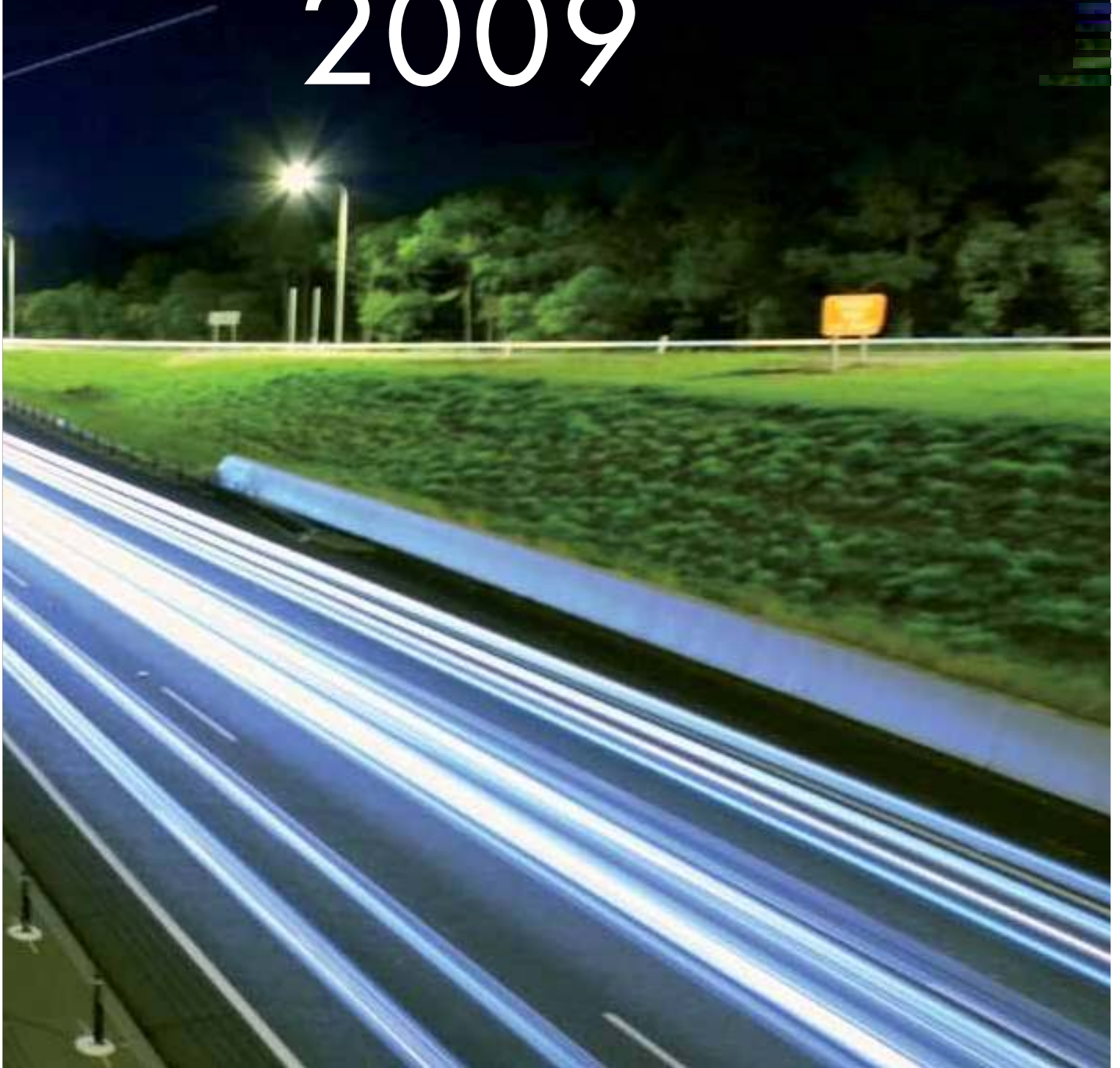
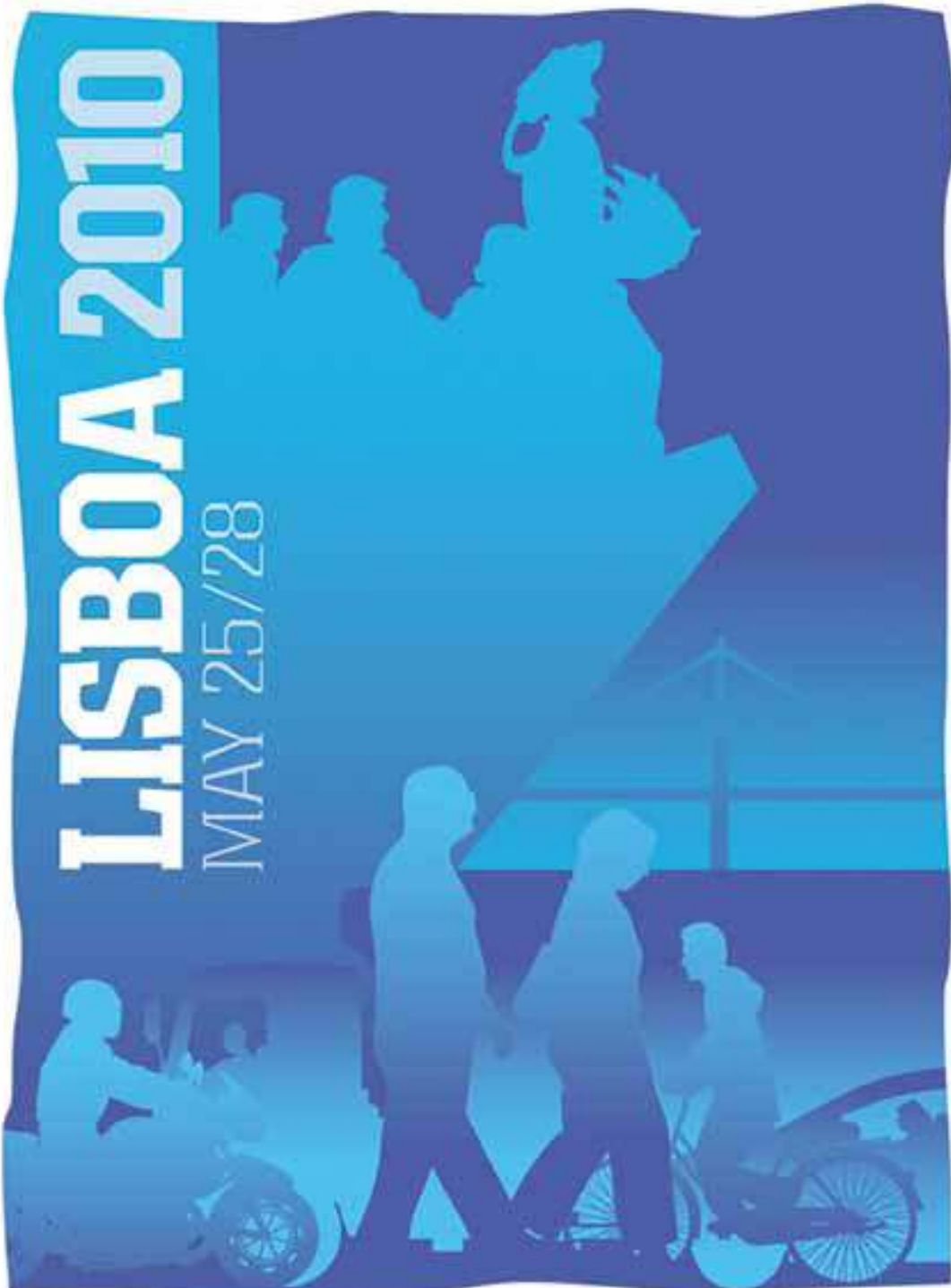




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EUROPEAN ROAD STATISTICS 2009





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European Union Road Statistics 2009

THE VOICE OF THE EUROPEAN ROAD

The European Union Road Federation (ERF), the Brussels Programme Centre of International Road Federation (IRF), is a non-profit association which coordinates the views of Europe's road sector and acts as a platform for dialogue and research on mobility issues. As the "Voice of the European Road", the ERF – IRF BPC promotes knowledge of the road sector through research, information services, and a permanent dialogue with all stakeholders.

- > ERF – IRF BPC believes roads are an undeniable source of socioeconomic wealth
- > ERF – IRF BPC believes poor road infrastructure is a determining factor in the causes and consequences of road accidents
- > ERF – IRF BPC is committed to making a contribution to environmental policy through innovative, market friendly proposals
- > ERF – IRF BPC is in favour of a fair deal for motorists and stable funding mechanisms for Europe's road network
- > ERF – IRF BPC believes users should be placed at the heart of Europe's transport policy

FOREWORD

The ERF – IRF BPC is delighted to present you with the 2009 edition of the European Road Statistics, the annual publication containing all essential information on the road transport sector. Throughout the years, the European Road Statistics have continued to deliver accurate data on the sector, making them a tool of paramount importance for policy makers and industry representatives alike.

In the midst of the current economic crisis, it is now more important than ever to acknowledge for economic importance of this vital sector and to ensure that the necessary funds are channelled towards improving and maintaining current infrastructure.

Greater investment will not only provide a much needed immediate economic stimulus, but will also have a more lasting impact through increased mobility of goods, people and services throughout Europe.

Last but not least, we believe that a better road infrastructure can also lead to currently underexploited energy efficiency gains by reducing congestion and related CO₂ emissions.

The eighth edition of the European Road Statistics aims at delivering factual information to expose the true extent and value of the European road sector.

We are confident that you will find this publication both informative and enlightening.

The ERF – IRF BPC Team
June 2009

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SYMBOLS AND ABBREVIATIONS

EU-27	EU-15	AT - Austria BE - Belgium DE - Germany DK - Denmark EL - Greece ES - Spain FI - Finland FR - France IE - Ireland IT - Italy LU - Luxembourg NL - The Netherlands PT - Portugal SE - Sweden UK - United Kingdom
	EU-12	BG - Bulgaria CY - Cyprus CZ - Czech Republic EE - Estonia HU - Hungary LT - Lithuania LV - Latvia MT - Malta PL - Poland RO - Romania SI - Slovenia SK - Slovakia

EU Candidates (CC)		HR - Croatia TR - Turkey MK - FYR Macedonia
EFTA	EEA	IS - Iceland LI - Liechtenstein NO - Norway
		CH - Switzerland
Other abbreviations		ACEA - European Automobile Manufacturers' Association ACEM - European Association of Motorcycle Manufacturers ASECAP - European Association of tolled motorways, bridges and tunnels operators CARE - European Road Accident Database CORDIS - Community Research and Development Information Service EBB - European Biodiesel Board EC - European Commission EIB - European Investment Bank EU - European Union € - Euro EEA - European Environment Agency g - Gramme Bn - Billion (thousand million) GDP - Gross Domestic Product IRTAD - International Road Traffic and Accident Database ITF - International Transport Forum pkm - Passenger-kilometre tkm - Tonne-kilometre toe - Tonne of oil equivalent n.a. - Data not available

GENERAL DATA

1.1 Economic importance of road transport in EU-27 - 2006*

	Turnover (€ bn)	Value Added (€ bn)***	Employment (million people)	Employment (% of total)**
Automotive Manufacturing (Motor Vehicles, Trailers, Semi-Trailers, Powered two-wheelers and Bicycles)	715.50	136.60	2.32	1.06
Motor Parts Manufacturing, Accessories, Maintenance, Repair and Sale of Motor Vehicles, Parts and Accessories	1,030	137	3.57	1.63
Fuel Retail	154.20	13.65	0.48	0.02
Road Transport (Freight Transport, Public Transport, Own Account)	320	135	4.30	1.90
Road Construction and Maintenance	115.20	39.70	3.80	0.40
Motorway Operators	19.82	2.86	0.07	0.02
Total Road Sector	2,290.41	444.08	14.93	5.07

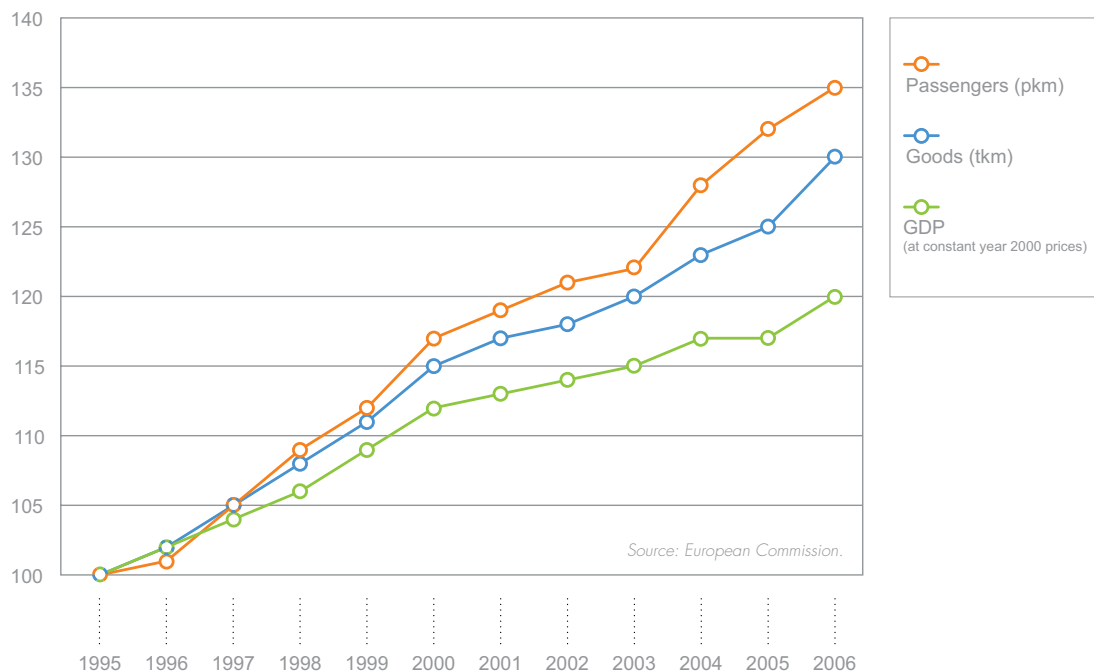
Source: Eurostat, Industry, ERF, IRF.

* These data do not take into account the auto-consumption within large companies and SME. Nor do they reflect indirect level of employment resulting from roads in sectors such as insurance and logistics.

** EU-27 GDP and Employment in 2006: € 11,597 billion and 218 million people respectively.

*** Value Added = turnover + capitalised production + other operating income +/- the changes in stocks - the purchases of goods and services - other taxes on products which are linked to turnover but not deductible - minus the duties and taxes linked to production.

1.2 Transport growth in EU-27, evolution 1995-2007



Source: EC.

1.3 Annual growth rates EU-27 (% change)

	1995 - 2007	2006 - 2007
GDP (real growth)	2.4	2.9
Passenger transport	1.7	1.2
Freight transport	2.7	2.6

Source: EC.

1.4 Employment in inland transport in EU-27 - 2006

	Road freight transport	Road passenger transport	Railway	Inland waterways	Sea Transport	Air Transport	Travel agencies & tour operators	Other* auxiliary transport activities
BE	63,082	33,306	35,000	933	825	5,578	7,949	46,953
BG	37,918	25,354	31,834	1,562	4,000	2,470	6,015	36,650
CZ	103,372	46,848	63,450	250	0	6,788	11,231	33,873
DK	41,123	30,973	9,238	142	14,980	5,653	6,334	29,398
DE	309,494	292,406	79,264	9,279	24,592	55,444	63,619	482,600
EE	13,849	6,131	3,430	93	1,000	728	18,549	10,145
EL	44,625	76,675	7,574	0	18,402	3,791	14,391	29,777
ES	393,085	171,274	20,810	256	7,156	40,393	56,783	198,513
FR	348,956	219,964	171,500	3,595	13,744	72,397	42,381	251,560
IE	13,746	8,493	8,523	50	4,950	6,687	6,048	15,555
IT	339,407	150,820	65,606	2,880	25,099	23,481	45,588	312,576
CY	2,415	2,426	0	0	4,725	2,435	2,913	4,728
LV	18,413	14,842	14,841	20	731	1,110	2,125	15,770
LT	36,571	18,632	10,900	145	1,635	829	3,104	13,676
LU	7,449	2,688	3,030	100	54	3,776	642	2,241
HU	67,818	53,026	44,206	1,218	30	2,667	6,322	27,512
MT	811	1,473	0	0	734	2,279	1,771	3,317
NL	122,950	37,500	38,281	13,291	6,996	36,000	22,927	73,842
AT	60,232	47,271	14,833	434	11	9,326	10,850	50,304
PL	224,808	148,702	120,780	1,254	2,858	5,551	17,599	65,554
PT	64,801	37,034	4,615	1,341	1,081	9,705	9,580	32,215
RO	76,417	85,053	42,301	2,941	1,068	3,528	8,604	65,029
SI	19,518	8,000	5,000	34	230	674	1,968	7,569
SK	12,746	14,827	35,000	776	0	814	2,526	9,231
FI	40,541	25,460	7,866	214	7,419	7,253	4,832	25,705
SE	71,027	58,826	8,188	1,145	14,506	7,477	12,449	51,384
UK	297,230	221,996	53,884	1,611	14,614	90,128	114,550	290,869
TOT	2,832,404	1,840,000	899,954	43,564	171,440	406,962	501,650	2,186,546

Source: Eurostat.

* Cargo handling and storage, other supporting activities, activities of other transport agencies.

CY: 2005, MT: 2002

Note: the above figures refer to employment in companies whose main activity lies in the mode concerned.

ROAD NETWORK

2.1 Length of total road network by category and country - 2006 (thousand km)

	BE	CZ	DK	DE	EE	EL ⁽¹⁾	ES	FR
Motorways	1.76	0.63	1.03	12.5	0.10	1.06	12.1	10.8
National Roads	12.6	6.17	0.64	40.7	1.5	10.2	23.7	25.2
Secondary or Regional	1.35	48.8	9.69	178.1	14.9	30.9	140.5	377.2
Other Roads	136.6	72.9	61.00	413.3	41.1	75.6	501.1	615.6
Total	152.3	128.5	72.4	644.6	57.6	117.7	677.4	1,028.8

	IE	IT ⁽²⁾	CY	LV	LT	LU ⁽³⁾	HU	MT
Motorways	0.27	6.6	0.26	0.0	0.39	0.15	0.79	0
National Roads	5.2	21.5	2.43	1.62	1.75	0.84	6.73	0.18
Secondary or Regional	11.6	147.4	1.93	18.5	19.6	1.91	23.5	0.67
Other Roads	79.4	312.1	3.38	49.5	58.7	2.35	158.7	1.38
Total	96.5	487.6	8.0	69.6	80.4	5.2	189.7	2.2

	NL	AT	PL	PT ⁽²⁾	SI	SK	FI ⁽⁴⁾	SE
Motorways	2.6	1.68	0.58	2.55	0.58	0.33	0.7	1.74
National Roads	2.6	10.4	13.6	5.85	0.96	3.36	12.6	13.7
Secondary or Regional	7.75	23.7	23.7	4.5	4.9	14.1	28.5	82.9
Other Roads	122	71.1	166.2	63.9	32.1	25.9	36.5	325.0
Total	134.9	106.9	204.1	76.8	38.5	43.7	78.3	423.3

(1) End of 2005, apart from motorways

(2) 2005 Figures

(3) 2004 Figures

(4) Total roads owned by the state. If private and cooperative roads are included, the overall figure is 428.3

	UK	BG	RO ⁽³⁾	TOTAL EU-27	HR
Motorways	3.7	0.39	0.23	63.5	0.87
National Roads	49	2.97	15.8	291.7	6.99
Secondary or Regional	122.2	4.02	64	1,406.8	10.5
Other Roads	248.4	11.99	147.7	3,833.5	10.4
Total	423.3	19.4	227.7	5,595.6	28.7

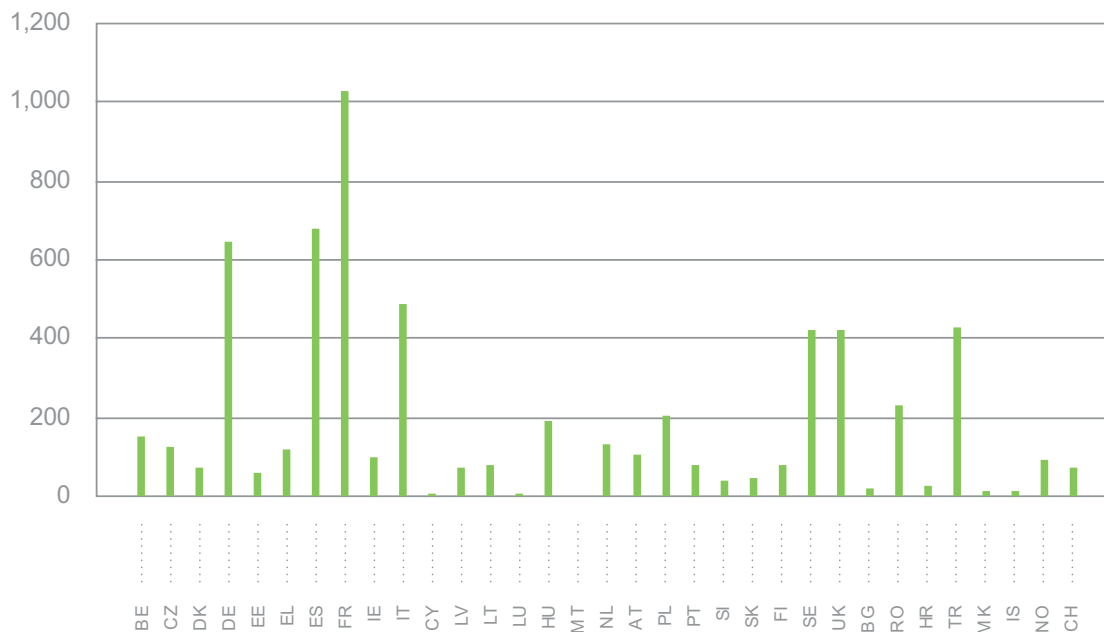
	TR	MK	IS	NO	CH
Motorways	1.99	0.22	0.01	0.27	1.36
National Roads	31.3	0.69	4.2	27.0	0.4
Secondary or Regional	30.4	3.81	4.0	27.0	18.1
Other Roads	363.2	9	4.8	38.5	51.5
Total	426.9	13.7	13.0	92.8	71.4

Source: EC, IRF

(1) End of 2005, apart from motorways - (2) 2005 Figures - (3) 2004 Figures - (4) Total roads owned by the state. If private and cooperative roads are included, the overall figure is 428.3

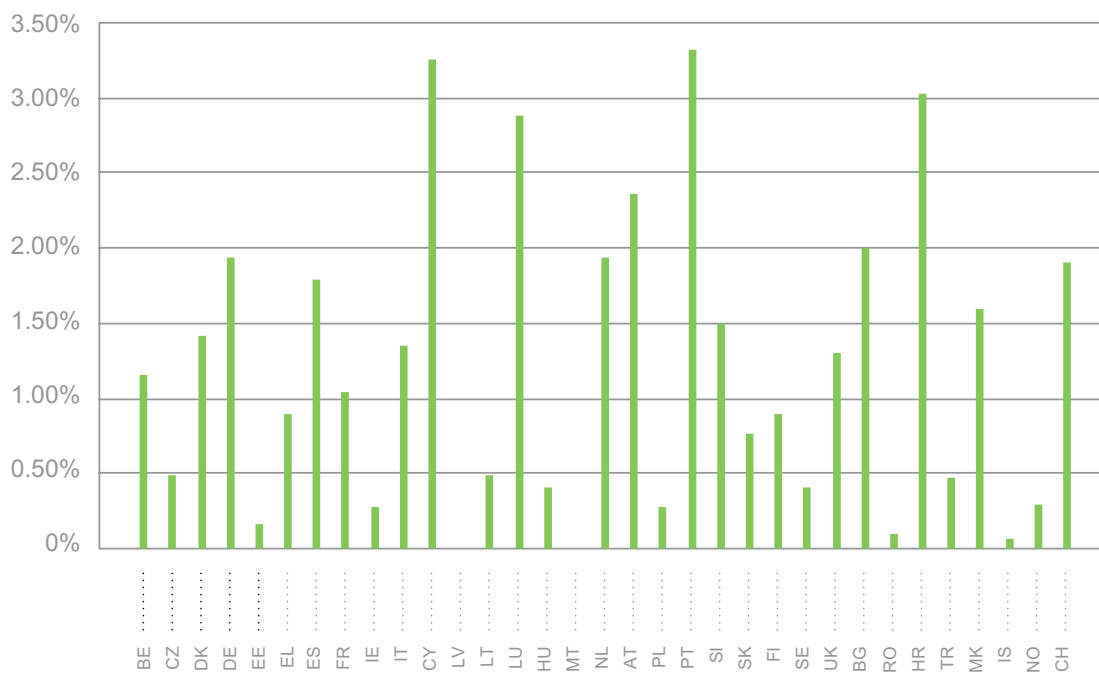
It is important to realise that each European country has its own road classification generally based on the State structure organisation. In many federal states for instance, a part from the national, regional and provincial network, there is also a thick municipal network, while in the scandinavian countries the road hierarchy includes many private or cooperative roads too. For this reason, the above road - length indicators are indicative and not per se comparable.

2.2 Length of total road network by country - 2006 (thousand km)



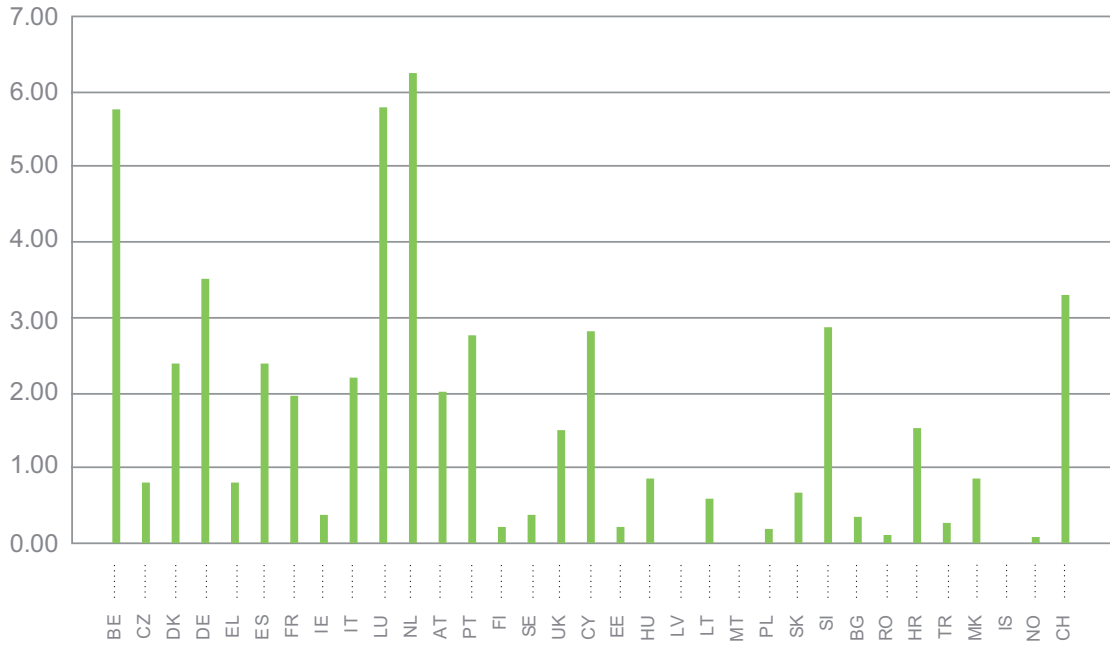
Source: EC, IRF

2.3 Proportion of motorways compared to the total road network - 2006



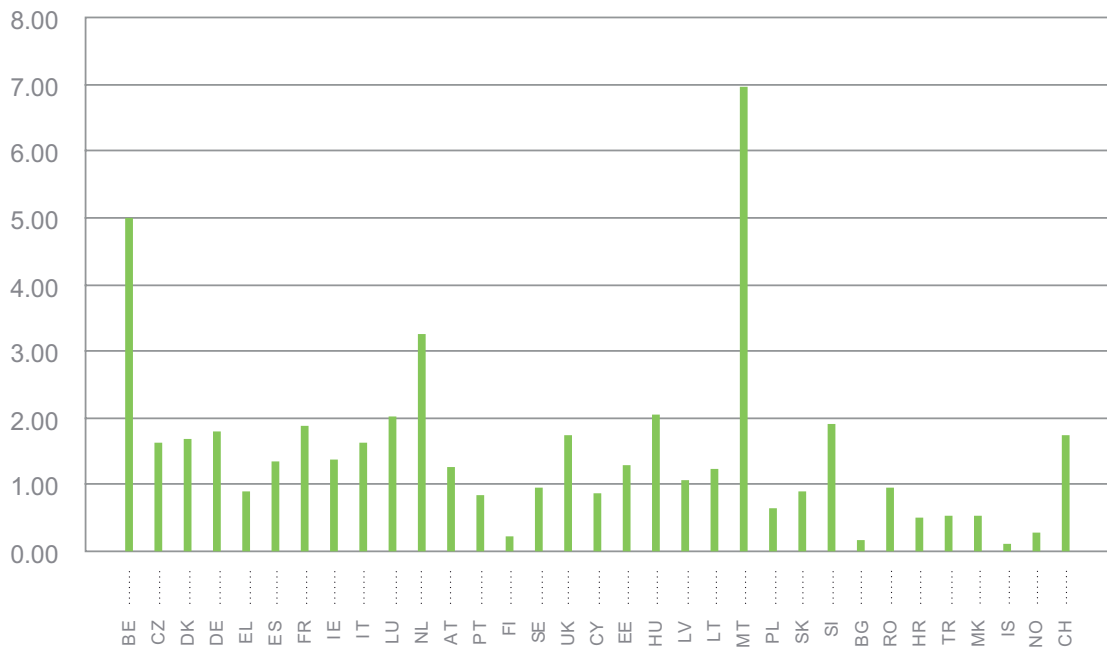
Source: EC, IRF

2.4 Density of motorways - 2006 (km per 100 km²)



Source: Europa, EC, IRF

2.5 Density of the total road network (km. road/square km land area) 2006



Source: Europa, EC, IRF

2.6 Transport network comparison between EU-27, USA, Japan, Russia and China - 2006 (thousand km)

	EU-27	USA	Japan	China	Russia
Road network	5,000	6,430	1,190	2,283	755
Motorway network	63.4	95.3 ⁽¹⁾	7.4 ⁽²⁾	45.3	29
Railway network	215.9	203.6 ⁽³⁾	27.6	77.1	85.5

Source: EC, IRF

(1): USA: 2007: divided highways with 4 or more lanes (rural or urban interstate, freeways, expressways, arterial and collector) with full access control by the authorities.

(2): Japan: national expressways. Length of roads with a central zone: 17,000 km.

(3): USA: a sum of overlapping networks.

INFRASTRUCTURE FINANCING

3.1 Toll net revenues - 2006-2007-2008 (€ million)

Country	2006	2007	2008
BE	49.06	41.60	49.20
DK	385.00	396.80	437.00
EL	154.00	155.00	170.50
ES	1,677.40	1,821.95	1,992.50
FR	6,406.60	6,849.00	7,383.60 ⁽³⁾
IT	4,071.24	4,333.40	4,473.80 ⁽³⁾
NL	25.40	22.59	24.50
AT	1,192.00	1,250.28 ⁽²⁾	1,435.00 ⁽⁴⁾
PT	639.90	664.80	713.90
HU	97.20 ⁽¹⁾	114.80	155.60
SI	139.40	151.96	172.70
NO	362.40	388.10	386.20
HR	198.10	226.94	258.60
PL	n.a.	n.a.	175.50
UK	n.a.	81.00	78
YU	n.a.	176.50	182.80
CZ	n.a.	n.a.	198.50
DE	n.a.	3,078.00	3,359.30
SK	n.a.	n.a.	74.94 ⁽⁵⁾

Source: ASECAP

(1) The revenue collected by AAK Zrt on all motorways in Hungary

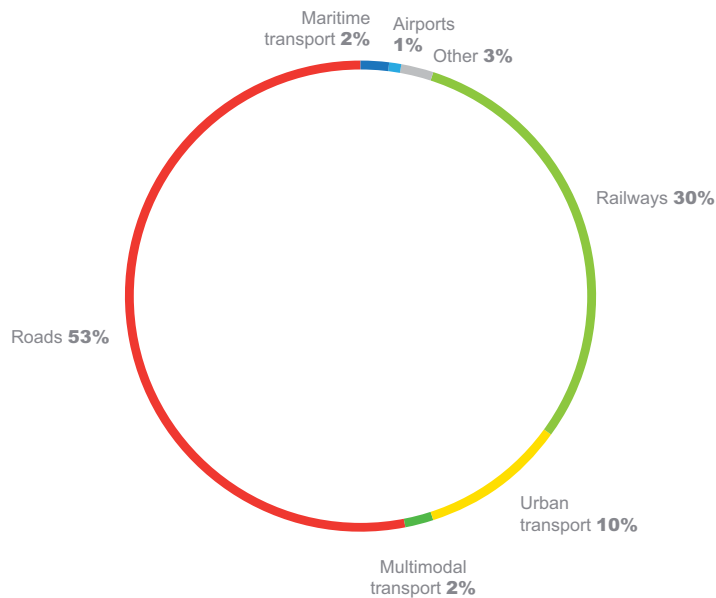
(2) Preliminary value for 2006

(3) Preliminary value

(4) Preliminary value 2007

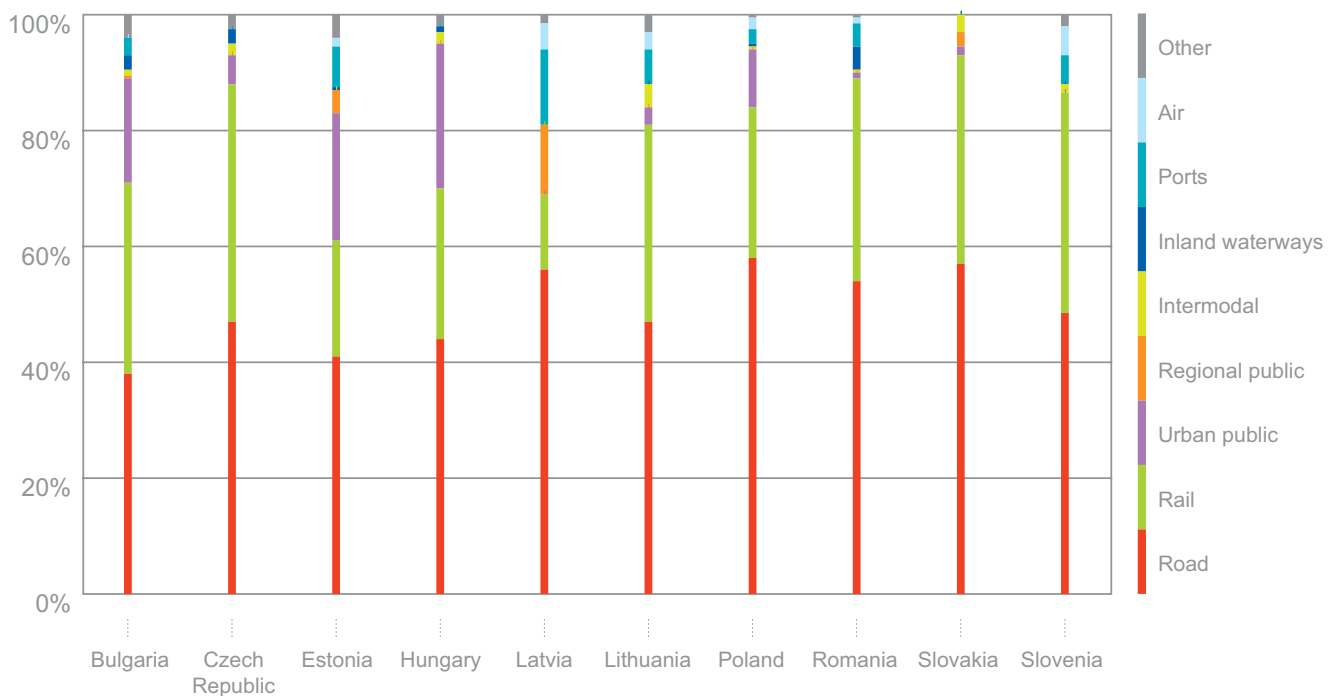
(5) Revenue from vignette on the whole charged network including motorways, expressways and selected 1st class roads

3.2 Allocation of EU structural funds - 2007-2013 (EU-12)



Source: EC.

3.3 Comparison of EU structural funds allocation for transport (selected countries) - 2007-2013



Source: EC, ERF.

3.4 Expenditures for the TEN-T Roads in the Member States

€ million	TEN-T	TEN-T Road	% road
Total cost 1996-2020	902,870	219,000	24.3
Expenditure until 31/12/2006	407,770	117,500	28.8
Investment forecast 2007-2013	389,821	83,000	21.3
Investment forecast 2014-2020	105,278	18,500	17.6

Source: EC

3.5 Type of TEN-T* Roads in EU-27 by 2020



Source: EC, DG TREN

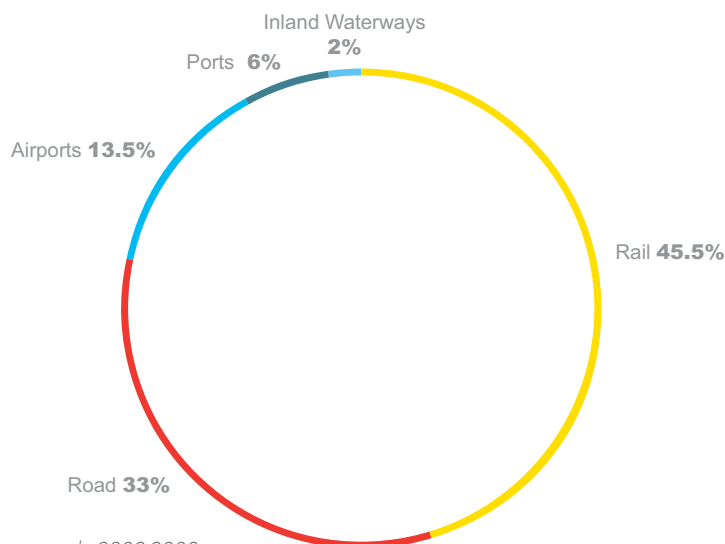
* The Guidelines define the TEN-T roads as composed of motorways and high-quality roads – existing, new or to be adapted

3.6 TEN-T Funding 2007-2013

Transeuropean Transport Network	2007 – 2013
Cost (€ billion)	
TEN-T Basic Network.....	390
New Member States (EU-12).....	72
Old Member States (EU-15).....	318
Community contribution (€ billion)	
Programme TEN-T.....	8,013
Cohesion Fund.....	34.8
ERDF (regions convergence).....	9.4
EIB Loans and Guarantees.....	53
Total Community contribution (€ billion)	
Grants.....	52.2 (13.4%)
Grants and Loans.....	105 (27%)
Other resources (national)	
	285 (73%)

Source: EC, DG TREN

3.7 Required investment breakdown per category 2007-2020 (remaining total TEN-T cost: € 520 billion)*



Source: EC, Implementation study 2002-2003.

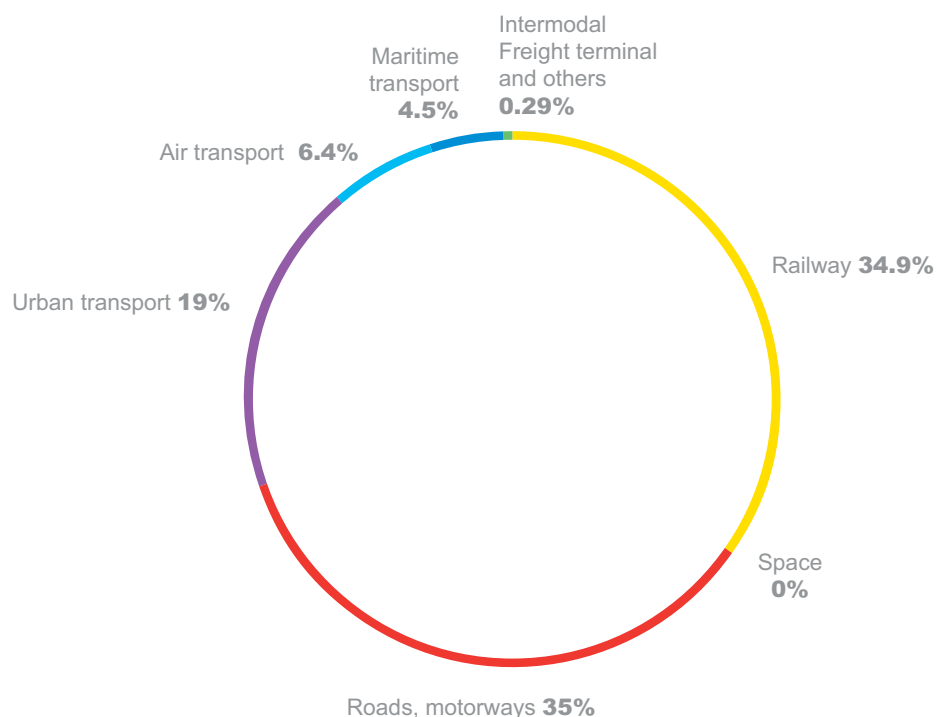
*Total estimated costs of TEN-T 1996-2020: € 860 billion.

3.8 European Investment Bank loans to EU-25 - 2004-2006 (€ million)

	2004	2005	2006
Railway	3,262	3,356	2,999
Roads, Motorways	2,978	2,754	4,384
Urban Transport	2,367	4,862	1,294
Air Transport	2,079	1,279	764
Maritime Transport	468	661	593
Intermodal Freight terminal and others	18	41	36
Space Transport		121	

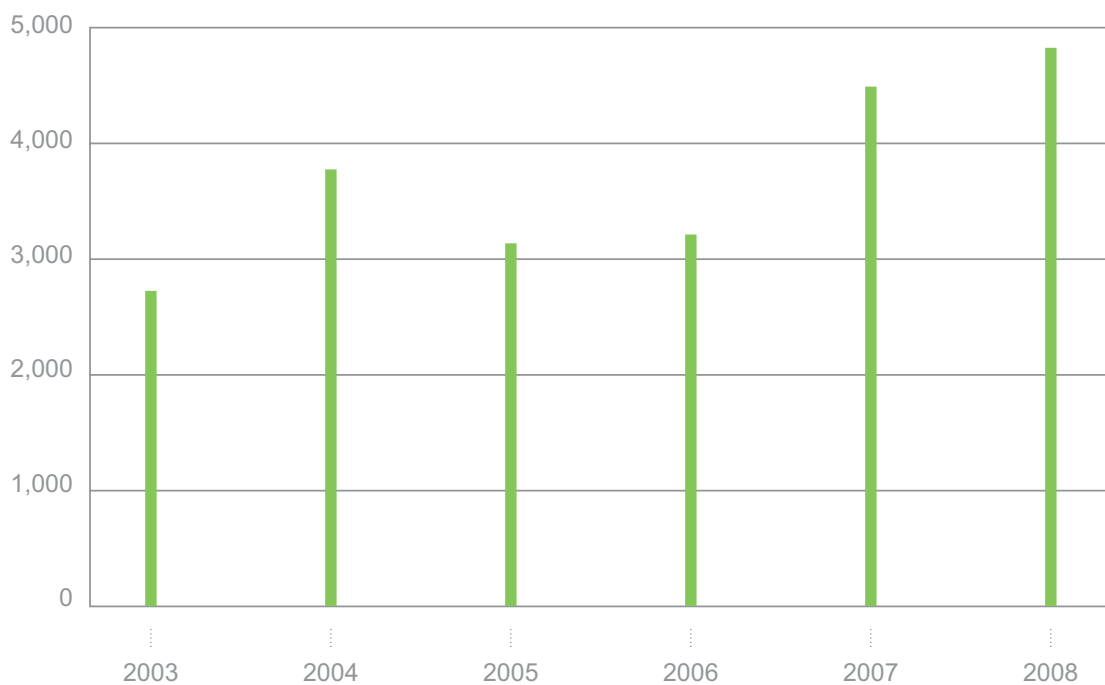
Source: EIB

3.9 European Investment Bank loans for transport TEN's to EU-27 in 2007 (total € 10,127 billion)



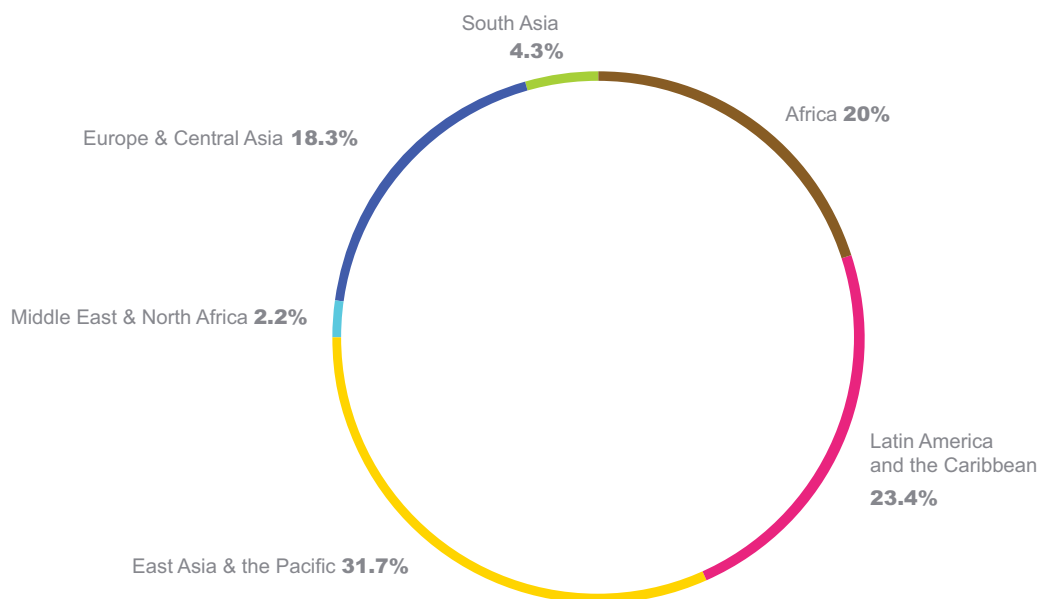
Source: EIB

3.10 World Bank total transport lending (million dollars)



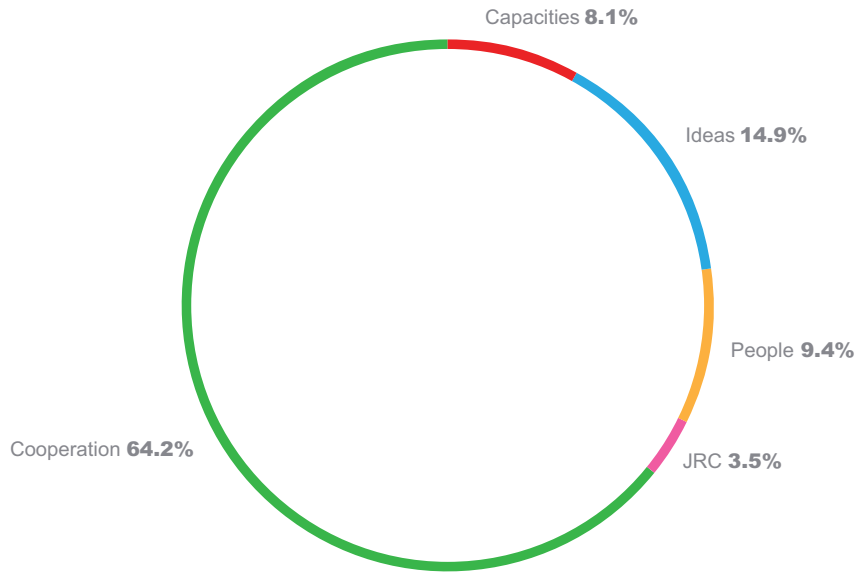
Source: World Bank

3.11 Transport lending breakdown by region - 2008



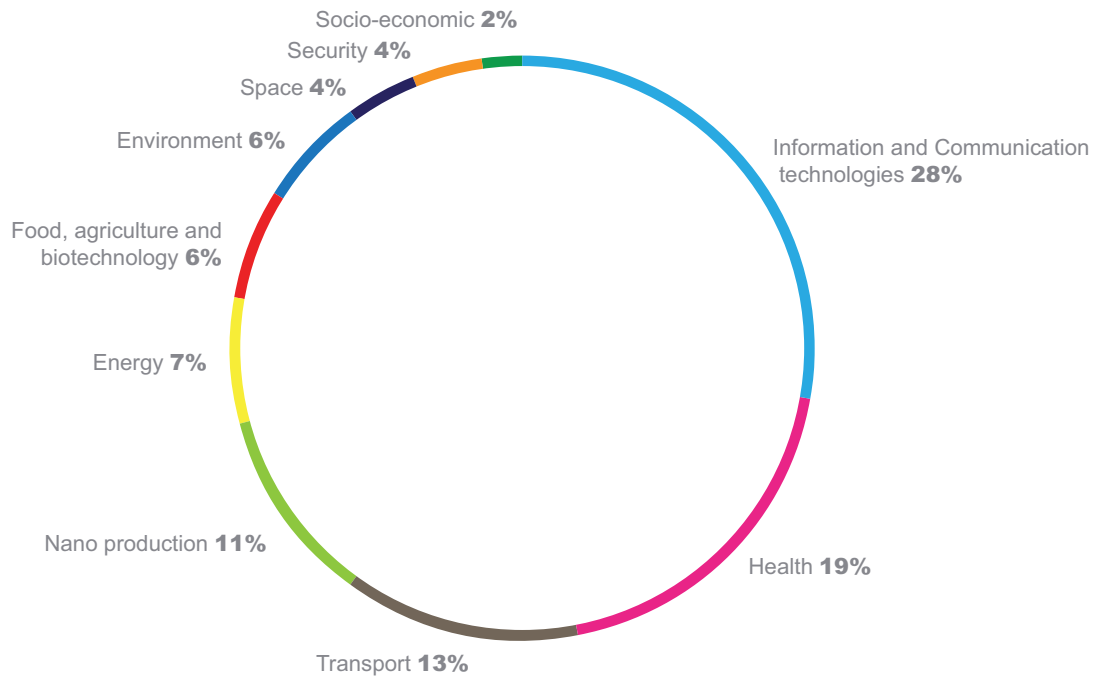
Source: World Bank

3.12 Seventh Framework Programme breakdown (50,5 € billion)



Source: CORDIS

3.13 Breakdown of funds for the Cooperation Specific Programme



Source: CORDIS

ROAD MAINTENANCE AND INVESTMENT

4.1 Investment and maintenance - Definition

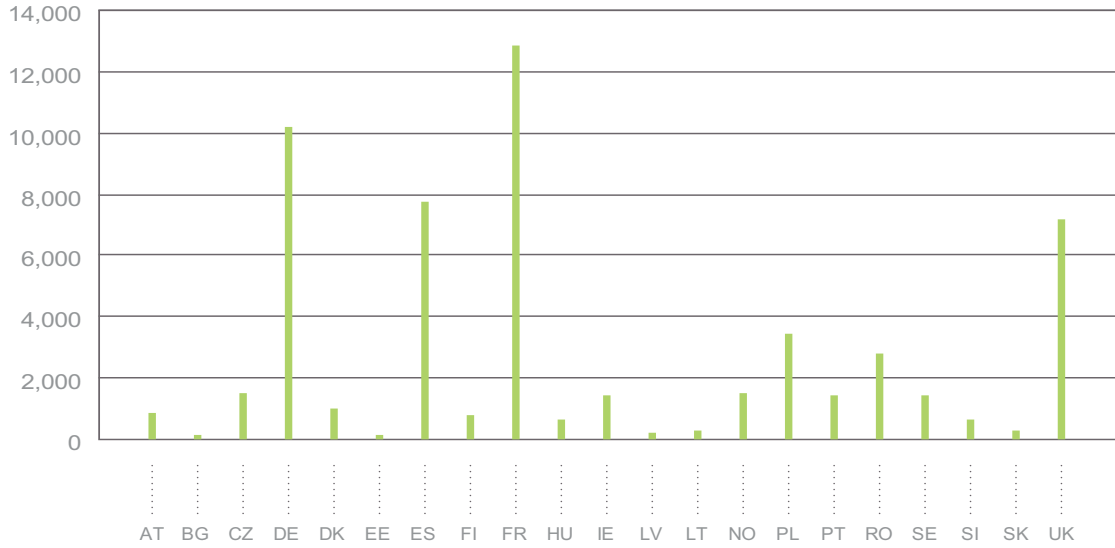
Most European countries distinguish “regular” and “non-regular” costs of maintenance, but the expenditures included in each category differ from one country to another. In the Netherlands, for instance, the terms fixed and variable maintenance are applied, whilst structural and operational maintenance are the definitions in Austria, routine and periodic maintenance in Sweden and routine and special maintenance in Spain.

The EC proposes to apply the following distinction: “Regular” costs aim at maintaining the functionality of existing infrastructure within its original lifetime (local repairs, like fixing cracks or potholes, winter maintenance, cleaning rest-places, maintaining grass areas, etc.). “Non-regular” costs are renewal expenditures prolonging the lifetime of the infrastructure without adding new functionalities (renewal of roadways and structures of bridges and tunnels, maintenance of road equipment, etc.).

It is necessary to state that definitions and data quality differ among the member countries. Given that there isn't any purchasing power parity corrected general index for transport infrastructure investment, we therefore call for caution when comparing investment data between countries.

Source: EC, ITF

4.2 Investment in road infrastructure in selected countries - 2007 (€ million)



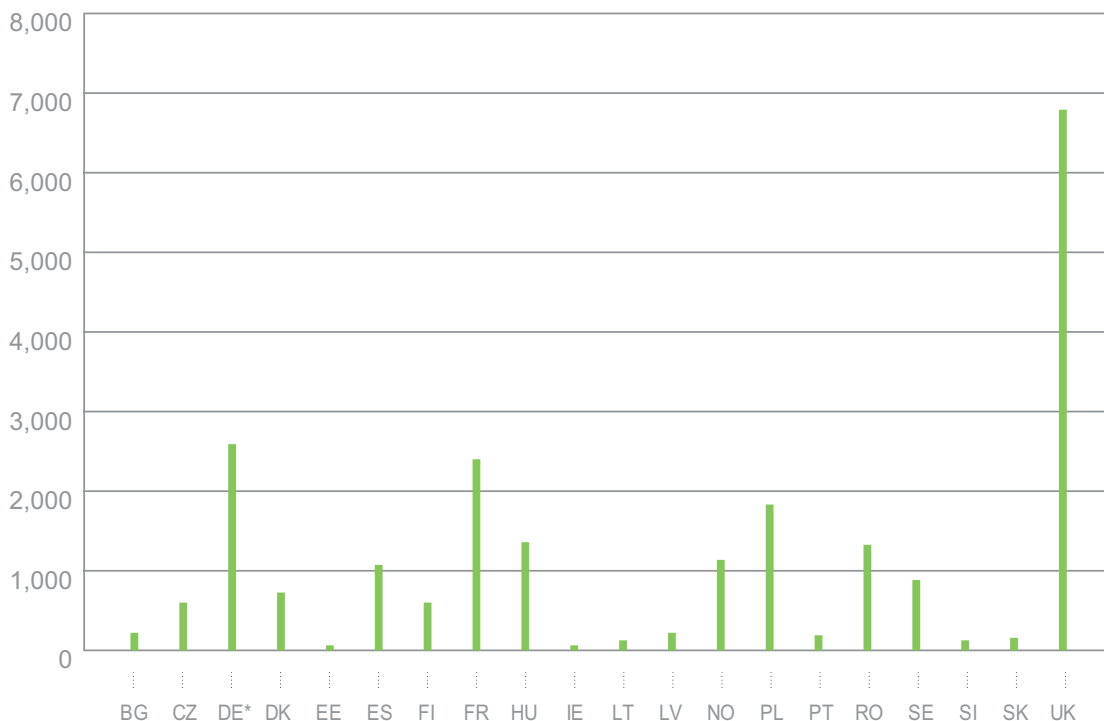
Source: ITF

4.3 Investment in road infrastructure in selected countries - 2007 (€ per km)



Source: ITF, IRF, EC

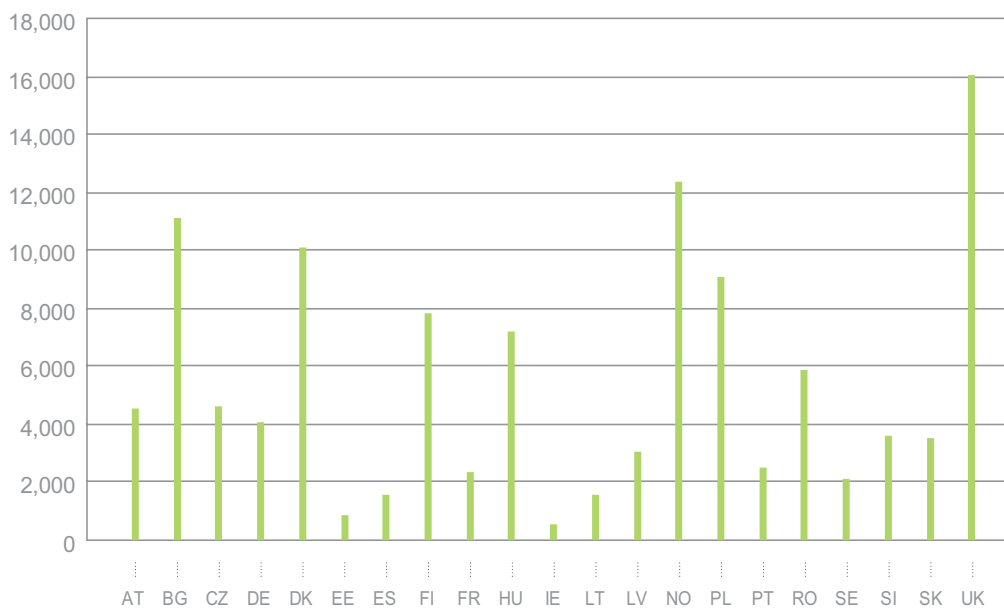
4.4 Investment in road maintenance in selected countries - 2007 (€ million)



Source: ITF, National Road Associations

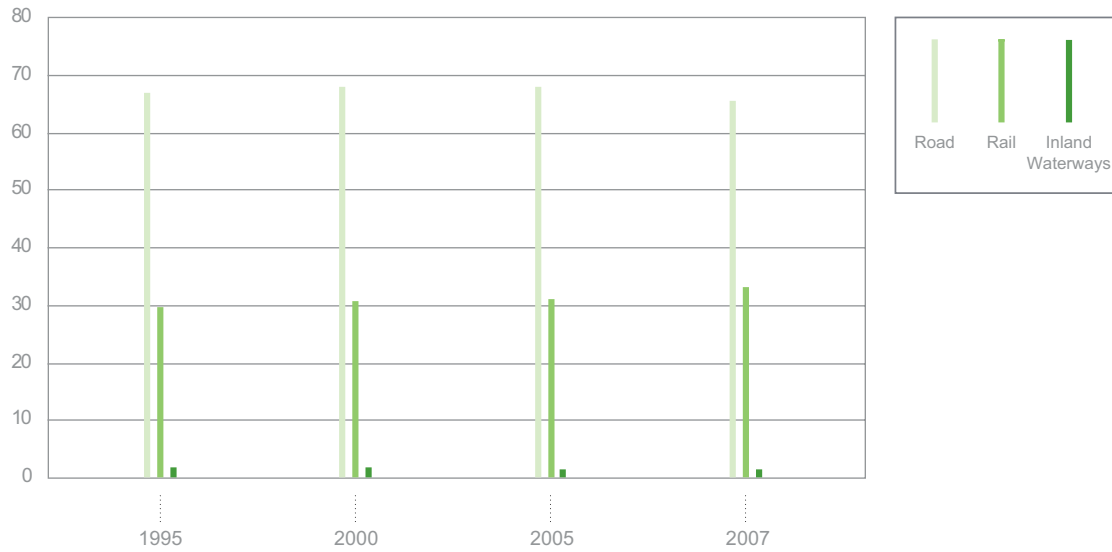
*2005 Figures

4.5 Investment in road maintenance per km of road network in selected countries - 2007 (€ per km)



Source: ITF, National Road Associations, IRF, EC

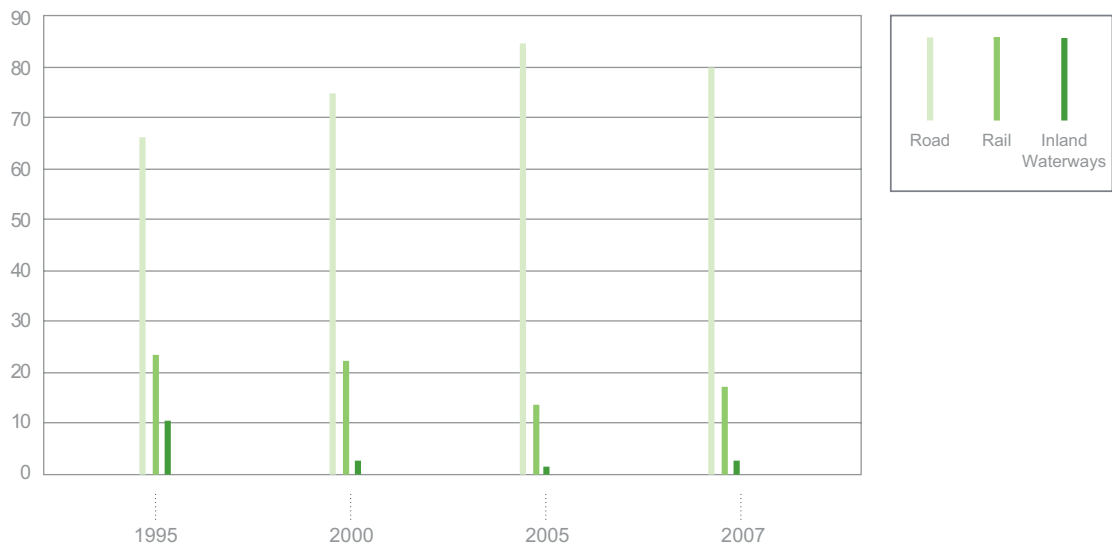
4.6 Transport infrastructure investment split in Western European countries*



Source: ITF

* Austria, Denmark, Finland, France, Germany, Iceland, Ireland, Norway, Portugal, Spain, Sweden, United Kingdom

4.7 Transport infrastructure investment split in Central and Eastern European countries*



* Croatia, Czech Republic, Estonia, FYR Macedonia, Hungary, Latvia, Lithuania, Poland, Romania, Serbia, Slovakia and Slovenia

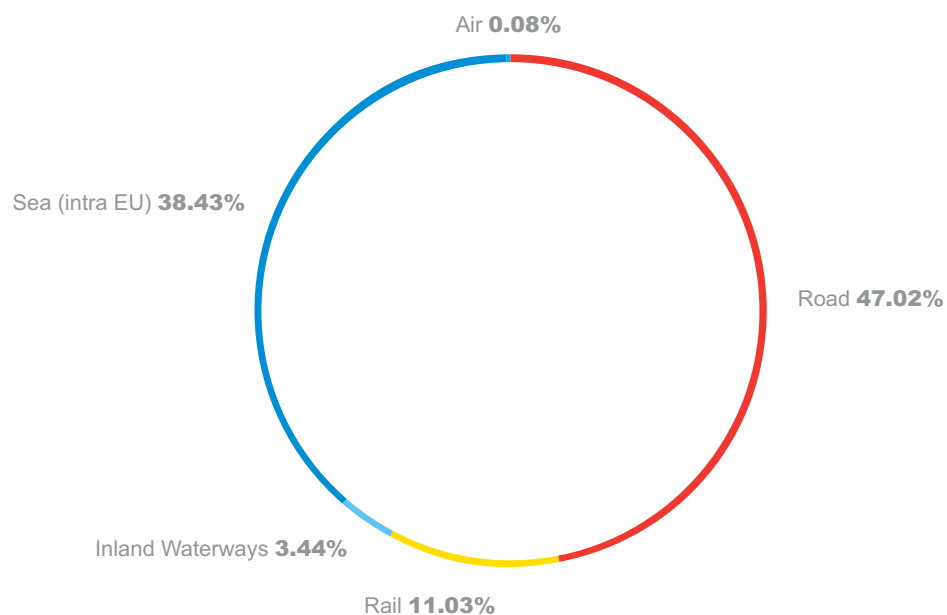
GOODS TRANSPORT

5.1 Transport of goods, performance by mode in EU-27 - 1995-2007 (billion tkm)

	Road	Rail	Inland Waterways	Sea (intra EU)	Air	Total
1995	1,289	386	122	1,150	2	2,947
1996	1,303	392	120	1,162	2	2,979
1997	1,352	410	128	1,205	2	3,097
1998	1,414	393	131	1,243	2	3,183
1999	1,470	384	129	1,288	3	3,274
2000	1,519	404	134	1,348	3	3,408
2001	1,556	386	133	1,400	3	3,478
2002	1,606	384	132	1,415	3	3,540
2003	1,625	392	124	1,444	3	3,588
2004	1,747	416	137	1,485	3	3,788
2005	1,800	414	139	1,520	3	3,876
2006	1,855	440	139	1,548	3	3,985
2007	1,927	452	141	1,575	3	4,098
1995-2007	43.9%	17.1%	15.6%	33.2%	55%	39.1%
Per Year	3.4%	1.3%	1.2%	2.7%	3.7%	2.7%
2006-2007	3.9%	2.7%	1.4%	1.7%	3.3%	2.8%

Source: Eurostat, ITF

5.2 Goods transport by mode in EU-27 - 2007 (% of tkm)



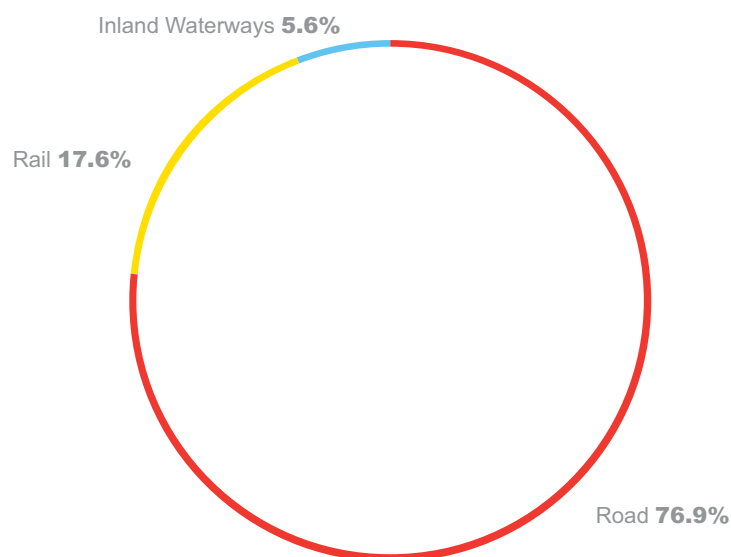
Source: Eurostat, International Transport Forum

5.3 Inland transport modal split in EU-27- 2000- 2007 (tkm in %)

	Road	Rail	Inland Waterways
2000	73.7	19.5	6.6
2001	74.8	18.6	6.5
2002	75.4	18.1	6.3
2003	75.7	18.4	5.8
2004	76.3	17.9	5.9
2005	76.9	17.6	5.9
2006	76.9	17.8	5.7
2007	76.9	17.6	5.6
2000-2007	4%	-10%	-15%

Source: Eurostat

5.4 Inland transport modal split in EU-27 - 2007 (tkm in %)



Source: Eurostat

5.5 Inland transport modal split by country - 2007 (tkm in %)

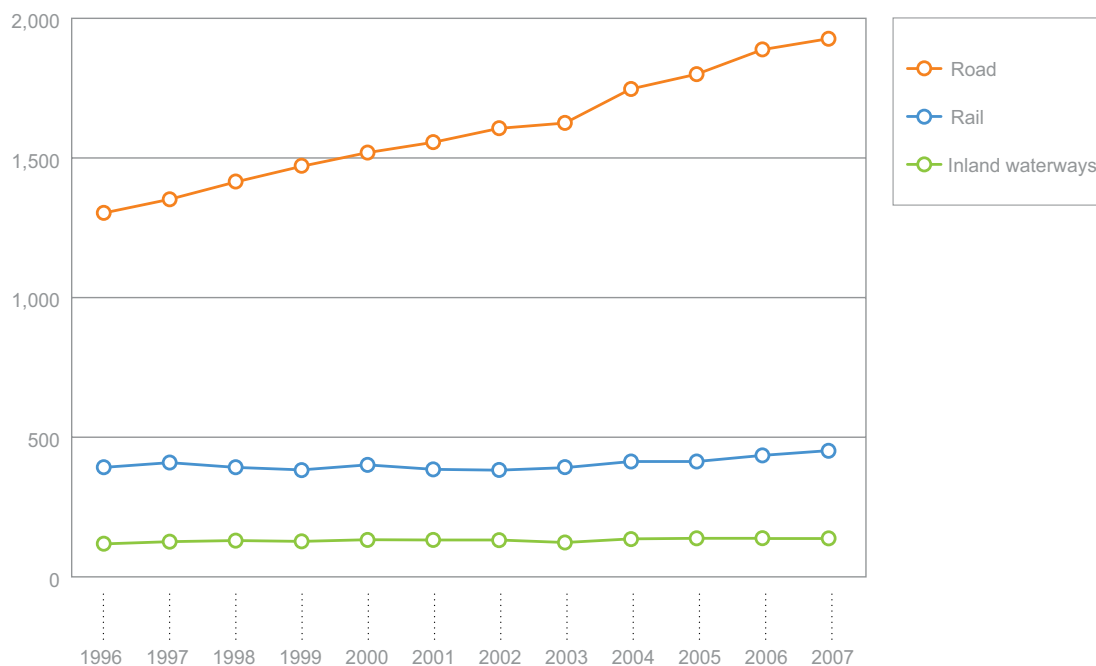
	Road	Rail	Inland waterways
BE	71.1	13.2	15.7
DK	92.2	7.8	0
DE	65.7	21.9	12.4
EL	97.1	2.9	0
ES	96.1	3.9	0
FR	81.4	15.2	3.4
IE	99.3	0.7	0
IT	90	10	0
LU	92.5	4.1	3.3
NL	61.80	5	33.2
AT	64	31.5	4.5
PT	94.7	5.3	0

	Road	Rail	Inland waterways
FI	73.8	25.9	0.3
SE	63.6	36.4	0
UK	86.6	13.3	0.1
EU-15	78.8	14.6	6.6
CY	100	0	0
CZ	74.6	25.3	0.1
EE	43.2	56.8	0
HU	76.3	19	4.7
LV	41.9	58.1	0
LT	58.5	41.5	0
MT	100	0	0
PL	74.4	25.5	0.1
SK	73.8	25.9	0.4
SI	79.2	20.8	0
BG	70	27	4.8
RO	74.0	17.5	10
EU-27	76.7	17.7	5.6
HR	74	25.2	0.8
TR	*94.9	*5.1	0
IS	100	0	0
NO	84.9	15.1	0
MK	88.5	11.5	0

Source: Eurostat

* 2006 data

5.6 Performance by mode for inland freight transport in EU-27 - 1995-2007 (billion tkm)



Source: Eurostat, ITF

5.7 Main country-to-country flows in international intra-EU road freight transport in EU-27 - 2006 (tonnes)

Rank in 2006	Pair of countries	Total tonnes	% of total intra EU-27 tonnes	% of hauliers of first country	% of hauliers of second country	% of other hauliers	Main other hauliers
1	DE - NL	81,834	9.8	31.1	64.5	4.4	PL
2	BE - FR	61,159	7.4	51.9	37	11.1	NL
3	DE - FR	50,177	6	62.8	20.7	16.4	LU
4	BE - NL	46,773	5.6	28	68.9	3.1	DE
5	BE - DE	40,325	4.9	29.8	46.8	23.4	NL
6	ES - FR	36,055	4.3	70.4	19.2	10.4	PT
7	AT - DE	34,686	4.20	49.4	42.9	7.8	CZ
8	DE - IT	30,217	3.6	42.1	39.3	18.5	AT
9	FR - IT	26,038	3.10	38.6	51.5	10	PL

Rank in 2006	Pair of countries	Total tonnes	% of total intra EU-27 tonnes	% of hauliers of first county	% of hauliers of second county	% of other hauliers	Main other hauliers
10	DE - PL	24,520	3	8.3	90.1	1.7	CZ
11	ES - PT	23,184	2.80	35.1	64.5	0.4	DE
12	IE - UK	21,071	2.5	36	63.6	0.4	AT
13	CZ - DE	19,722	2.40	81.2	15.7	3.1	PL
14	FR - NL	17,660	2.1	11.6	69.5	18.9	BE
15	DE - DK	14,302	1.7	56.8	36.2	7.1	LU
16	FR - UK	13,522	1.6	39.6	36.5	23.9	PL
17	DE - ES	13,360	1.6	24.4	58.2	17.4	PL
18	AT - IT	12,547	1.5	68.1	16.8	15.1	DE
19	ES - IT	9,349	1.1	54	35	11	SK
20	CZ - SK	7,730	0.9	55.9	42.6	1.6	PL

Source: DG TREN

5.8 Share by type of goods in EU-27 road freight transport - 2007* (1,000 tonnes)

	%	Tonnes
Cereals	1.52	265,474
Potatoes, other fresh or frozen fruits and vegetables	1.82	316,979
Live animals, sugar beet	0.70	121,286
Wood and cork	3.18	554,509
Textiles, textile articles and man-made fibres, other raw animal and vegetable materials	0.60	103,814
Foodstuff and animal fodder	10.30	1,795,655
Oil seeds and oleaginous fruits and fats	0.40	69,887

	%	Tonnes
Solid minerals fuels	0.82	143,566
Crude petroleum	0.03	5,473
Petroleum products	3.43	597,442
Iron ore, iron and steel waste and blast furnace dust	0.87	151,083
Non-ferrous ores and waste	0.43	75,437
Metal products	2.95	514,838
Cement, lime, manufactured building materials	11.01	1,918,607
Crude and manufactured minerals	36.23	6,315,275
Natural and chemical fertilizers	1.04	181,582
Coal chemicals, tar	0.20	34,350
Chemicals other than coal chemicals and tar	3.36	586,027
Paper pulp and waste paper	0.72	125,112
Transport equipment, machinery, apparatus, engines, whether or not assembled, and parts thereof	3.35	584,252
Manufactures of metal	0.96	186,206
Glass, glassware, ceramic products	0.60	104,701
Leather, textile, clothing, other manufactured articles	4.00	697,252
Miscellaneous articles	11.48	2,001,015

Source: Eurostat.

* Figures for Italy are for 2006

5.9 Registration of commercial vehicles in EU-27 and selected countries - 2006-2008

Light commercial vehicles (LCV)					
	Registrations 2006	Registrations 2007	Registrations 2008	Evolution 2007-2008	Evolution 2006-2008
AT	30,351	32,315	32,746	1.3%	7.9%
BE	57,917	65,392	64,639	-1.2%	11.6%
DK	62,915	56,152	33,619	-40.1%	-46.6%
FI	15,268	16,888	15,522	-8.1%	1.7%
FR	439,271	460,552	458,946	-0.3%	4.5%
DE	197,164	221,540	223,234	0.8%	13.2%
EL	23,735	24,007	22,211	-7.5%	-6.4%
IE	40,979	44,056	29,961	-32.0%	-26.9%
IT	234,566	252,796	230,921	-8.7%	-1.6%
LU	3,083	3,492	4,028	15.3%	30.7%
NL	64,558	80,783	84,659	4.8%	31.1%
PT	64,487	68,421	55,404	-19.0%	-14.1%
ES	273,818	275,398	165,961	-39.7%	-39.4%
SE	39,402	44,095	39,181	-11.1%	-0.6%
UK	331,976	341,719	290,859	-14.9%	-12.4%
EU-15	1,879,490	1,987,606	1,751,891	-11.9%	-6.8%
BG	9,959	8,488	8,669	2.1%	-13.0%
CZ	49,491	62,038	59,986	-3.3%	21.2%
EE	3,688	4,553	2,771	-39.1%	-24.9%
HU	21,604	21,920	21,557	-1.7%	-0.2%
LV	2,465	3,342	1,918	-42.6%	-22.2%
LT	4,296	3,999	2,920	-27.0%	-32.0%
PL	40,065	53,401	58,179	8.9%	45.2%
RO	30,508	24,468	33,117	35.3%	8.6%
SK	19,484	23,555	26,857	14.0%	37.8%
SI	6,166	7,804	8,532	9.3%	38.4%
EU-27	2,067,216	2,201,174	1,976,396	-10.2%	-4.4%
IC	2,487	2,773	1,226	-55.8%	-50.7%
NO	42,610	45,608	34,870	-23.5%	-18.2%
CH	23,536	25,794	26,890	4.2%	14.3%
EU+EFTA	2,135,849	2,275,349	2,039,382	-10.4%	-4.5%

Source: ACEA

Commercial vehicles over 3.5tn					
	Registrations 2006	Registrations 2007	Registrations 2008	Evolution 2007-2008	Evolution 2006-2008
AT	7,615	8,423	8,607	2.2%	13.0%
BE	10,396	12,178	12,106	-0.6%	16.4%
DK	5,993	7,200	7,106	-1.3%	18.6%
FI	5,257	4,853	5,211	7.4%	-0.9%
FR	53,355	52,808	57,870	9.6%	8.5%
DE	101,559	107,105	105,879	-1.1%	4.3%
EL	2,167	2,392	2,278	-4.8%	5.1%
IE	5,861	5,444	3,634	-33.2%	-38.0%
IT	35,747	35,820	34,477	-3.7%	-3.6%
LU	1,424	1,647	1,793	8.9%	25.9%
NL	19,461	15,340	18,287	19.2%	-6.0%
PT	5,406	5,644	5,535	-1.9%	2.4%
ES	41,076	45,260	31,935	-29.4%	-22.3%
SE	6,448	6,848	7,092	3.6%	10.0%
UK	55,574	50,747	57,410	13.1%	3.3%
EU-15	357,339	361,709	359,220	-0.7%	0.5%
BG	n.a.	3,101	3,790	22.2%	n.a.
CZ	9,927	11,587	10,581	-8.7%	6.6%
EE	1,541	1,903	1,280	-32.7%	-16.9%
HU	n.a.	n.a.	n.a.	n.a.	n.a.
LV	2,186	3,129	1,856	-40.7%	-15.1%
LT	3,124	5,006	3,730	-25.5%	19.4%
PL	15,896	24,586	22,726	-7.6%	43.0%
RO	7,782	18,362	8,382	-54.4%	7.7%
SK	4,433	5,506	4,885	-11.3%	10.2%
SI	2,062	2,717	2,630	-3.2%	27.5%
EU-27	404,290	437,606	419,080	-4.2%	3.7%
IC	526	544	288	-47.1%	-45.2%
NO	5,789	6,261	6,528	4.3%	12.8%
CH	4,481	4,396	5,132	16.7%	14.5%
EU+EFTA	415,086	448,807	431,028	-4.0%	3.8%

Source: ACEA

HCV- Heavy Commercial Vehicles (Trucks) over 16t*					
	Registrations 2006	Registrations 2007	Registrations 2008	Evolution 2007-2008	Evolution 2006-2008
AT	6,893	7,555	7,775	2.9%	12.8%
BE	7,800	9,340	9,634	3.1%	23.5%
DK	5,219	6,371	5,996	-5.9%	14.9%
FI	2,743	2,749	3,339	21.5%	21.7%
FR	43,613	44,405	48,163	8.5%	10.4%
DE	62,682	68,420	67,748	-1.0%	8.1%
EL	1,247	1,417	1,591	12.3%	27.6%
IE	3,740	3,519	2,648	-24.8%	-29.2%
IT	25,930	26,226	25,741	-1.8%	-0.7%
LU	1,265	1,472	1,584	7.6%	25.2%
NL	17,043	13,175	15,730	19.4%	-7.7%
PT	4,082	4,247	4,492	5.8%	10.0%
ES	32,675	35,971	24,911	-30.7%	-23.8%
SE	5,297	5,861	6,027	2.8%	13.8%
UK	34,532	29,332	35,094	19.6%	1.6%
EU-15	254,761	260,060	260,473	0.2%	2.2%
BG	n.a.	2,421	2,389	-1.3%	n.a.
CZ	6,699	8,217	7,436	-9.5%	11.0%
EE	1,389	1,644	1,124	-31.6%	-19.1%
HU	n.a.	n.a.	n.a.	n.a.	n.a.
LV	1,949	2,813	1,632	-42.0%	-16.3%
LT	2,893	4,679	3,335	-28.7%	15.3%
PL	11,361	19,239	16,699	-13.2%	47.0%
RO	4,170	6,991	5,994	-14.3%	43.7%
SK	3,354	4,289	3,718	-13.3%	10.9%
SI	1,679	2,326	2,227	-4.3%	32.6%
EU-27	288,255	312,679	305,027	-2.4%	5.8%
IC	334	307	193	-37.1%	-42.2%
NO	3,988	4,591	4,659	1.5%	16.8%
CH	3,746	3,290	3,886	18.1%	3.7%
EU + EFTA	296,323	320,867	313,765	-2.2%	5.9%

Source: ACEA

* does not include Buses & Coaches

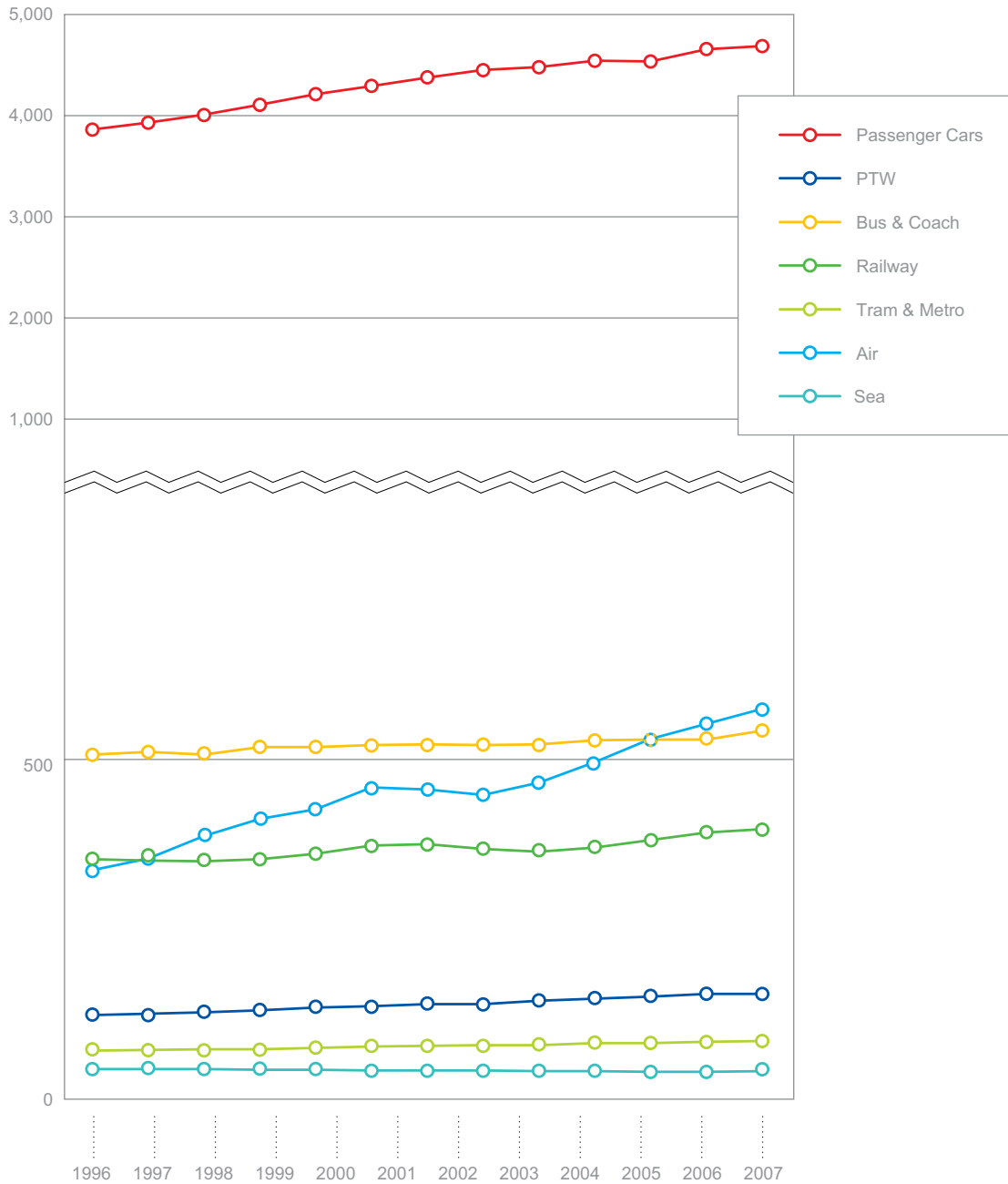
PASSENGER TRANSPORT

6.1 Transport of passengers by mode in EU-27 - 1995-2007 (billion pkm)

	Passenger Cars	PTW	Bus & Coach	Railway	Tram & Metro	Air	Sea	Total
1995	3,863	123	504	351	71	335	44	5,291
1996	3,931	125	508	349	72	352	44	5,381
1997	4,010	127	508	351	73	385	44	5,498
1998	4,108	130	515	351	73	410	43	5,630
1999	4,212	134	515	359	75	424	43	5,762
2000	4,292	136	518	371	77	456	42	5,892
2001	4,376	139	519	373	78	453	42	5,980
2002	4,452	139	518	366	79	445	42	6,041
2003	4,480	144	519	362	79	463	41	6,088
2004	4,543	147	525	368	82	493	41	6,199
2005	4,536	150	526	379	82	527	40	6,240
2006	4,656	154	526	390	84	549	40	6,399
2007	4,688	154	539	395	85	571	41	6,473
1995-2007	21.4%	25.2%	6.9%	12.5%	19.7%	70.4%	-6.8%	23.3%
Per Year	1.6%	1.9%	0.6%	1%	1.5%	4.5%	-0.7%	1.7%
2006-2007	0.7%	0%	2.4%	1.4%	1.8%	4%	2.5%	1.2%

Source: EC, ITF

6.2 Evolution of passenger transport by mode in EU-27 - 1995-2007



Source: EC, ITF

6.3 Inland transport modal split by country in EU-27 - 2007 (billion pkm)

	Passenger cars	Passenger cars %	Bus	Bus %	Railways	Railways %	Urban rail (tram + metro)	Urban rail (tram + metro) %	TOTAL
BE	112.5	79.3%	18.45	13.0%	9.93	7.0%	0.97	0.7%	141.8
BG	34.0	70.6%	11.27	23.4%	2.40	5.0%	0.47	1.0%	48.1
CZ	71.5	69.9%	16.12	15.8%	6.90	6.7%	7.75	7.6%	102.3
DK	55.28	80.1%	7.42	10.7%	6.18	8.9%	0.18	0.3%	69.06
DE	868.7	84.4%	65.37	6.4%	79.34	7.7%	15.92	1.5%	1,029.3
EE	10	76.7%	2.68	20.6%	0.27	2.1%	0.08	0.6%	13.0
IE	42.0	81.6%	7.30	14.2%	2.01	3.9%	0.18	0.3%	51.5
EL	95.0	78.8%	22.00	18.3%	1.93	1.6%	1.60	1.3%	120.5
ES	343.3	79.7%	59.16	13.7%	21.86	5.1%	6.40	1.5%	430.7
FR	727.8	83.9%	47.10	5.4%	80.31	9.3%	12.64	1.5%	867.9
IT	720.2	81.8%	104.12	11.8%	49.59	5.6%	6.22	0.7%	880.1
CY	5.5	80.9%	1.30	19.1%	0.00	0.0%	0.00	0.0%	6.8
LV	17.5	81.8%	2.64	12.3%	0.98	4.6%	0.28	1.3%	21.4
LT	39.12	90.7%	3.62	8.4%	0.41	1.0%	0.00	0.0%	43.2
LU	6.6	84.8%	0.86	11.1%	0.32	4.1%	0.00	0.0%	7.8
HU	41.42	59.5%	17.15	24.6%	8.75	12.6%	2.28	3.3%	69.6
MT	2.1	80.5%	0.51	19.5%	0.00	0.0%	0.00	0.0%	2.6
NL	148.8	83.2%	12.25	6.8%	16.33	9.1%	1.52	0.8%	178.9
AT	72.0	75.7%	9.80	10.3%	9.50	10.0%	3.87	4.1%	95.2
PL	239.26	82.3%	27.36	9.4%	19.52	6.7%	4.45	1.5%	290.6
PT	74.0	82.3%	10.88	12.1%	3.99	4.4%	1.05	1.2%	89.9
RO	60.0	69.3%	12.16	14.1%	7.48	8.6%	6.90	8.0%	86.5
SI	23.06	85.1%	3.24	12.0%	0.81	3.0%	0.00	0.0%	27.1
SK	25.99	69.9%	8.65	23.3%	2.17	5.8%	0.39	1.0%	37.2
FI	63.8	84.3%	7.54	10.0%	3.78	5.0%	0.52	0.7%	75.6
SE	99.6	82.6%	8.50	7.0%	10.27	8.5%	2.24	1.9%	120.6
UK	689.0	86.1%	51.50	6.4%	50.11	6.3%	9.54	1.2%	800.2
Total EU-27	4,688.0	82.1%	539.0	9.4%	395.1	6.9%	85.5	1.5%	5,707.6

Source: Eurostat, ITF

6.4 Motorisation by country - 2007

	Passenger cars (thousand)	Passenger cars per 1,000 inhabitants	PTW (thousand)	Buses (thousand)
BE	5,049	473	375	15
BG	2,082	272	90	24
CZ	4,280	412	860	21
DK	2,068	378	197	14
DE	41,184	501	5,550	75
EE	524	391	15	4
IE	1,910	434	37	8
EL	4,799	428	1,299	27
ES	21,760	481	4,742	61
FR	31,443	508	2,535	94
IT	35,680	598	9,280	96
CY	411	521	41	3
LV	905	398	44	11
LT	1,588	472	29	14
LU	322	665	39	1
HU	3,012	300	136	18
MT	225	548	13	1
NL	7,392	451	585	11
AT	4,246	510	668	9
PL	14,589	383	825	88
PT	4,379	412	537	15
RO	3,541	164	56	34
SI	1,014	501	71	2
SK	1,434	265	64	10
FI	2,570	485	377	12
SE	4,258	464	528	13
UK	29,101	476	1,295	112
EU-27	229,764	464	30,289	798
HR	1,491	336	184	5
MK	250	122		2
TR	6,472	92	2,003	562

Source: EC

6.5 Registration of passenger vehicles in EU-27 - 2006-2008

	2006	2007	2008	Evolution 07-08	Evolution 06-08
AT	308,594	298,182	293,697	-1.5%	-4.8%
BE	526,141	524,798	535,947	2.1%	1.9%
DK	156,934	162,684	149,967	-7.8%	-4.4%
FI	145,700	125,617	139,647	11.2%	-4.2%
FR	2,000,549	2,064,543	2,050,282	-0.7%	2.5%
DE	3,467,961	3,148,163	3,090,040	-1.8%	-10.9%
EL	267,706	279,794	267,242	-4.5%	-0.2%
IE	178,484	186,540	151,607	-18.7%	-15.1%
IT	2,326,049	2,493,106	2,160,131	-13.4%	-7.1%
LU	50,837	51,332	52,359	2.0%	3.0%
NL	484,079	505,538	499,980	-1.1%	3.3%
PT	194,702	201,816	213,386	5.7%	9.6%
ES	1,634,608	1,614,835	1,161,176	-28.1%	-29.0%
SE	282,766	306,794	253,982	-17.2%	-10.2%
UK	2,344,864	2,404,007	2,131,795	-11.3%	-9.1%
EU-15	14,369,974	14,367,749	13,151,238	-8.5%	-8.5%
BG	36,455	43,521	45,143	3.7%	23.8%
CZ	123,987	132,542	143,661	8.4%	15.9%
EE	25,515	30,902	24,335	-21.3%	-4.6%
HU	187,676	171,661	155,909	-9.2%	-16.9%
LV	25,626	32,497	19,192	-40.9%	-25.1%
LT	14,234	20,988	21,514	2.5%	51.1%
PL	238,683	292,376	319,965	9.4%	34.1%
RO	247,518	312,532	285,489	-8.7%	15.3%
SK	59,084	59,700	70,040	17.3%	18.5%
SI	58,462	65,511	68,533	4.6%	17.2%
EU-27*	15,387,214	15,529,979	14,305,019	-7.9%	-7.0%
IC	17,129	15,942	9,033	-43.3%	-47.3%
NO	109,164	129,195	110,617	-14.4%	1.3%
CH	269,452	284,688	287,489	1.0%	6.7%
EU+EFTA	15,782,959	15,959,804	14,712,158	-7.8%	-6.8%

Source: ACEA

* Data for Malta and Cyprus are currently not available.

6.6. Motorcycle Registrations 2006-2007 in EU-27

	2006	2007	evolution
AT	18,873	23,748	25.8%
BE	27,269	30,131	10.5%
DE	165,842	166,883	0.6%
DK	7,578	9,776	29.0%
EL	88,480	100,458	13.5%
ES	258,355	269,479	4.3%
FI	11,058	11,477	3.8%
FR	229,364	238,966	4.2%
IE	2,508	2,882	14.9%
IT	444,987	435,959	-2.0%
LU	1,378	1,417	2.8%
NL	14,790	16,237	9.8%
PT	11,435	11,991	4.9%
SE	27,051	27,064	0.0%
UK	109,527	119,863	9.4%
EU-15	1,418,495	1,466,331	3.4%
BG	n.a.	n.a.	n.a.
CY	2,925	3,710	26.8%
CZ	8,423	9,985	18.5%
EE	771	1,254	62.6%
HU	12,048	12,781	6.1%
LT	2,322	n.a.	n.a.
LV	2,120	3,786	78.6%
MT	544	740	36.0%
PL	5,115	7,574	48.1%
RO	n.a.	n.a.	n.a.
SK	2,122	3,144	48.2%
SI	3,598	5,061	40.7%
EU-27	1,458,483	1,514,366	3.8%

Source: ACEM

6.7 Transport of passengers per mode - EU-27/World - 2007

	Passenger transport 2007 (billion pkm)					
	EU-27	EU-27%	USA*	Japan*	China*	Russia
Passenger car	4,688.0	74.0%	7,317.1 ⁽¹⁾	724 ⁽²⁾	1,013.08 ⁽³⁾	n.a.
Bus / coach	539.0	8.5%	275.4	89.0	n.a.	127.9
Railway	394.6	6.3%	23.7	396.0	662.2	174.1
Tram + metro	85.4	1.4%	19.7	n.a.	n.a.	51.3
Waterborne	41.0	0.7%	0.6	3.8	7.4	1.1
Air (intra EU)	571.0	9.0%	950.5	86.0	237.1	111.0

Source: EC

(1) Including light trucks/vans

(2) Including light vehicles

(3) Including buses and coaches

*2006

SAFETY

7.1 Road accidents involving injury - 1990-2007* (thousand)

	BE	DK	DE	EL	ES	FR	IE	IT
1990	62.40	9.20	389.40	19.60	101.50	162.60	6.10	161.80
1995	50.70	8.40	388.00	22.80	83.60	132.90	8.10	182.80
2000	49.10	7.30	382.90	23.00	101.70	121.20	7.70	256.50
2005	40.40	5.40	336.60	16.90	91.20	84.50	5.60	240.00
2006	41.10	5.40	327.90	16.00	99.80	80.30	6.00	238.10
2007	41.48	5.55	335.49	15.09	100.51	81.27	5.16	230.87
Evolution								
1990-2007	-34%	-40%	-14%	-23%	-1%	-50%	-15%	43%
Evolution								
2006-2007	1%	3%	2%	-6%	1%	1%	-14%	-3%

	LU	NL	AT	PT	FI	SE	UK	EU-15
1990	1.20	44.90	46.30	45.10	10.20	17.00	265.60	1,342.90
1995	1.10	42.60	39.00	48.30	7.80	15.60	237.30	1,269.00
2000	0.90	42.30	42.10	44.50	6.60	15.80	242.10	1,343.70
2005	0.70	27.00	40.90	37.10	7.00	18.10	203.70	1,155.10
2006	0.80	24.50	39.90	35.70	6.70	18.20	194.80	1,135.20
2007	0.75	25.82	41.10	35.31	6.66	18.55	187.10	1,130.70
Evolution								
1990-2007	-38%	-42%	-11%	-22%	-35%	9%	-30%	-16%
Evolution								
2006-2007	-6%	5%	3%	-1%	-1%	2%	-4%	-0.4%

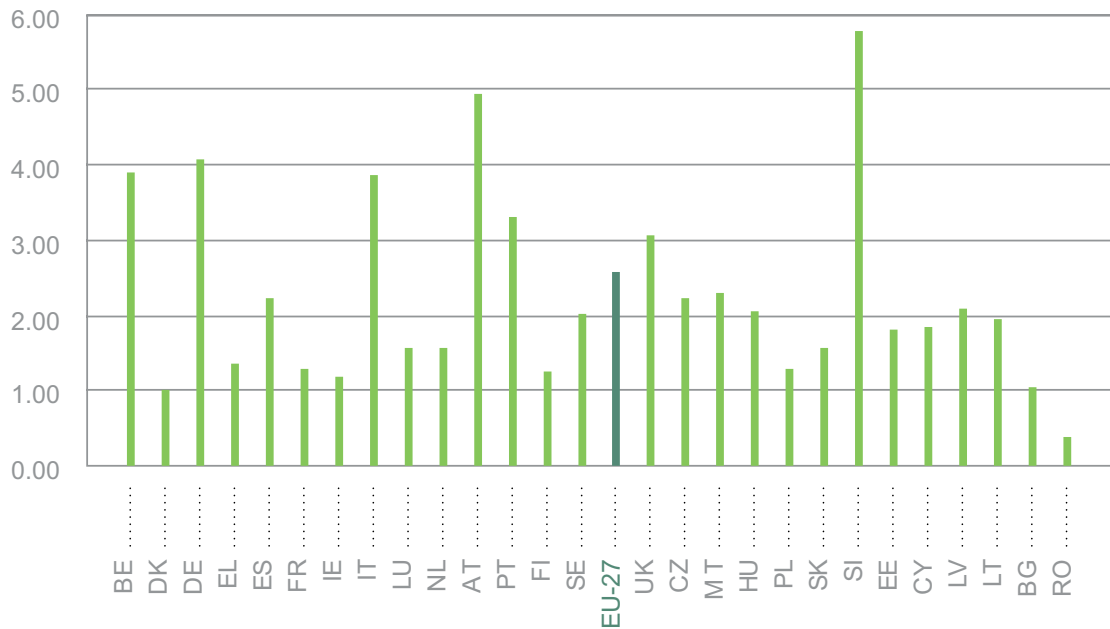
	CZ	EE	CY	LV	LT	HU	MT
1990	21.90	2.10	3.20	4.30	5.10	27.80	0.20
1995	28.70	1.60	3.10	4.10	4.10	19.80	1.00
2000	25.40	1.50	2.40	4.50	5.80	17.50	1.00
2005	25.20	2.30	1.40	4.50	6.80	20.80	0.80
2006	22.10	2.60	1.60	4.30	6.60	21.00	0.90
2007	23.06	2.45	1.47	4.78	6.60	20.61	0.94
Evolution							
1990-2007	5%	17%	-54%	11%	29%	-26%	370%
Evolution							
2006-2007	4%	-6%	-8%	11%	0%	-2%	4%

	PL	SI	SK	BG	RO	EU-12	EU-27
1990	50.50	5.20	8.20	6.50	9.70	144.70	1,487.60
1995	56.90	6.60	8.70	7.40	9.10	151.10	1,420.10
2000	57.30	8.60	7.90	6.90	7.60	146.40	1,490.10
2005	48.10	10.50	7.90	8.20	7.20	143.70	1,298.80
2006	46.90	11.60	8.00	8.20	6.60	140.40	1,275.60
2007	49.50	11.68	8.50	8.01	8.45	146.05	1,276.76
Evolution							
1990-2007	-2%	125%	4%	23%	-13%	1%	-14%
Evolution							
2006-2007	6%	1%	6%	-2%	28%	4%	0%

Source: EC, CARE

*Note: the definition of an accident involving personal injury differs from country to country.

7.2 Road accidents involving injury per one thousand of population in EU-27 - 2007



Source: Eurostat, CARE

7.3 Road fatalities* in EU-27 - 1970-2007

	BE	DK	DE	EL	ES	FR	IE	IT
1970	2,950	1,208	21,332	1,099	5,456	16,448	540	11,004
1980	2,396	690	15,050	1,445	6,522	13,672	564	9,220
1990	1,976	634	11,046	2,050	9,032	11,215	478	7,137
2000	1,470	498	7,503	2,037	5,777	8,079	418	7,061
2001	1,486	431	6,977	1,880	5,517	8,162	412	6,691
2002	1,306	463	6,842	1,634	5,347	7,655	376	6,739
2003	1,214	432	6,613	1,605	5,400	6,058	337	6,065
2004	1,161	369	5,842	1,670	4,749	5,530	377	5,692
2005	1,089	331	5,361	1,658	4,442	5,318	396	5,818
2006	1,069	306	5,091	1,657	4,104	4,709	365	5,669
2007	1,067	406	4,949	1,580	3,821	4,620	338	5,131
Evolution								
1970-2007	-63.83%	-66.39%	-76.80%	43.77%	-29.97%	-71.91%	-37.41%	-53.37%
Evolution								
2006-2007	-0.19%	32.68%	-2.79%	-4.65%	-6.90%	-1.89%	-7.40%	-9.49%

	LU	NL	AT	PT	FI	SE	UK	EU-15
1970	132	3,181	2,507	1,842	1,055	1,307	7,770	77,831
1980	98	1,997	2,003	2,941	551	848	6,240	64,237
1990	70	1,376	1,391	2,646	649	772	5,402	55,874
2000	76	1,082	976	1,877	396	591	3,580	41,421
2001	70	993	958	1,670	433	583	3,598	39,861
2002	62	987	956	1,655	415	560	3,581	38,578
2003	53	1,028	931	1,546	379	529	3,658	37,163
2004	50	804	878	1,294	375	480	3,368	32,639
2005	46	750	768	1,247	379	440	3,336	31,379
2006	36	730	730	969	336	445	3,298	29,514
2007	43	709	691	974	380	471	3,058	28,238
Evolution								
1970-2007	-67.42%	-77.71%	-72.44%	-47.12%	-63.98%	-63.96%	-60.64%	-63.72%
Evolution								
2006-2007	19.44%	-2.88%	-5.34%	0.52%	13.10%	5.84%	-7.28%	-4.32%

* Persons deceased (suicide not included - except DK, ES, FR; natural death not included- except LU, SE) within 30 days of a road accident.

	CY	CZ	EE	HU	LV	LT	MT	PL
1990	116	1,291	436	2,432	947	933	4	7,333
2000	111	1,486	204	1,200	588	641	15	6,294
2001	98	1,334	199	1,239	558	706	16	5,534
2002	94	1,431	223	1,429	559	697	16	5,827
2003	97	1,447	164	1,326	532	709	16	5,640
2004	117	1,382	170	1,296	516	752	13	5,712
2005	102	1,286	169	1,278	442	773	17	5,444
2006	86	1,063	204	1,303	407	759	11	5,243
2007	89	1,221	196	1,232	419	739	12	5,583
Evolution								
1990-2007	-23%	-5%	-55%	-49%	-56%	-21%	200%	-24%
Evolution								
2006-2007	3.49%	14.86%	-3.92%	-5.45%	2.95%	-2.64%	9.09%	6.48%

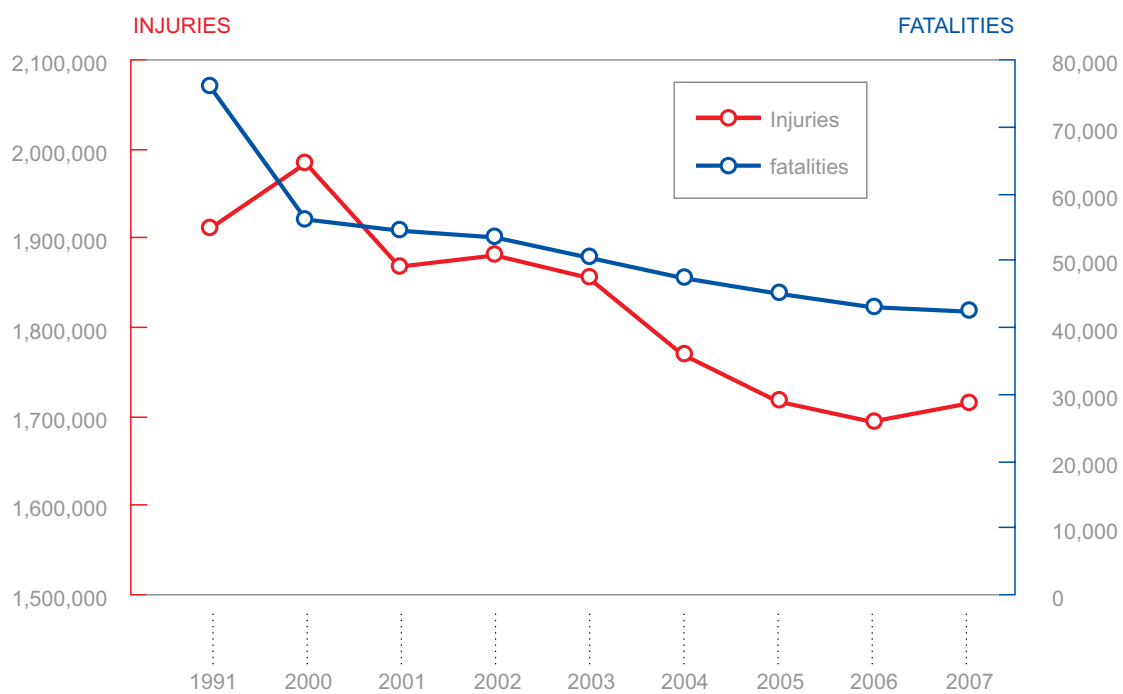
	SK	SI	RO	BG	EU-12	EU-27
1990	731	517	3,782	1,567	20,089	75,963
2000	628	313	2,499	1,012	14,991	56,412
2001	614	278	2,461	1,011	14,048	53,909
2002	610	269	2,398	959	14,512	53,090
2003	645	242	2,235	960	14,013	49,861
2004	603	274	2,418	943	11,504	46,835
2005	560	258	2,461	957	13,747	45,126
2006	579	262	2,478	1,043	13,438	42,952
2007	627	292	2,794	1,006	14,210	42,448
Evolution						
1990-2007	-14%	-44%	-26%	-36%	-29%	-44%
Evolution						
2006-2007	8.29%	11.45%	12.75%	-3.55%	5.74%	-1.17%

* Persons deceased (suicide not included - except DK, ES, FR; natural death not included - except LU, SE) within 30 days of a road accident.

Corrective factors are applied to the figures from Member States not currently using this definition.

Source: Eurostat, DG TREN

7.4 Evolution of road fatalities and injuries in EU-27 - 1991-2007



Source: CARE

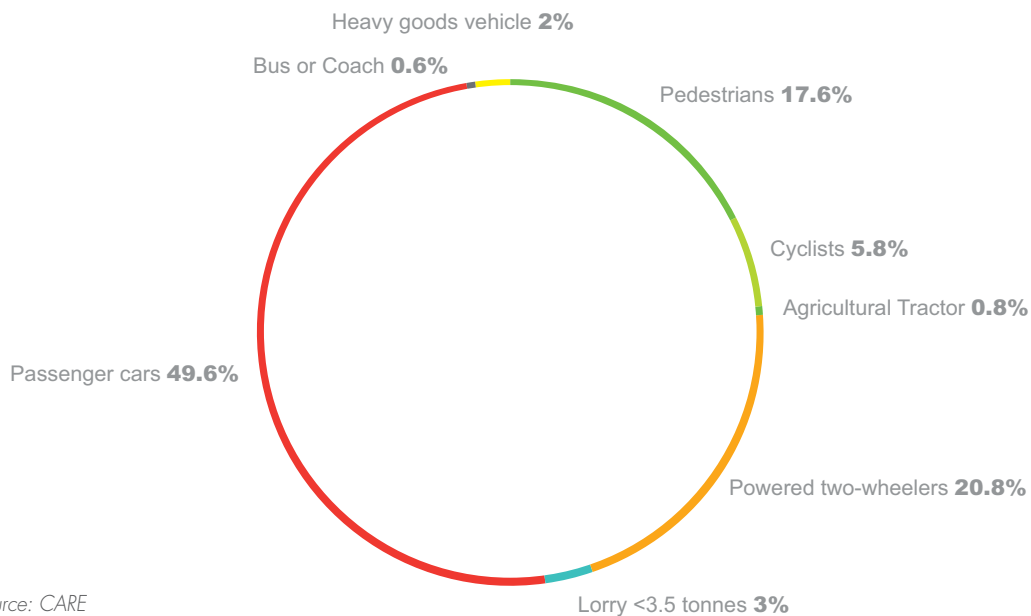
7.5 Road fatalities country rankings - 2007

per million inhabitants		per 100 million pkm*		per million passenger cars	
MT	29	SE	46	MT	54
NL	43	UK	44	NL	97
DK	74	FI	59	UK	106
SE	51	NL	47	SE	111
UK	50	MT	56	DE	120
DE	62	LU	64	LU	135
IE	78	IT	64	IT	145
LU	90	DE	56	FR	148
FI	72	DK	72	FI	150
EU-27	86	EU-27	88	AT	164
PT	92	AT	94	ES	179
ES	85	SI	125	IE	182
AT	83	BE	94	EU-27	187
FR	75	FR	62	DK	199
IT	86	ES	108	BE	213
BE	100	IE	80	PT	225
CZ	118	PT	128	CY	227
SK	116	CZ	163	CZ	291
CY	114	CY	158	SI	293
RO	130	EL	158	EL	338
HU	123	EE	193	EE	364
SI	145	LT	187	PL	399
PL	146	PL	229	HU	413
BG	131	SK	235	SK	453
EE	146	HU	289	LT	465
LV	184	BG	289	LV	485
EL	141	LV	234	BG	523
LT	219	RO	448	RO	782

Source: EC

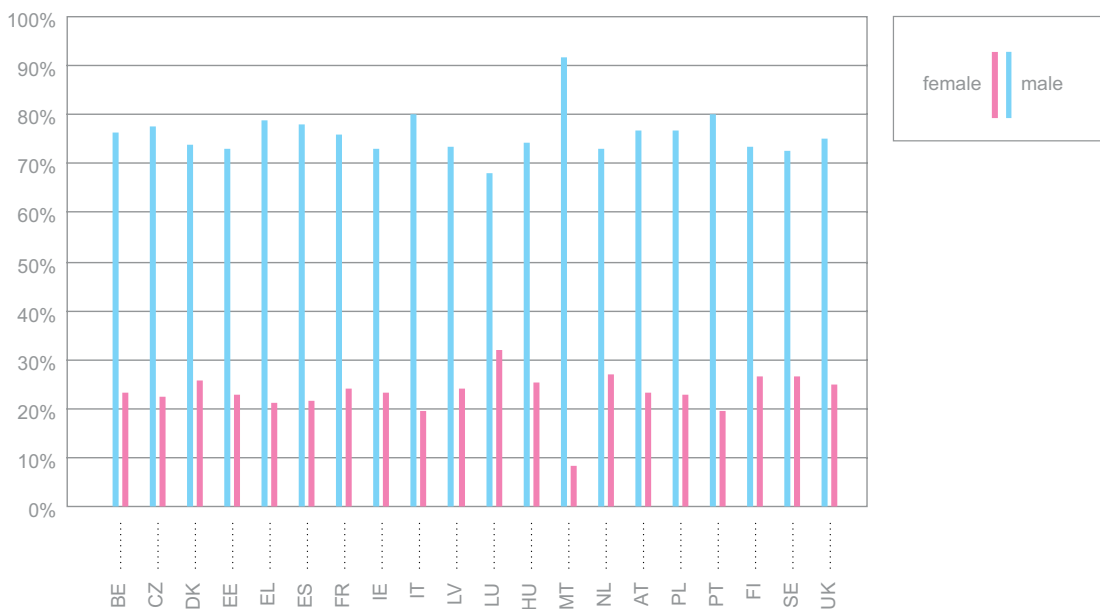
* p/km: passenger-kilometres of cars and powered two-wheelers only.

7.6 Road fatalities by mode of transport in 20 EU Member States - 2007



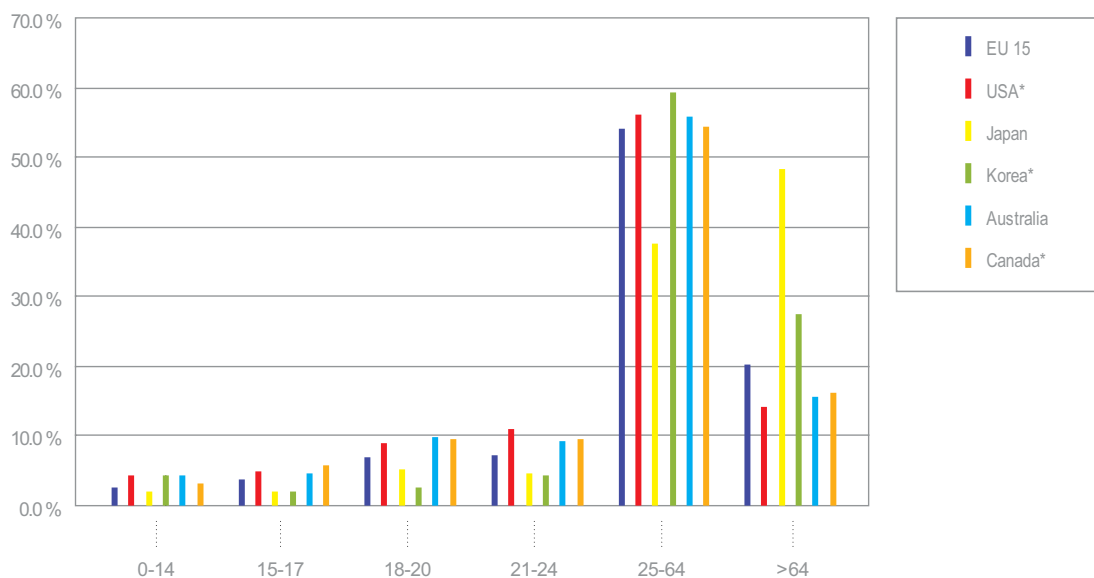
Source: CARE
 Data for SK, SI, RO, BG, DE, IT, FI not available

7.7 Road fatalities by gender in EU selected countries (%) - 2007



Source: CARE

7.8 Fatalities by age group in EU-15 and selected countries (%) - 2007



Source: European Commission.

* 2004 Figures.

7.9 Road fatalities by age group in EU-15 and selected countries - 2007

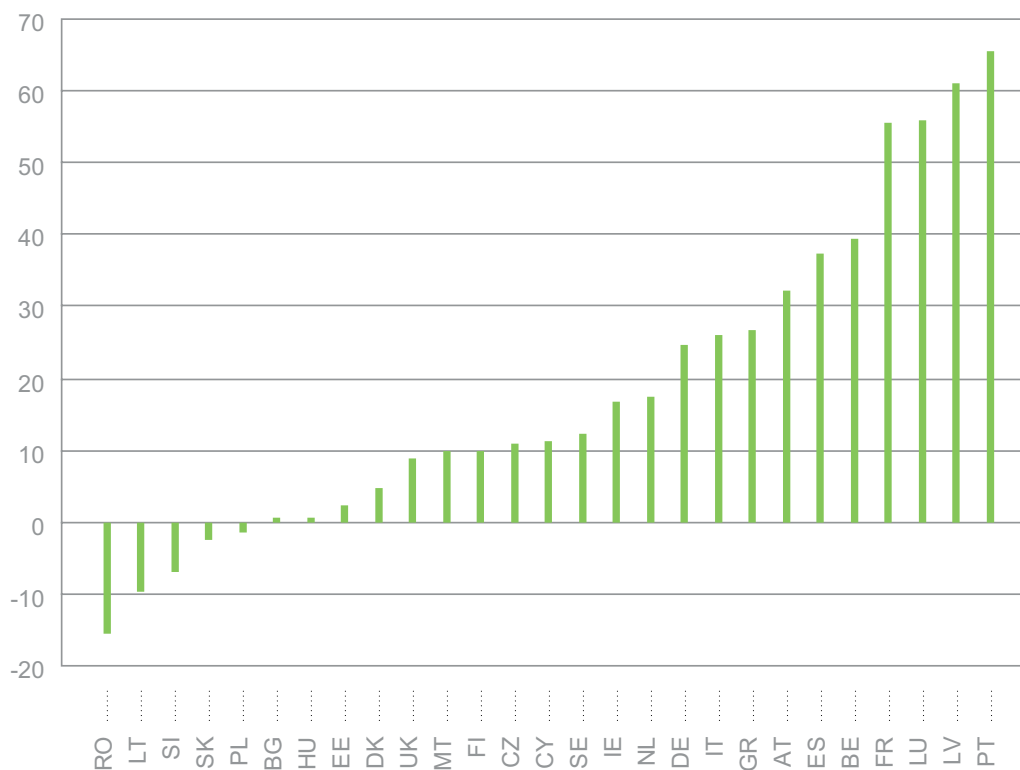
	0-14	15-17	18-20	21-24	25-64	>64	Total
AT	13	32	76	59	366	145	691
BE	30	27	90	125	622	169	1,063
DE	111	176	524	447	2,535	1,153	5,320
DK	20	19	28	30	214	95	406
ES	108	136	229	325	2,382	602	3,782
EL	42	43	280*		892	330	1,587
FR	164	200	466	515	2,383	884	4,612
FI	14	18	42	33	194	79	380
IT	95	190	723*		2,868	1,105	4,981
IE	16	14	37	39	168	58	332
LU (1)	0	2	6*		23	12	43
NL	36	32	63	71	326	181	709

* 18-24

	0-14	15-17	18-20	21-24	25-64	>64	Total
PT	21	10	54	72	581	215	953
SE	10	22	43	43	248	105	471
UK	91	182	301	317	1,490	557	2,938
EU-15	771	1,103	1,953	2,076	15,292	5,690	28,268
Average EU-15	51	107	300	173	928	711	1,885
LV	11	15	44*		259	73	402
MT	0	0	4*		5	3	12
CZ	25	29	82	108	753	202	1,199
PL	156	180	385	569	3,251	946	5,487
EE	6	8	41*		97	41	193
HU	37	30	46	93	805	209	1,220

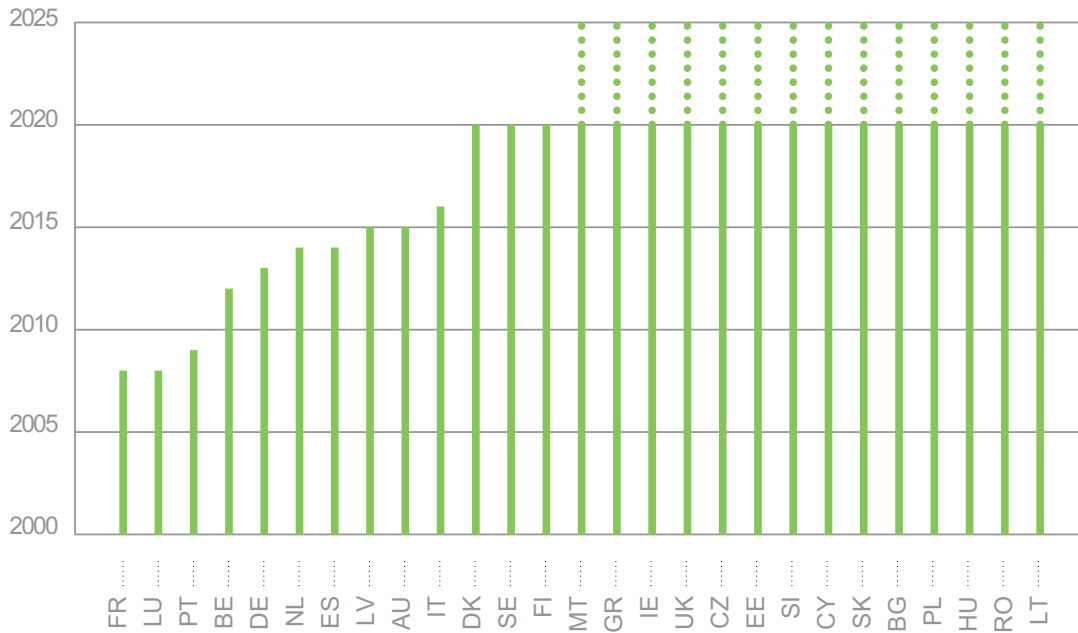
Source: IRTAD, CARE * 18-24 (1) 2004 Data

7.10 Lives saved per country in 2007 compared with 2001 (per million inhabitants)



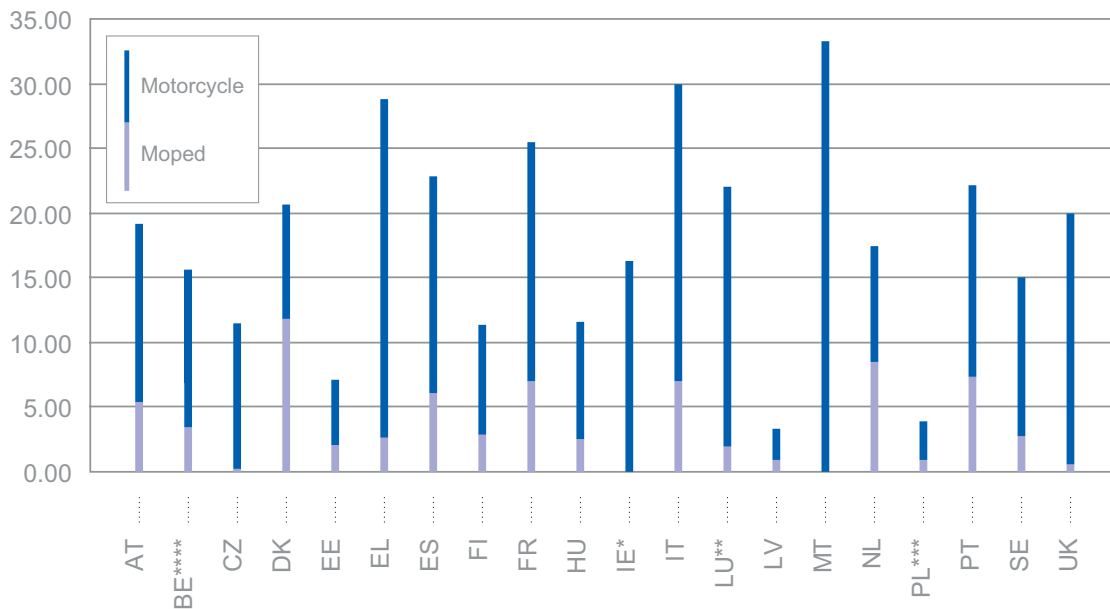
Source: Table 7.3, Eurostat

7.11 Expected year of reaching EU target of halving deaths by 2010



Source: European Transport Safety Council

7.12 PTWs Fatalities in selected countries in 2007 (%)



Source: CARE
 *2003 / **2004 / ***2005 / ****2006

TAXATION

8.1 Excise duties in EU-27 - 2007-2008 (€/1000 litres)

	2007		2008		evolution 07-08	
	Unleaded Diesel		Unleaded Diesel		Unleaded Diesel	
BE	592	331	592	318	0.0	-3.9
DK	537	364	561	382	4.5	4.9
DE	655	470	655	470	0.0	0.0
EL	331	276	359	302	8.5	9.4
ES	396	302	360	302	-9.1	0.0
FR	607	428	607	428	0.0	0.0
IE	443	368	509	368	14.9	0.0
IT	564	423	564	423	0.0	0.0
LU	462	290	462	302	0.0	4.1
NL	679	371	701	413	3.2	11.3
AT	447	347	442	437	-1.1	25.9
PT	583	364	583	364	0.0	0.0
FI	588	319	627	364	6.6	14.1
SE	371	399	568	446	53.1	11.8
UK	713	713	661	661	-7.3	-7.3
EU-15 average	531	384	550	399	3.6	3.7
BG	322	274	350	307	8.7	12.0
CZ	419	352	483	406	15.3	15.3
EE	288	245	359	330	24.7	34.7
CY	303	248	299	245	-1.3	-1.2
LV	300	256	379	330	26.3	28.9
LT	287	245	434	330	51.2	34.7
HU	376	309	448	368	19.1	19.1
MT	474	332	459	352	-3.2	6.0
PL	416	288	488	339	17.3	17.7
RO	327	260	336	284	2.8	9.2
SI	400	323	403	383	0.8	18.6
SK	415	388	515	481	24.1	24.0
EU-27 average	455	344	489	375	7.4	9.2

Source: ACEA

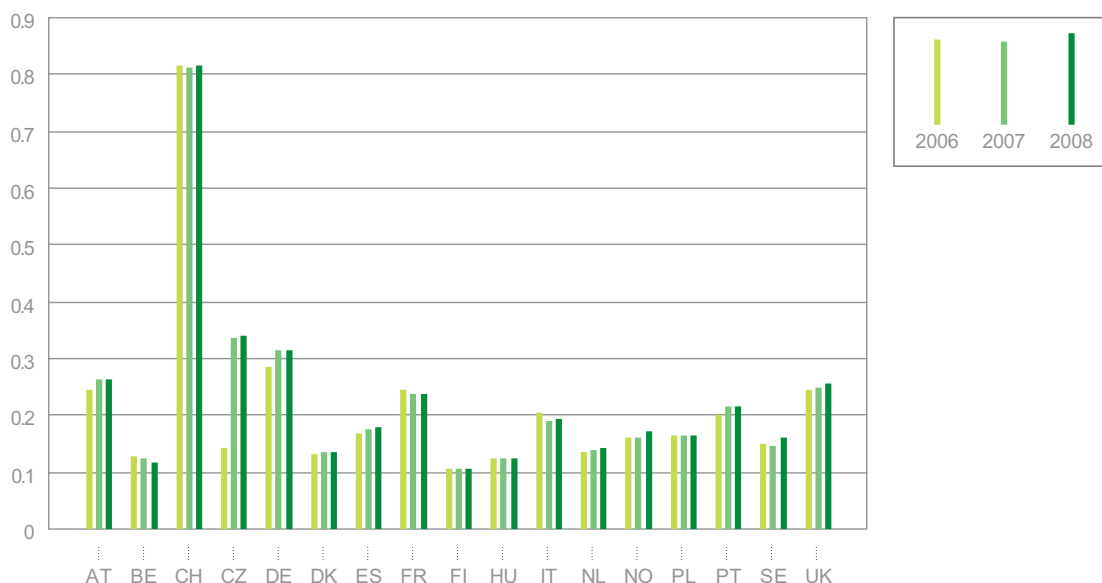
8.2 Motor vehicle tax revenue in EU-15 - 2007 (€ billion)*

	AT	BE	DK	DE	ES	FR	EL	IE	IT	NL	PT	FI	SE	UK
	€ bn	€ bn	DKK bn	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn	€ bn	SEK bn	£ bn
	2006	2004	2008	2007	2007	2007	2006	2005	2007	2007	2006	2007	2008	2007
Purchase or transfer VAT on vehicles.	2.510	4.291	n.a.	26.800	6.497	13.458	n.a.	0.058	19.560	2.643	1.200	1.219	15.000	1.283
servicing/repair parts, tyres														
New vehicles sales	n.a.	1.176	n.a.	n.a.	4.027	7.617	0.742	n.a.	n.a.	0.820	n.a.	n.a.	n.a.	n.a.
Second hand vehicles sales	n.a.	0.074	n.a.	2.100	0.071	0.627	0.115	n.a.	n.a.	0.089	n.a.	n.a.	n.a.	n.a.
Services and repair+tyres	n.a.	1.416	n.a.	4.200	n.a.	5.215	n.a.	n.a.	n.a.	1.573	n.a.	n.a.	n.a.	n.a.
Accessories and spare parts	n.a.	0.865	n.a.	1.300	2.399		0.18	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Fuels & Lubricants	5.523	5.765	15.000	39.300	18.601	33.673	2.820	2.339	33.370	6.943	3.700	3.314	50.000	24.510
Sales & registration taxes	0.53	0.319	24.000	n.a.	1.761	1.891	0.997	1.712	1.320	0.797	1.175	1.412	n.a.	n.a.
Annual ownership	1.510	1.463	9.626	8.900	2.412	1.109	0.819	0.802	6.210	2.766	0.080	0.585	11.850	5.38
Driving license fees taxes	n.a.	0.007	n.a.	0.008	0.099	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.07
Insurance taxes	0	0.449	2.096	3.520	0.752	3.900	n.a.	n.a.	4.550	n.a.	n.a.	0.272	3.350	n.a.
Tolls	1.300	n.a.	0.413	n.a.	n.a.	8.838	n.a.	0.039	1.180	n.a.	n.a.	n.a.	n.a.	n.a.
Customs duties	n.a.	0.093	n.a.	0.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	0.125	n.a.	n.a.	n.a.
Other taxes	0.57	0.520	n.a.	0.29	0.391	1.163	n.a.	0.136	4.240	1.788	0.090	n.a.	7.250	3.710
TOTAL	12.236	12.148	50.490	80.000	30.513	64.033	5.673	5.086	70.430	17.419	6.370	6.802	87.450	46.5
€ bn	12.3	12.1	6.7	80	30.5	64	5.7	5.1	70.4	17.4	6.4	6.8	7.9	52.6
Total = € 378 bn														

Source: ACEA

* No data are available for other EU Member States.

8.3 Net taxation per v-km (€/km) on domestic standard haul in selected countries 2006-2008



Source: ITF

8.4 Net fuel taxes in selected countries 2005-2008 (€/litre)

	2005	2006	2007	2008 (March)
AT	0.30	0.33	0.36	0.36
BE	0.34	0.35	0.33	0.31
CH	0.49	0.49	0.48	0.49
CZ	0.38	0.40	0.36	0.36
DE	0.47	0.47	0.47	0.47
DK	0.37	0.36	0.37	0.38
ES	0.29	0.29	0.30	0.30
FR	0.38	0.39	0.39	0.39
FI	0.27	0.27	0.27	0.27
HU	0.34	0.34	0.32	0.32
IT	0.40	0.41	0.40	0.40
NL	0.36	0.36	0.37	0.38
NO	0.41	0.45	0.45	0.49
PL	0.02	0.02	0.02	0.02
PT	0.31	0.31	0.36	0.36
SE	0.37	0.38	0.39	0.41
UK	0.69	0.71	0.72	0.74

Source: ITF

8.5 At the pump prices of petroleum EU-25 - 2007

	Unleaded		Diesel	
	€/litre	of which taxes (%)	€/litre	of which taxes (%)
BE	1.28	64.70	0.98	50.80
CZ	1.03	56.70	1.00	51.70
DK	1.26	62.80	1.05	54.90
DE	1.30	66.40	1.11	58.40
EE	0.86	48.80	0.83	44.50
EL	0.98	50.10	0.95	44.80
ES	1.02	53.20	0.94	52.70
FR	1.25	64.80	1.06	56.90
IE	1.10	57.30	1.06	51.80
IT	1.28	60.50	1.13	53.70
CY	0.93	42.30	0.87	40.90
LV	0.90	51.60	0.88	44.50
LT	0.88	43.30	0.85	44.50
LU	1.09	55.10	0.92	46.90
HU	1.08	55.80	1.02	48.70
MT	1.04	45.20	0.94	41.30
NL	1.42	62.60	1.06	48.00
AT	1.08	57.50	1.00	53.00
PL	1.06	59.00	0.95	50.70
PT	1.30	62.00	1.05	52.00
SI	1.03	55.30	0.96	50.60
SK	1.09	58.10	1.08	55.60
FI	1.26	64.40	0.99	50.70
SE	1.22	57.90	1.09	57.50
UK	1.37	67.70	1.41	66.30

Source: Eurostat

8.6 Current fleet renewal schemes

Country	Incentives	Vehicle Age	Conditions	Duration
AU	€ 1,500	> 13 years	- New cars minimum € 4 - Total envelope € 45 m	01.04.2009 - 31.12.2009
DE	€ 2,500	> 9 years	- New cars minimum € 4 - Used car purchased maximum 1 year old - Total envelope € 5 bn	14.01.2009 - 31.12.2009
FR	€ 1,000	> 10 years	- New Car emits max. 160 g/km of CO ₂ - No CO ₂ Requirements for a new light commercial vehicle - Estimated cost € 220 m	04.12.2008 - 21.12.2009
IT	€ 1,500 - 3,000*	> 9 years	- New car minimum € 4 and emits max. 130 g/km (diesel) or 140 g/km (other fuels) of CO ₂	07.02.2009 - 31.12.2009
PT	€ 1,000 € 1,250	> 10 years > 15 years	- New car emits max. 140 g/km of CO ₂	01.01.2009 - 31.12.2009
RO	€ 900 appr.	> 10 years	- Maximum 60,000 cars	01.01.2009 - 31.12.2010
ES	Interest-free loan up to € 10,000	> 10 years or > 250,000 km	- New car value max. € 30,000 - New car emits max. 140 g/km of CO ₂ - New light commercial vehicle emits max. 160 g/km of CO ₂ - Applicable to purchase of used cars (up to 5 years old) provided scrapped car is at least 15 years old	01.12.2008 - 01.10.2010
LU	€ 1,500- 1,750	> 10 years	- € 1750 if new car emits max. 120 g/km of CO ₂ (diesel ≤ 5 mg PM)	
CY	€ 675 - 1,700	> 15 years	- € 675 for simple scrapping - € 1,280 if combined with purchase of a new car that consumes max. 7 litres/100 km - € 1,700 km if combined with purchase of a new car that consumes max. 5 litres/100 km	ongoing

* Up to 5000 if emits less than 120 g/km

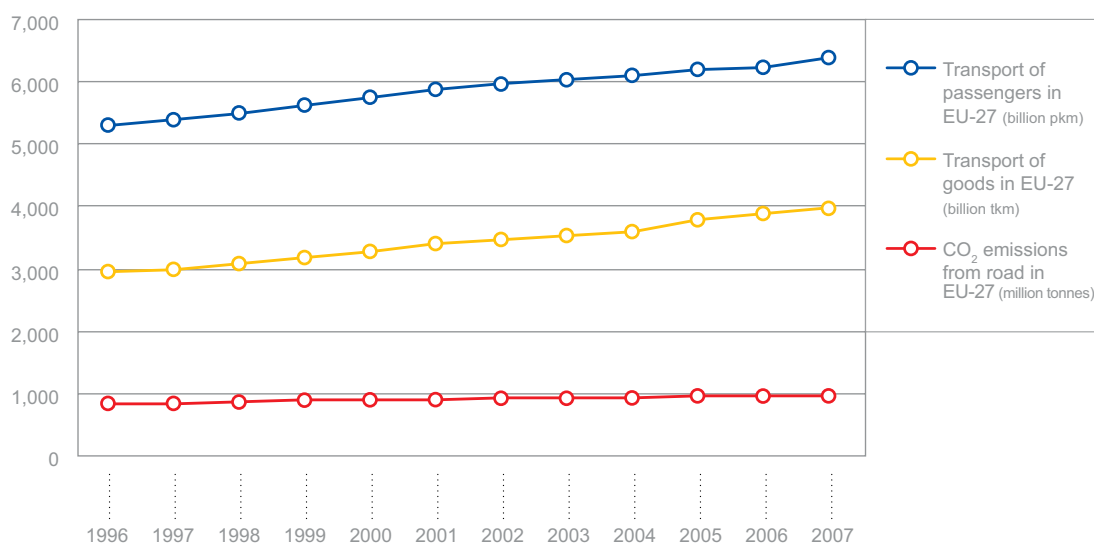
Country	Incentives	Vehicle Age	Conditions	Duration
SK	€ 1,000 - 1,500	> 10 years	<ul style="list-style-type: none"> - New car value maximum € 25,000 - € 1,000 incentive without contribution from the dealer - 1,500 incentive when dealer contributes € 500 (total customer benefit in that case € 2,000) 	09.03.2009 - 25.03.2009
	€ 2,000	> 10 years	<ul style="list-style-type: none"> - Dealers pay 50% of the incentive - New car value maximum € 25,000 	06.04.2009 - 31.12.2009
NL	€ 750 - 1,000	> 13 years	<ul style="list-style-type: none"> - Petrol cars/light commercial vehicles - € 750 if old car/van > 19 years - € 1,000 if old car/van > 13 < 19 years - New car/van < 8 years 	2009 - 2010 Exact date TBC
	€ 1,000 - 1,750	> 9 years	<ul style="list-style-type: none"> - Diesel cars/light commercial vehicles - € 1,000 for old car - € 1,000 for old van < 1,800 kg - € 1,750 for old van > 1,800 kg - New car/van equipped with particulate filter 	
UK	£ 2,000	> 10 years	<ul style="list-style-type: none"> - Manufacturers pay 50% of the incentive - Passenger cars and light commercial vehicles - Total envelope £ 300 m 	05.2009 - 02.2010

Discussions regarding possible scrapping schemes are currently taking place in the Czech Republic, Hungary and Poland

Source: ACEA

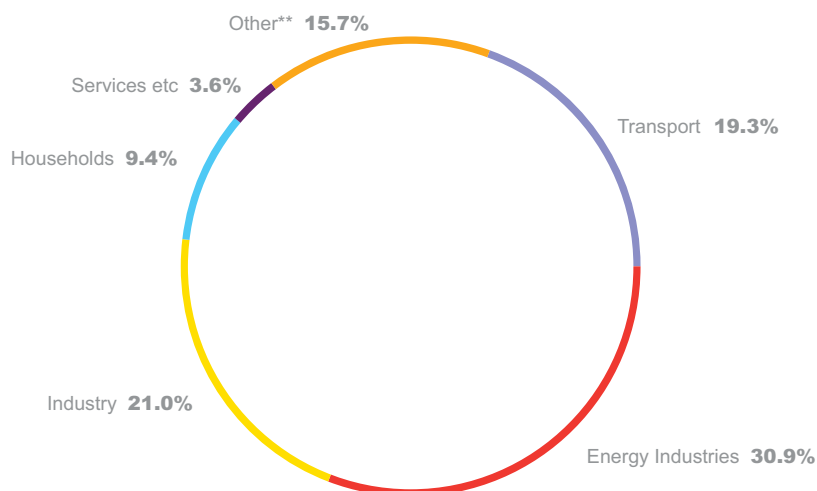
ENVIRONMENT

9.1 Comparison between road CO₂ emissions and freight and passenger transport in EU-27 - 1996-2006



Source: EEA

9.2 Percentage split of EU-27 greenhouse gas emissions* per sector - 2006



Source: EEA

* Total greenhouse gas (GHG) emissions comprise the Kyoto basket of 6 greenhouse gases: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (NO₂), hydrofluorocarbons (HFC), perfluorocarbons (PFC) and sulphur hexafluoride (SF₆).

** Emissions from fuel combustion in agriculture/forestry/fisheries, Other (Not elsewhere specified), Fugitive Emissions from Fuels, Solvent and Other Product Use, Agriculture, Waste, Other.

9.3 Fuel market share for new car registrations - 2008



Source: ACEA

9.4 Diesel market share for new car registrations 1998 - 2008

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Evolution 1998-2008
AT	54	57	61	65	69	71	70	64	62	59	55	1%
BE	52	54	56	62	64	68	70	72	74	77	79	52%
DK	4	9	13	17	20	22	24	23	26	38	46	1,048%
FI	15	15	n.a.	16	15	15	15	17	20	28	50	231%
FR	40	44	49	46	63	67	69	69	71	74	77	93%
DE	17	22	30	34	37	39	44	42	44	48	44	159%
EL	1	0	0	1	1	1	3	1	2	3	4	260%
IE	12	10	10	12	16	17	18	21	24	27	34	179%
IT	22	29	33	36	43	48	58	58	58	56	51	130%
LU	38	42	50	58	61	65	72	75	77	77	77	103%
NL	20	22	22	22	21	22	24	26	27	28	25	26%
PT	18	20	24	28	34	44	56	63	65	69	68	280%
ES	47	50	53	52	57	60	65	67	68	71	69	47%
SE	11	7	6	5	7	7	8	9	19	35	36	229%
UK	15	13	14	17	23	27	32	36	38	40	44	191%
EU-15	25	29	32	36	41	44	48	49	51	54	53	112%

Source: ACEA

9.5 Final energy consumption by sector in EU-27 - 2007 (%)

	Industry	Households	Agriculture	Transport	Services	Other Sectors
BE	35%	23%	2%	27%	11%	1%
BG	39%	21%	3%	28%	9%	0%
CZ	37%	23%	2%	26%	11%	1%
DK	19%	28%	5%	35%	12%	0%
DE	27%	29%	1%	30%	10%	3%
EE	23%	32%	3%	29%	13%	0%
IE	19%	22%	2%	43%	13%	0%
GR	21%	24%	5%	40%	10%	0%
ES	27%	16%	3%	43%	9%	2%
FR	22%	27%	2%	33%	14%	2%
IT	31%	21%	2%	34%	11%	0%
CY	18%	16%	2%	50%	9%	5%
LV	17%	34%	4%	31%	16%	0%
LT	21%	27%	2%	36%	13%	0%
LU	22%	15%	1%	60%	2%	0%
HU	20%	33%	3%	28%	16%	0%
MT	11%	19%	n.a.	57%	13%	0%
NL	28%	18%	8%	31%	15%	0%
AT	32%	23%	2%	33%	9%	0%
PL	29%	30%	6%	24%	11%	0%
PT	31%	17%	1%	38%	12%	0%
RO	38%	31%	1%	19%	8%	2%
SI	33%	22%	1%	36%	3%	5%
SK	42%	20%	1%	19%	18%	0%
FI	49%	19%	3%	19%	7%	3%
SE	38%	20%	2%	26%	13%	0%
UK	22%	27%	1%	38%	11%	1%
Total EU-27	28%	25%	2%	33%	11%	1%

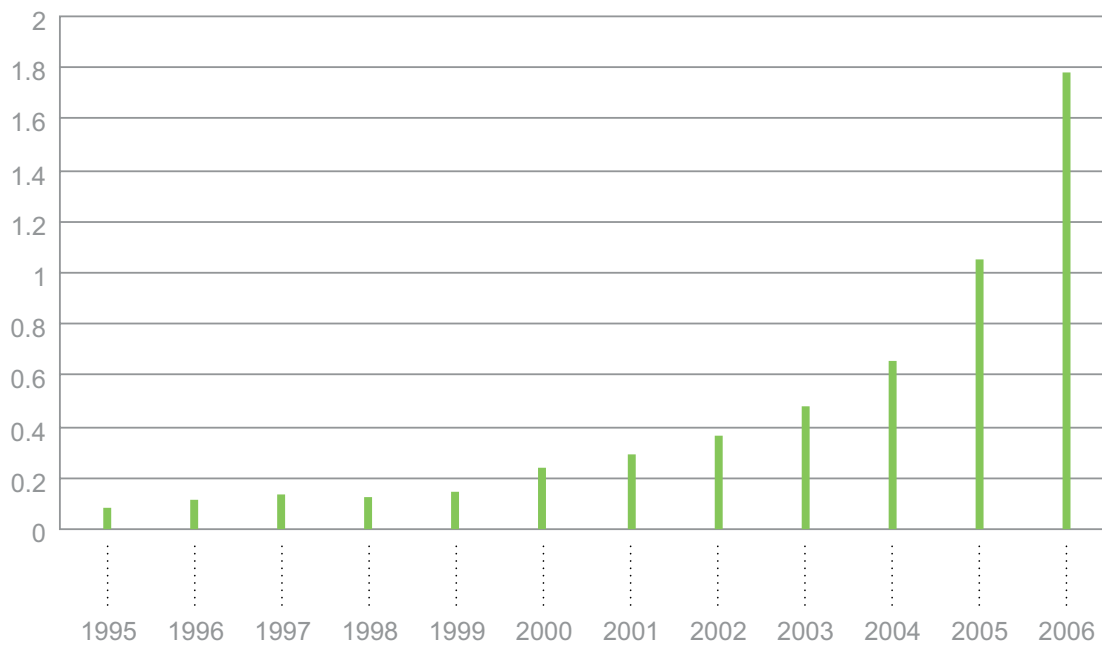
Source: Eurostat

9.6 Biodiesel production in EU-27 - 2005-2007 (1,000 tonnes)

	2005	2006	2007
BE	1	25	166
DK	71	80	85
DE	1,669	2,662	2,890
EL	3	42	100
ES	73	99	168
FR	492	743	872
IE	n.a.	4	3
IT	396	447	363
LU	n.a.	0	0
NL	n.a.	18	85
AT	85	123	267
PT	1	91	175
FI	n.a.	0	39
SE	1	13	63
UK	51	192	150
Total EU-15	2,843	4,539	5,426
BG	n.a.	4	9
CZ	133	107	61
EE	7	1	0
CY	1	1	1
LV	5	7	9
LT	7	10	26
HU	n.a.	0	7
MT	2	2	1
PL	100	116	80
RO	n.a.	10	36
SI	8	11	11
SK	78	82	46
Total EU-27	3,184	4,890	5,713

Source: EBB

9.7 Share of biofuels in consumption of transport EU-27 - 1995-2006 (%)



Source: Eurostat

9.8 CO₂ Emissions of New Cars (g per km)

	BE	DK	DE	EL	ES	FR	IE	IT
2000	166.5	175.7	182.2	180.3	159.2	163.6	161.3	155.1
2001	163.7	172.9	179.5	166.5	156.8	159.8	166.6	158.3
2002	160.0	168.8	176.2	166.6	155.3	155.7	163.1	155.5
2003	157.0	167.8	174.7	167.7	155.9	153.9	165.5	151.8
2004	155.4	164.7	173.7	167.6	154.2	152.0	166.4	149.0
2005	154.1	162.6	172.2	166.2	154.2	151.2	165.6	148.5
2006	152.8	161.4	171.3	165.3	154.5	148.9	165.1	148.2
2007	151.7	158.7	168.3	163.9	152.1	148.4	160.5	145.5
Evolution								
2000-2007	-8.89%	-9.68%	-7.63%	-9.10%	-4.46%	-9.29%	-0.50%	-6.19%

	LU	NL	AT	PT	FI	SE	UK	EU-15
2000	176.7	174.2	168.0	169.2	181.1	200.0	185.4	173
2001	177.0	174.0	165.6	n.a.	178.1	200.2	177.9	160
2002	172.6	171.2	163.2	152.9	176.0	196.8	173.6	167
2003	172.3	172.3	162.7	148.9	177.1	197.1	171.5	166
2004	168.5	169.7	160.8	146.1	178.5	195.8	170.2	165
2005	167.4	168.7	161.0	143.9	178.2	192.4	168.5	164
2006	167.0	165.5	162.6	144.0	177.9	187.3	166.5	163
2007	164.6	163.6	161.8	143.2	176.1	180.1	163.5	160
Evolution								
2000-2007	-6.85%	-6.08%	-3.69%	-15.37%	-2.76%	-9.95%	-11.81%	-7.56%

Source: Eurostat

CASE STUDY A:

London Congestion Charge

10.1 Changes in traffic entering the congestion charge zone

Vehicle type	2002	2003	2004	2005	evolution 2005 versus 2002
Vehicle four or more wheels	62,500	48,500	47,200	48,800	-22%
Potentially chargeable vehicles	53,400	37,500	36,100	37,500	-30%
Cars	37,500	23,600	22,700	24,200	-35%
Vans	12,800	11,000	10,900	10,700	-16%
Lorries	3,000	2,900	2,300	2,400	-20%
Non-chargeable vehicles	19,200	21,700	21,800	21,500	12%
Licensed taxis	6,900	7,800	8,400	85,000	23%
Buses and coaches	2,200	2,600	2,800	3,000	36%
Pedal cycles	3,900	4,400	4,500	4,900	24%
Powered two-wheelers	6,200	6,200	6,200	5,400	-12%
All Vehicles	72,500	59,200	57,900	59,000	-19%

Source: EEA

10.2 Principal % changes of CO₂ emissions - 2002-2003

Change	Charging zone	Inner ring road
Flow Change - motorcycles	0,2	1
Flow Change - taxis	2,4	2,1
Flow Change - car	-11,2	-3,9
Flow Change - buses and coaches	1,2	1,4
Flow Change - light goods	-0,1	2,3
Flow Change - rigid goods	-0,7	0,7
Flow Change - articulated heavy goods	-0,2	0,2
Traffic volume change	-8,7	3,8
Speed Change	-7,3	-8,5
Traffic volume and speed change	-15,7	-4,7
Vehicule stock change	-0,7	-0,7
Overall traffic emission change	-16,4	-5,4
Additional 'background' change from technological improvement (fleet turnover) 2003-2006	-3,4	-2,4

Source: EEA

10.3 Principal % changes to emissions of NO_x and PM₁₀ - 2002-2003

Change	NO _x [*]		PM ₁₀ ^{**}	
	Charging road	Inner Ring road	Charging road	Inner Ring road
Flow Change - motorcycles		0.4	0.2	2.4
Flow Change - taxis	2.3	3.8	2.0	3.6
Flow Change - car	-4.5	-4.6	-1.6	-1.8
Flow Change - buses and coaches	2.9	1.0	3.2	1.1
Flow Change - light goods	-0.1	-0.1	1.7	3.2
Flow Change - rigid goods	-1.6	-1.0	1.6	1.0
Flow Change - articulated heavy goods	-0.4	-0.2	0.4	0.2
Traffic volume change	-1.4	-0.8	7.4	9.7
Speed Change	-6.5	-5.5	-7.7	-6.9
Traffic volume and speed change	-7.9	-6.3	-0.2	2.8
Vehicle stock change	-5.5	-9.2	-6.7	-9.6
Overall traffic emission change	-13.4	-15.5	-6.9	-6.8
Additional 'background' change from technological improvement (fleet turnover) 2003-2006	-17.3	-23.8	-17.5	-20.9

Source: EEA

*Nitrogen oxide

**Particulate matter 10 micrometers or less in diameter

10.4 Estimated savings per year

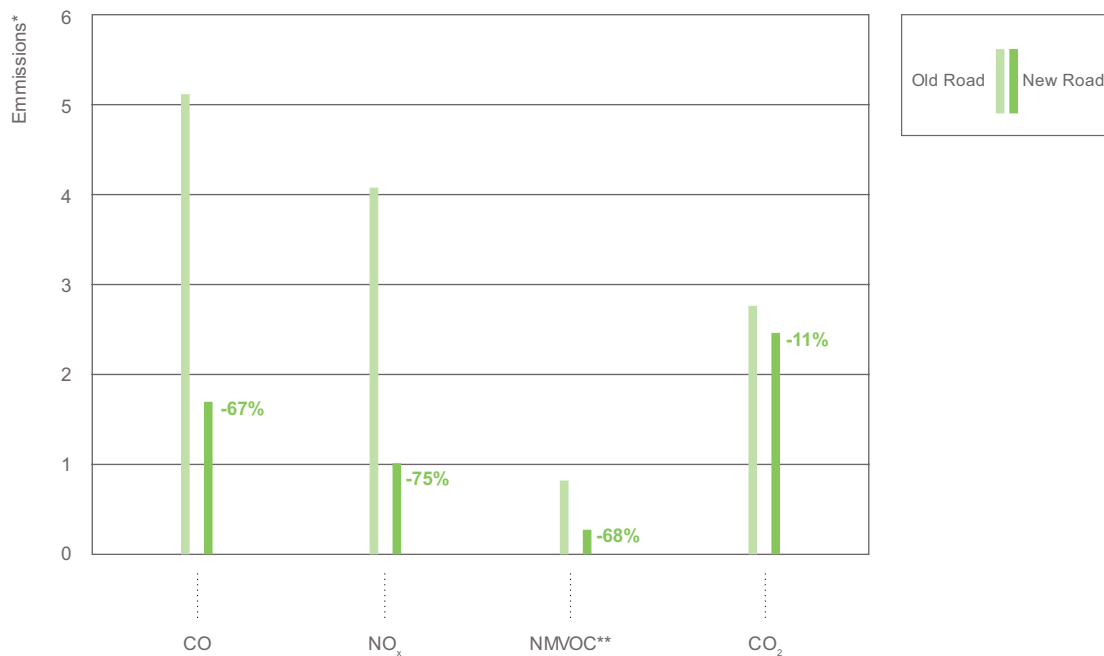
	£ 5 (€ 7) charge	£ 8 (€ 11) charge
Vehicle km saved	211 million	237 million
Fuel savings (litres)	44 million	48 million
Savings (tonnes)	110,000	120,000
Savings (£)	£ 2.3 million (€ 3.4 million)	£ 2.5 million (€ 3.7 million)

Source: EEA

CASE STUDY B:

SINTEF Report on Environmental Consequences of better roads

10.5 Narrow, winding low-traffic two-lane road (some parts only one lane) to be replaced by a good two-lane road - % change in emissions

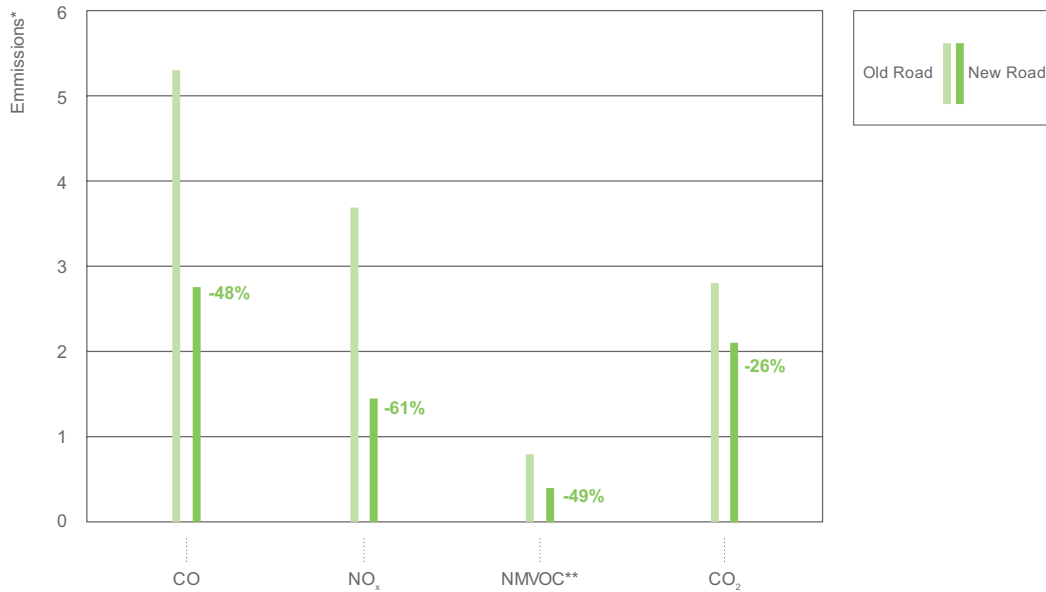


Source: SINTEF

*Emissions in g/kj+km (CO₂: kg/10 veh-km)

**Non-methane volatile organic compounds

10.6 Two-lane road of fair standard to be replaced by a four-lane motorway - % change in emissions

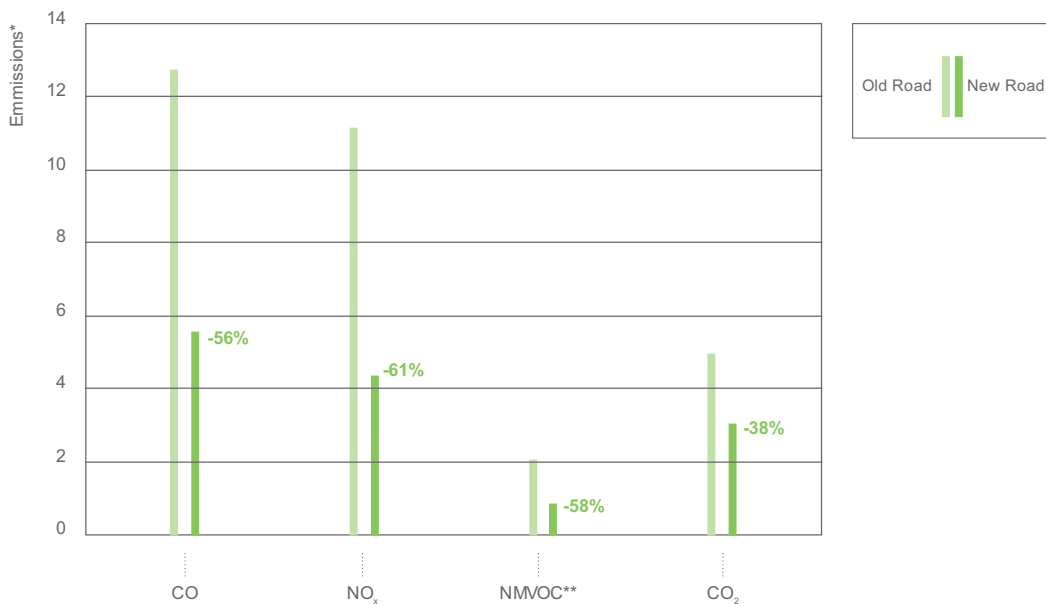


Source: SINTEF

*Emissions in g/kjt-km (CO₂: kg/10 veh-km)

**Non-methane volatile organic compounds

10.7 Heavily congested city motorway to be expanded by one extra lane - % change in emissions



Source: SINTEF

*Emissions in g/kjt-km (CO₂: kg/10 veh-km)

**Non-methane volatile organic compounds

CASE STUDY C:

Krakow fights against road traffic noise

Background information

In order to improve the well being of their citizens and reduce the harmful exposure to road traffic noise in 2008 the Municipality of Krakow decided to carry out the Noise Control programme in accordance with the Directive 2002/49/EC. The Noise Control programme has been prepared because the limit values of environmental noise were sensibly exceeded over a long term. According to LDEN measurements (day - evening - night) 40% of the citizens are exposed to road noise above 55 dB and according to LN measurements (night) 32% of the citizens are exposed to road noise above 50 dB in the nighttime. This is why the Program is primarily concentrated on the reduction of the harmful impact of transport noise emanating from streets, but also train and tramway lines. Below are listed the typical short term remedial measures together with expected noise reduction values. The list comprises both stand-alone solutions as well as combinations of measures, in which case the expected noise reduction is a compound value.

Source: EKKOM

10.8 Expected noise reduction of remedial measures in Municipality of Krakow

No	Remedial measures	Expected noise reduction
1	Enforcement of existing speed limits (particularly at night)	c.a. 2 dB
2	Acoustic screens	c.a. 6 dB
3	Implementation of a coordinated traffic signals scheme and improvement of traffic flow	c.a. 2 dB
4	Pavement replacement combined with enforcement of existing speed limits	c.a. 4 dB
5	Enforcement of existing speed limits combined with a coordinated traffic signals scheme	c.a. 3 dB
6	Acoustic screens combined with enforcement of existing speed limits	c.a. 8 -10 dB
7	Coordinated traffic signals scheme in combination with speed limitation, refitting of expansion spaces and polishing of rails	c.a. 3 dB
8	Reconstruction of street and tramway track	c.a. 3 dB
9	Area wide traffic management system combined with refitting of manholes	c.a. 2 dB
10	Track upgrading combined with polishing of rails, replacement of rolling stock and acoustic screens	c.a. 10 dB
11	Traffic calming by limiting vehicle speed, restriction of heavy vehicles in combination with acoustic screens	c.a. 4 dB
12	Street resurfacing	c.a. 2 dB

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