National Road Safety Council; 	
– Police;	
 Kuratorium f ür Verkehrssicherheit (KfV); 	
- Car Driver Associations (ÖAMTC, ARBÖ).	
Main themes:	
 Drink-driving, 	Drink-driving (83%)
 Seat-belt, 	Seat-belt (73%)
 Speeding, 	Speeding (53%)
 Lighting and visibility 	-



- ^{ix} Based on data of 24 countries (excl. BG, CH, IS, NO, PL and RO).
- ^x Based on data of 25 countries (excl. BG, CH, IS, NO and RO).
- ^{xi} Based on data of 26 countries (excl. BG, CH, NO and RO).
- ^{xii} Based on data of 24 countries (excl. BG, CH, MT, NO, RO and SK).
- xiii Based on data of 29 countries (excl. NO).
- xiv Based on data of 28 countries (excl. IE and NO).



Mandatory vehicle inspection rules are similar to most other European countries.

Vehicles and technology (national developments)

Table 13: Developments of vehicles and technology in Austria, compared to the situation in other European countries. (Sources: TiS.PT, 2003; national sources)

Mandatory technical inspections	Most common in Europe (% of countries)
Passenger cars: every 12 months for all	Every 12 months (41%)
vehicles older than 5 years (for new cars:	
after 3 years, then 2, than every year.	
Motor cycles: every 12 months	Every 12 months (35%)
Busses or coaches: every 12 months	Every 12 months (41%)
Lorries or trucks: every 12 months	Every 12 months (41%) ^{xv}



^{xv} Based on data of 17 countries (excl.BG, CH, CY, CZ, EE, HU,LT, MT, NO, RO, SI, SK).



Project co-financed by the European Commission, Directorate-General for Mobility and Transport 7/16



The amount of speed checks per population is relative high in Austria compared to the European average.

The amount of road side tests per population has increased over years in Austria, but is still at a lower level than the European average.

Road Safety Performance Indicators

Speed

Table 14: Number of speed checks in Austria versus the European average (Source: ETSC, 2010)

Measure	2006	2008	% change	European average (2008)
Number of tests/1000 population	327	456	39%	90.8 ^{xvi}

Table 15: Percentage of speed offenders per road type in Austria compared to the European average (Source: ETSC, 2010)

Road type	2001	2007	Average annual change	European average
Motorways	Not available	23%	Not available	Not available
Rural roads	Not available	Not available	Not available	Not available
Urban roads	Not available	Not available	Not available	Not available

Table 16: Mean speed per road type in Austria compared to the European average (Source: ETSC, 2010)

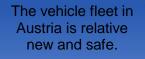
Road type	2001	2009	Average annual change	European average
Motorways	122 km/h	117 km/h	-4%	Not available
Rural roads	89 km/h	89 km/h	0%	Not available
Urban roads	52 km/h	51 km/h	0%	Not available

Alcohol

Table 17: Road side surveys for drink-driving in Austria compared to the European average (Source: ETSC, 2010)

Measure	2006	2008	% change	European average (2008)
Number of tests/1000 population	56	87	55%	145.8 ^{xvii}
% tested over the limit	9.4%	5.6%	-40%	Not available

^{xvi} Based on data of 21 countries (excl. BE, CH, DE, EE, IE, IS, MT, PT and UK).
 ^{xvii} Based on data of 17 countries (excl. BE, BG, CH, CZ, DE, IS, LU, LV, MT, NL, RO, SK and UK.).



Seatbelt use at front seats is somewhat higher in Austria than the European average.

• Vehicles

Table 18: State of the vehicle fleet in country compared to the European average (Source: ETSC, 2009)

Vehicle fleet in Austria	European average
Cars per age group (2009):	Passenger cars (2009) ^{xviii}
– 20% ≤ 2 years,	12% ≤ 2 years,
 20% 2 to 5 years, 	19% 2 to 5 years,
- 30% 6 to 10 years,	27 % 6 to 10 years,
- 30% > 10 year.	42% >10 years
EuroNCAP occupant protection score of cars (new cars	
sold in 2008):	
– 5 stars: 52%	49%
– 4 stars: 33%	35%
- 3 stars: 6%	6%
– 2 stars: 1%	1% ^{xix}

• Protective systems

Table 19: Protective system use in Austria versus the average in Europe (Source: Vis & Eksler, 2008; ETSC, 2009; national sources)

Use of protective systems in Austria	European average
Daytime seat belt wearing in cars and vans (2008):	(2007)
- 87% front,	85% front ^{xx} ,
 No information on % driver 	Not available
 No information on % front passenger 	Not available
– 65% rear,	60% rear ^{xxi} ,
 82% child restraint systems (2007) 	Not available
Helmet use:	
 No information on % motor riders, 	Not available
 No information on % moped riders, 	Not available
- 35% cyclists (2009)	Not available



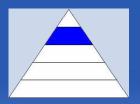
^{xviii} Based on data of 22 countries (excl. BG, DK, EL, FR, IS, MT, PT and SK).

xix Based on data of 27 countries (excl. CY, IS and MT).

^{xx} Based on data of 25 countries (excl. AT, EL, IS, LT and RO); data of SK (2008); data of BE, CH, DK, IE, MT, NL (2006); data of HU, IT, NO, PT (2005); data of LU (2003)
 ^{xxi} Based on data of 22 countries (excl. CY, EL, ES, IS, IT, LT, RO and SK); data of BE, CH, DK, IE, MT, NL

(2006); data of HU, NO, PT (2005); data of LU (2003).





The amount of fatalities per inhabitants of Austria is about average; the improvement is also similar to the European average last decade.

Road Safety Outcomes

General positioning

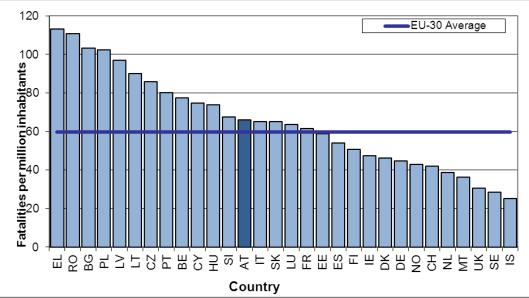
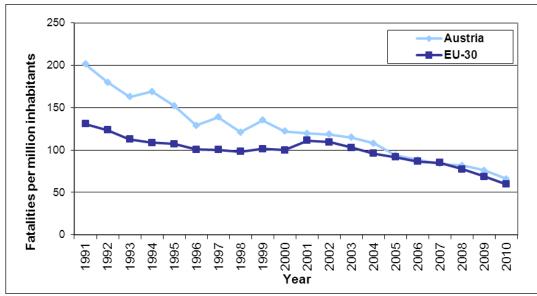


Figure 1: Fatalities per million inhabitants (2010). (Source: CARE, Eurostat).







Austria has a somewhat higher share of fatalities among occupants of cars than the European average

European average

Austria has a somewhat higher share of female road fatalities than the European average

Austria has far more fatalities on rural roads than other European countries on average.



Transport mode

Table 20: Reported fatalities by mode of road transport in Austria compared to the European average of the last year available (Source: CARE, national sources).

Transport mode	2001	2010	Average annual change	% in 2010	European average (2009 ^{xxii})
Pedestrians	117	98	-2%	18%	18%
Car occupants	570	292	-5%	53%	47%
Motorcyclists	107	68	-4%	12%	13%
Mopeds	37	18	-6%	3%	2%
Cyclists	55	32	-5%	6%	5%
Bus/coach occupants	14	8	-5%	1%	<1%
Lorry/truck occupants	31	17	-5%	3%	4%

Age, gender and nationality

Table 21: Reported fatalities by age, gender and nationality in Austria versus the European average of the last year available (Source: CARE, national sources).

Age and gender	2001	2010	Average annual change	% in 2010	European average (2009 ^{VIII})
Females	251	143	-5%	26%	24%
0-14 years	14	5	-7%	1%	1%
15 – 17 years	11	9	-2%	2%	1%
18 – 24 years	36	16	-6%	3%	4%
25 – 49 years	79	44	-5%	8%	7%
50 – 64 years	33	20	-4%	4%	3%
65+ years	78	49	-4%	9%	7%
Males	707	409	-5%	74%	75%
0-14 years	12	5	-6%	1%	2%
15 – 17 years	21	18	-2%	3%	2%
18 – 24 years	152	86	-5%	16%	13%
25 – 49 years	301	134	-6%	24%	31%
50 – 64 years	113	75	-4%	14%	12%
65+ years	108	91	-2%	16%	12%
Nationality of driver or rider killed					
National	811	474	5%	86%	Not available
Non-national	147	78	5%	14%	Not available

Location

Table 22: Reported fatalities by location in Austria compared to the European average of the last year available (Source: CARE, national sources). Motorways and junctions are part of built-up and rural areas.

Location	2001	2010	Average annual change	% in 2010	European average (2009 ^{VIII})
Built-up areas	213	141	-4%	26%	33%
Rural areas	745	411	-5%	74%	49%
Motorways	157	62	-7%	11%	5%
Junctions	141	103	-3%	19%	12%

^{xxii} Based on data of 28 countries (excl. NO, LT); data of FR, IE, MT, SE (2008).

A relative low amount of fatal crashes happen at night time and as single vehicle crash in Austria.

Lighting and weather conditions

Table 23: Reported fatalities by lighting and weather conditions in Austria compared to the European average of the last year available (Source: CARE, national sources).

Conditions	2001	2010	Average annual change	% in 2010	European average (2009 ^{xxiii})
Lightning conditions					
During daylight	534	345	-4%	63%	55%
During nighttime	375	182	-6%	33%	39%
Weather condition					
While raining	106	67	-4%	12%	10%

Single vehicle crashes

Table 24: Reported fatalities by type in country compared to the European average of the last year available (Source: CARE, national sources).

Crash type	2001	2010	Average annual change	% in 2010	European average (2009 ^{xxiv})
Single vehicle crash	392	176	-6%	32%	40%

Under-reporting of casualties

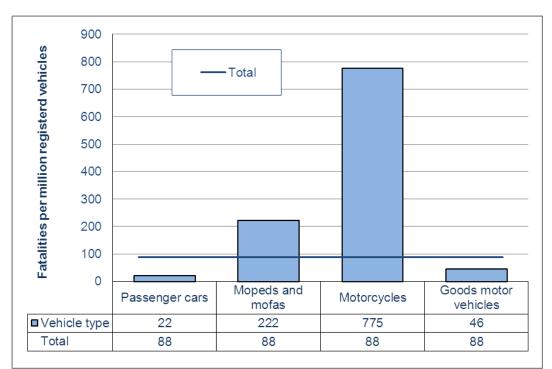
- Fatalities: 100%. This amount is suspected since adequate alternative registration systems are missing for a check.
- Hospitalised: no information available.

(Source: WHO, 2009; national sources)



^{xxiii} Based on 25 countries (excl. IE, IT, LT, NO, SI); data of AT, BE, DK, EE, FI, FR, MT, SE (2008). ^{xxiv} Based on 27 countries (excl. IE, LT, NO); data of AT, BE, DK, EE, FI, FR, MT, SE (2008).

Risk figures



Motorcyclists have the highest risk, as are adolescents and the elderly.



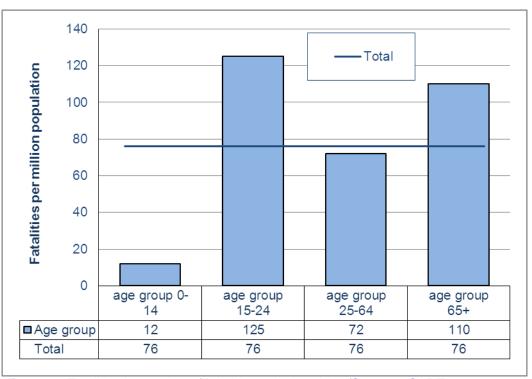


Figure 4: Fatalities by number of inhabitants in Austria in (Sources: CARE, Eurostat).





Social Cost

- Total costs of road crashes: € 9.92 billion (2006)
- Percentage of GDP: 3.86%

Table 25: Cost (in million Euro) per injury type in Austria versus the European average (Source: Bickel et al., 2006).

Injury type	Value	European average ^{xxv}
Fatal	1.76	1.28
Hospitalised	0.24	0.18
Slightly injured	0.02	0.02

The estimated costs of road injury are higher in Austria than on average in Europe.



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





Austria has a relative strict drinkdriving legislation for novice and professional drivers, but road side checks on alcohol are at a lower level than the European average.



Safety position

- The amount of fatalities per inhabitants in Austria is about the same as the European average.

• Scope of problem

- Austria has a somewhat higher share of fatalities among occupants of cars than the European average
- Also the share of female drivers that die in a crash, is somewhat higher than the European average.
- A relatively high share of fatal crashes happen in Austria on rural roads, but a relatively low share happens during night time and as a single vehicle crash.

Recent progress

- The decrease in annual road fatalities is also similar to the European average last decade.
- The amount of road side tests per population has increased over years in Austria, but is still at a lower level than the European average.
- The amount of speed checks per population has also increased over year but is already relative high in Austria compared to the European average.

Remarkable road safety policy issues

- Austria aims for a safe system approach for all road users through cooperation and shared responsibility.
- Road inspections are an obligatory part of infrastructure management in Austria.
- Austria has a drink-driving limit of 0.1 for novice and professional drivers, which is lower than the limit in most countries.
- Child restraint law enforcement is assessed as more effective in Austria than in other European countries.
- The minimum age for driving a car or a moped is lower in Austria than in most other European countries.





Literature

- Bickel, P. et al (2006) HEATCO deliverable 5. Proposal for harmonised guidelines. EU-project developing harmonised European approaches for transport costing and project assessment (HEATCO). Institut für Energiewissenschaft und Rationelle Energieanwendung, Stuttgart.
- CARE database
- CIA database
- DG-TREN (2005) Road safety country profiles (on website <u>http://ec.europa.eu/transport/road_safety/observatory/country_profiles_en.htm</u>)
- DG-TREN (2010). Technical Assistance in support of the Preparation of the European Road Safety Action Program 2011-2020. Final Report. DG-TREN, Brussels
- ETSC (2009). Boost the market for safer cars across Europe. + Background tables PIN Flash no.13. ETSC, Brussels
- ETSC (2010). Tackling the three main killers on the road. A priority for the forthcoming EU Road Safety Action Program + Background tables. PIN Flash no.16. ETSC, Brussels
- ETSC (2011) <u>www.etsc.eu/faq.php</u> (FAQ on driving licensing has been removed now)
- Eurostat database
- National sources: via CARE national experts
- OECD/ITF (2011). IRTAD Road Safety 2010. Annual Report. OECD/ITF, Brussels
- ROSE25 (2005). Inventory and compiling of a European good practice guide on road safety education targeted at young people. Final report. KfV, Vienna
- SARTRE (2004). *European drivers and road risk. SARTRE 3 results*. INRETS, Arcueil Cedex.
- SUPREME (2007) Final Report Part F1. Thematic Report: Education and Campaigns. European Commission, Brussels.
- TiS.PT (2003). Study on Road Traffic Rules and Corresponding Enforcement Actions in the Member States of the European Union. European Commission Directorate-General Energy and Transport, Brussels.
- Vis, M.A. and Eksler, V. (Eds.) (2008) Road Safety Performance Indicators: Updated Country Comparisons. Deliverable D3.11a of the EU FP6 project SafetyNet.
- WHO (2009) Global status report on road safety. Time for action. World Health Organisation, Geneve.

