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# Slow recovery in road freight transport in 2010

## Analysis of trends in EU road freight transport over recent years

A slow recovery in road freight transport continued in 2010 but activity remained below the peak level recorded in 2007.

Cross trade and cabotage transport continued to grow more rapidly than international transport. Poland confirmed its emergence as a key-player in road freight, particularly for all forms of international transport. Belgium, France and Denmark have the highest cabotage penetration rates.

The top 4 countries, Germany, Spain, Italy and the UK, accounted for more than half of dangerous goods transport.

The combined pressures of the recession and no tightening of vehicle regulations led to an ageing of the vehicle fleet.



Figure 1: EU-27 quarterly road freight transport (billion tkm)

(1) 2004 and 2005 excluding BG and RO

(2) EL: 2009 instead of 2010

(³) EL: 2009 instead of 2011; UK: 2010 instead of 2011 Source: Eurostat (online data code: road go tq tott)



## Strong growth in all forms of international transport in 2010

Table 1: Road freight transport by type of operation (million tkm)

	2009							2010		Change 2009-2010					
	National	International	Cross-trade	Cabotage	Total	National	International	Cross-trade	Cabotage	Total	National	International	Cross-trade	Cabotage	Total
EU-27	1 153 366	411 380	107 744	17 589	1 690 081	1 175 571	441 538	116 049	20 984	1 754 145	1.9%	7.3%	7.7%	19.3%	3.8%
BE	17 603	15 066	2 047	1 458	36 174	17 755	13 918	1 964	1 363	35 002	0.9%	-7.6%	-4.1%	-6.5%	-3.2%
BG	6 306	6 934	3 848	655	17 742	6 120	6 969	5 477	867	19 433	-2.9%	0.5%	42.3%	32.4%	9.5%
CZ	13 480	21 618	9 492	364	44 955	14 762	25 183	11 341	545	51 832	9.5%	16.5%	19.5%	49.7%	15.3%
DK	10 002	6 230	387	257	16 876	10 573	3 502	634	310	15 018	5.7%	-43.8%	63.8%	20.6%	-11.0%
DE	245 568	53 800	6 395	1 785	307 547	252 462	52 847	5 819	1 975	313 104	2.8%	-1.8%	-9.0%	10.6%	1.8%
EE	1 326	2 512	1 294	207	5 340	1 388	2 832	1 127	268	5 614	4.7%	12.7%	-12.9%	29.5%	5.1%
IE	8 469	2 546	362	310	11 687	8 221	2 028	342	348	10 939	-2.9%	-20.3%	-5.5%	12.3%	-6.4%
EL (1)	24 228	4 337	18	2	28 585	24 228	4 337	18	2	28 585	:	:	:	:	:
ES	151 060	56 500	2 801	1 534	211 895	146 194	59 415	2 774	1 685	210 068	-3.2%	5.2%	-1.0%	9.8%	-0.9%
FR	156 021	16 802	465	333	173 621	164 325	17 138	383	347	182 193	5.3%	2.0%	-17.6%	4.2%	4.9%
IT	145 610	20 255	1 088	675	167 627	149 248	25 288	701	538	175 775	2.5%	24.8%	-35.6%	-20.3%	4.9%
CY	944	18	-	-	963	1 066	20	-	-	1 087	12.9%	11.1%	-	-	12.9%
LV	2 149	3 718	2 090	158	8 115	2 561	4 625	3 187	217	10 590	19.2%	24.4%	52.5%	37.3%	30.5%
LT	2 633	7 670	7 384	70	17 757	2 292	8 891	8 141	74	19 398	-13.0%	15.9%	10.3%	5.7%	9.2%
LU	530	2 045	3 484	2 341	8 400	574	2 301	3 748	2 072	8 694	8.3%	12.5%	7.6%	-11.5%	3.5%
HU	12 171	14 622	8 295	285	35 373	11 329	13 786	8 186	421	33 721	-6.9%	-5.7%	-1.3%	47.7%	-4.7%
NL	31 337	32 166	6 905	2 266	72 675	34 301	31 863	7 473	2 701	76 339	9.5%	-0.9%	8.2%	19.2%	5.0%
AT	13 491	11 902	3 039	643	29 075	13 914	11 233	2 903	609	28 659	3.1%	-5.6%	-4.5%	-5.3%	-1.4%
PL	79 207	70 436	28 497	2 601	180 742	86 154	89 260	31 044	4 388	210 846	8.8%	26.7%	8.9%	68.7%	16.7%
PT	14 424	17 907	2 983	494	35 808	12 881	17 878	3 956	653	35 368	-10.7%	-0.2%	32.6%	32.2%	-1.2%
RO	20 879	11 923	1 374	93	34 269	12 096	12 297	1 429	66	25 889	-42.1%	3.1%	4.0%	-29.0%	-24.5%
SI	2 276	7 401	4 725	360	14 762	2 288	8 054	5 182	407	15 931	0.5%	8.8%	9.7%	13.1%	7.9%
SK	5 519	11 534	10 302	350	27 705	5 198	12 434	9 415	528	27 575	-5.8%	7.8%	-8.6%	50.9%	-0.5%
FI	24 394	3 275	86	49	27 805	25 156	4 099	139	138	29 532	3.1%	25.2%	61.6%	181.6%	6.2%
SE	32 123	2 517	251	156	35 047	32 732	2 990	366	179	36 268	1.9%	18.8%	45.8%	14.7%	3.5%
UK	131 616	7 646	132	143	139 536	137 753	8 350	300	283	146 685	4.7%	9.2%	127.3%	97.9%	5.1%
LI	:	57	193	12	263	:	68	221	14	303	-	19.3%	14.5%	16.7%	15.2%
NO	15 277	3 105	35	30	18 447	16 344	3 362	6	39	19 751	7.0%	8.3%	-82.9%	30.0%	7.1%
СН	9 697	2 818	346	313	13 174	9 550	2 880	530	277	13 237	-1.5%	2.2%	53.2%	-11.5%	0.5%
HR	5 125	3 622	679	:	9 426	4 547	3 465	765	3	8 780	-11.3%	-4.3%	12.7%	:	-6.9%

Note: In this table, international transport corresponds to international transport loaded and unloaded.

(1) EL: 2009 instead of 2010

Source: Eurostat (online data code: road go ta tott)

At total transport level, the top six countries in 2010 were Germany, Poland, Spain, France, Italy and the UK. Overall, the biggest increases in total transport in 2010 were recorded in Latvia (30 %), Poland (17 %) and the Czech Republic (15 %). Romania (-25 %) and Denmark (-11 %) recorded the largest falls.

Total international transport rose strongly between 2009 and 2010 but remained below the peak level of 2007. International transport in the EU-27 was up by 7.3 %, cross-trade by 7.7 %, while cabotage was 19.3 % higher. The international growth was mainly concentrated in the newer Member States. In contrast, national transport in the EU-27 recorded a rise of a little under 2 % between 2009 and 2010.

Poland was among a number of countries to record growth in all categories of transport, confirming its emergence as a key European player in freight transport, with its strength in international transport. Others to achieve growth across the board were the Czech Republic, Latvia, Slovenia, the UK and two Nordic countries, Finland and Sweden.

For national transport, the strongest growths in 2010 were recorded by Latvia, nearly 20 % and the Czech Republic and the Netherlands, nearly 10 %.

In contrast, there were falls of over 40 % for Romania, 13 % for Lithuania and 11 % for Portugal.

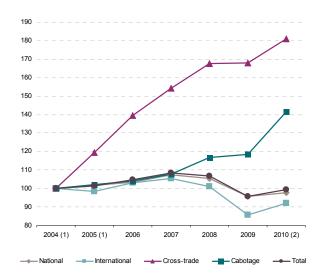
For international transport, there were gains of around 25 % for Italy, Latvia, Poland and Finland, while Denmark and Ireland showed falls of 44 % and 20 % respectively.

In cross-trade, there were gains of 40 % or more for the UK (127 %), Denmark (64 %), Finland (62 %), Latvia (52 %), Sweden (46 %) and Bulgaria (42 %). Norway; Italy and France saw declines in their cross-trade of 83 %, 36 % and 18 % respectively.

In cabotage, there were gains of 50 % or more in 2010 for the Czech Republic (50 %), Slovakia (51 %), Poland (69 %), the UK (98 %) and Finland (182 %) although this was from a small base. In contrast, Romania and Italy recorded falls of 29 % and 20 % respectively (Romanian cabotage transport being very small).

Figure 2 shows the decline of national and international transport at EU level between 2007 and 2009 followed by a partial recovery in 2010, though it remained below the level recorded in 2007. It also shows the emergence of cross-trade and cabotage as growth points.

Figure 2: Evolution of EU-27 road freight transport (based on tkm, 2004=100)



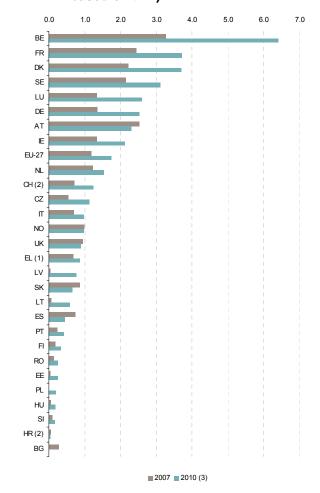
(1) BG and RO: 2006 instead of 2004 and 2005

(2) EL: 2009 instead of 2010

Source: Eurostat (online data code: road go ta tott)

Figure 3 shows the development of the cabotage penetration rate between 2007 and 2010 at country level. The rate is the percentage of cabotage in a country's total domestic transport (national transport plus cabotage in that country). Most countries recorded an increase in penetration; the exceptions were Spain, Austria, Slovakia, the UK, Norway and Bulgaria. Belgium was the most heavily penetrated country with over 6 % of its domestic transport undertaken by cabotage. Other countries with high penetration rates were France, Denmark and Sweden with over 3 % and Germany, Luxembourg, Austria and Ireland with over 2 %. At the other extreme, Bulgaria had a penetration rate of 0.03 % while Hungary and Slovenia also had very low rates of less than 0.2 %.

Figure 3: Cabotage penetration rate by country in which cabotage takes place (in % based on tkm)



- (1) EL: 2009 instead of 2010
- (2) CH and HR: 2008 instead of 2007
- (3) 2010 data exclude the cabotage performed by EL

Source: Eurostat (online data codes: road go ta tott and road go ca c)

## **Evolution of transport by type of goods**

Table 2 shows road freight by group of goods for both tonnes and tonne-kilometres. In terms of tonnes, transport is concentrated in five groups (03, 09, 04, 01, 14), which account for just under 70 % of the total. In tonne-kilometres, transport is less concentrated, with seven groups (04, 01, 09, 03, 08, 06, 18) accounting for around two-thirds of the total. Comparing 2010 with 2009 for tonnes shows large rises for mail and parcels (33 %) and metals and metal products (13 %), though these are both relatively small groups. In terms of tonnekilometres, the same two groups, mail and parcels and metals and metal products, recorded rises of 28 % and 11 % respectively. For mail and parcels, this performance followed an equally strong year in 2009 and saw its share of the total reach over 1 % of total tonnes and nearly 2 % of tonne-kilometres.

For tonnes, there were similar marked upward movements for agricultural products, wood and wood products and household goods. In contrast, there were consistent decreases in chemicals, furniture and unidentifiable goods which accounted for 1.7 % of total tonnes in 2010, well down on previous years. This suggests some improvement in the quality of the reporting of data.

For tonne-kilometres, wood and wood products recorded a gentle rise in its share of total transport as did household goods. Textiles and other non-metallic mineral products showed strong sustained falls in their share of the total.

Table 2: EU-27 road freight transport by group of goods (NST 2007)

NST2007			Th	ousand Tonr	nes		Million Tonne-kilometres				
			2009	2010 <sup>(1)</sup>	Share in total 2010	Change 2009-2010	2008	2009	2010 <sup>(1)</sup>	Share in total 2010	Change 2009-2010
01	Products of agriculture, hunting, and forestry; fish and other fishing products	1 142 592	1 169 075	1 206 579	8.0%	3.2%	175 820	174 782	179 516	10.3%	2.7%
02	oal and lignite; crude petroleum and natural gas		140 579	130 290	0.9%	-7.3%	12 304	11 479	11 512	0.7%	0.3%
03	Metal ores and other mining and quarrying products; peat; uranium and thorium		4 380 988	4 404 756	29.3%	0.5%	162 625	139 174	143 610	8.2%	3.2%
04	Food products, beverages and tobacco		1 627 604	1 632 043	10.9%	0.3%	295 319	290 132	293 603	16.8%	1.2%
05	Fextiles and textile products; leather and leather products		73 584	71 323	0.5%	-3.1%	23 474	20 224	19 407	1.1%	-4.0%
06	Wood and products of wood and cork (except furniture); articles of straw and plaiting materials; pulp, paper and paper products; printed matter and recorded media	697 740	621 226	629 060	4.2%	1.3%	136 987	125 096	131 100	7.5%	4.8%
07	Coke and refined petroleum products		556 946	553 552	3.7%	-0.6%	56 880	51 465	52 882	3.0%	2.8%
08	Chemicals, chemical products, and man-made fibres; rubber and plastic products; nuclear fuel		662 825	588 294	3.9%	-11.2%	138 506	128 748	131 688	7.5%	2.3%
09	Other non metallic mineral products	2 339 494	2 028 790	2 047 879	13.6%	0.9%	177 363	154 217	152 492	8.7%	-1.1%
10	Basic metals; fabricated metal products, except machinery and equipment	662 041	515 188	580 436	3.9%	12.7%	144 175	115 005	127 089	7.3%	10.5%
11	Machinery and equipment n.e.c.; office machinery and computers; electrical machinery and apparatus n.e.c.; radio, television and communication equipment and apparatus; medical, precision and optical instruments; watches and clocks	360 495	278 031	296 250	2.0%	6.6%	72 136	57 791	60 424	3.5%	4.6%
12	Fransport equipment		223 275	224 669	1.5%	0.6%	69 400	57 443	63 571	3.6%	10.7%
13	Furniture; other manufactured goods n.e.c.	155 890	123 801	112 755	0.8%	-8.9%	43 573	31 493	32 236	1.8%	2.4%
14	Secondary raw materials; municipal wastes and other wastes	1 275 465	1 304 516	1 058 997	7.1%	-18.8%	60 665	61 183	63 025	3.6%	3.0%
15	Mail, parcels	121 307	128 564	171 541	1.1%	33.4%	25 545	26 829	34 416	2.0%	28.3%
16	Equipment and material utilized in the transport of goods	246 136	216 858	223 140	1.5%	2.9%	37 495	33 745	34 623	2.0%	2.6%
17	Goods moved in the course of household and office removals; baggage and articles accompanying travellers; motor vehicles being moved for repair, other non market goods n.e.c.		72 058	75 724	0.5%	5.1%	6 537	7 091	7 521	0.4%	6.1%
18	Grouped goods: a mixture of types of goods which are transported together		417 884	527 056	3.5%	26.1%	119 037	100 883	128 245	7.3%	27.1%
19	Unidentifiable goods: goods which for any reason cannot be identified and therefore cannot be assigned to groups 01-16.		352 501	251 818	1.7%	-28.6%	70 931	58 738	37 511	2.1%	-36.1%
	Other goods n.e.c.	273 868	243 859	232 999	1.6%	-4.5%	42 875	37 577	43 494	2.5%	15.7%

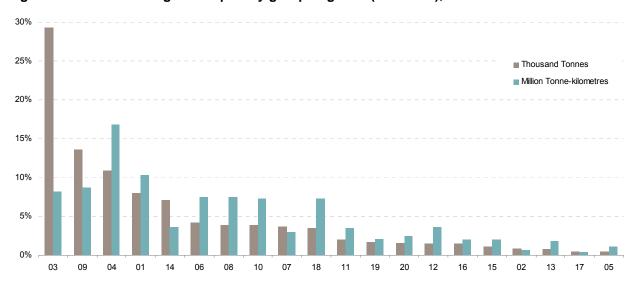
(1) EL: 2009 instead of 2010

Source: Eurostat (online data code: road go ta tg)

Figure 4 presents the same data in a different format, comparing shares of the total for each main group of goods. In terms of tonnes the main groups are mining and quarrying products, non metallic mineral products, food products, products of agriculture and municipal wastes, etc. Quarrying products and municipal wastes both tend to be transported over short distances so that they, like other non-metallic mineral products (e.g. glass), figure much less prominently on the tonnekilometre side. Here, the largest group is food

where for example, there are long movements within Europe from Spain to most other countries. Similar considerations apply to agricultural products and wood. For chemicals and metal products, the concentration of production in a limited number of sites means that they have to be transported over longer distances. Grouped goods, i.e. mixtures, are likely to be found in containers, which again are likely to travel relatively long distances from the ports where they arrive.

Figure 4: EU-27 road freight transport by group of goods (NST 2007), 2010 (1)



(1) EL: 2009 instead of 2010

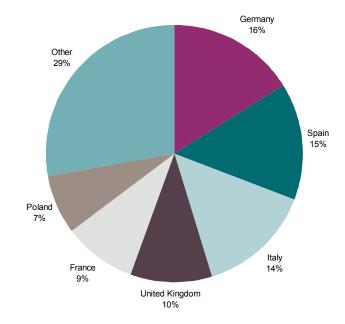
Source: Eurostat (online data code: road go ta tg)

## Share of dangerous goods transport declines

The top six countries, Germany (16 %), Spain (15 %), Italy (14 %), the UK (10 %), France (9 %) and Poland (7 %) accounted for nearly three quarters of the total transport of dangerous goods with the first four taking more than half.

Since 2004, the share of dangerous goods in total transport has declined. While transport of flammable liquids has kept pace with total transport (with the exception of 2007 and 2008), other dangerous goods have fallen behind, year by year since 2004. Over the period from 2004 to 2010, other dangerous goods transport declined by 6 % compared with a fall of 0.5 % for total transport. This trend accelerated in 2010. The outcome is that total dangerous goods transport, which had been below the curve for total transport from 2005 to 2008, caught up in 2009, only to fall behind again in 2010.

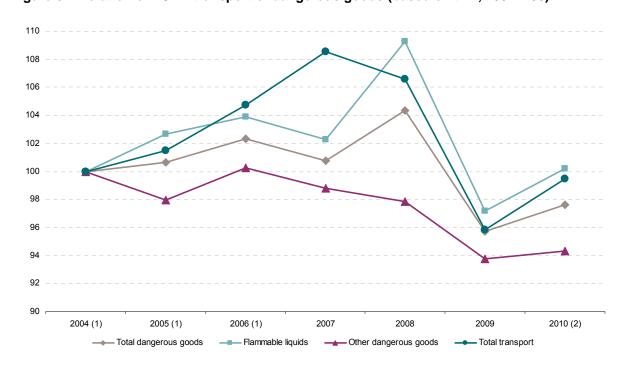
Figure 5: Share of countries in total EU-27 transport of dangerous goods, 2010 (% in tkm)



(1) EL: 2009 instead of 2010

Source: Eurostat (online data code: road go ta dg)

Figure 6: Evolution of EU-27 transport of dangerous goods (based on tkm, 2004=100)



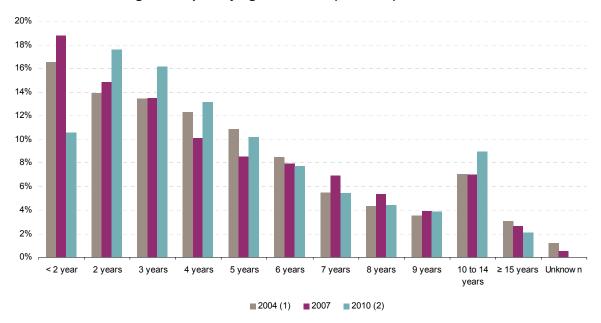
(1) BG and RO: 2006 instead of 2004 and 2005; HU: 2007 instead of 2004, 2005 and 2006

(2) EL: 2009 instead of 2010

Source: Eurostat (online data code: road go ta dg)

## The European vehicle fleet ages

Figure 7: EU-27 road freight transport by age of vehicle (% of tkm)



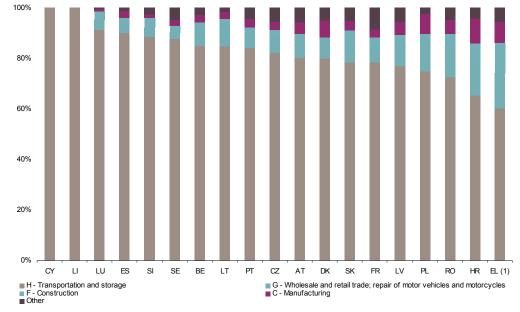
(1) BG and RO: 2006 instead of 2004 (2) EL and UK: 2009 instead of 2010

Source: Eurostat (online data code: road go ta agev)

The combination of the crisis in 2008 and the introduction of the Euro vehicle standards in 2008/2009 has meant that vehicle replacement has fallen substantially in the past two years. The outcome is that the proportion of vehicles less than two years old has fallen to 11 % in 2010, compared to 19 % in 2007 and 17 % in 2004.

Correspondingly, the proportion of vehicles aged between 2 years and 5 years was higher in 2010 than in the earlier years. There has also been a substantial rise in the number of vehicles of more than 9 but less than 15 years old, rising to 9 % compared with 7 % in the earlier years. Figure 8 shows the proportion of transport undertaken by economic sector. Transportation and storage accounts for the greatest share in all countries, ranging from 100 % for Cyprus and Liechtenstein to 60 % for Greece. In most countries, wholesale and retail trade come next, ranging up to over 10 % in Greece, Romania and Poland.

Figure 8: Road freight transport by economic activity (NACE rev.2), 2010 (million tkm)



(1) EL: 2009 instead of 2010

Source: Eurostat (online data code: road go ta nace).

### **METHODOLOGICAL NOTES**

Data presented in this publication were collected in the framework of <u>Council Regulation (EC) 1172/98</u> on statistical returns in respect of the carriage of goods by road. These data are based on sample surveys carried out in the reporting countries, i.e. EU Member States, Croatia, Liechtenstein, Norway and Switzerland, and record the road goods transport undertaken by vehicles registered in these countries.

Reporting countries use their own national surveys for the collection of data based on returns from road hauliers. The results are micro-data referring to vehicles and their linked journeys providing detailed information on goods transported. At the European level, common aggregation procedures have been used that might diverge from national practices. Therefore differences might occur between the figures in this publication and national values. For the distinction between national and international transport, journey related information is used at the European level, which might cause differences in corresponding values from those countries that are using goods related information for these statistics.

**Bulgaria and Romania**: While Bulgaria and Romania had no obligation to report prior to their accession in 2007, they started to report data for the reference year 2006.

**Greece:** As road transport data for 2010 was not available at drafting time, 2009 data have been used instead. Meanwhile Greece provided 2010 data which can be consulted at the online source referenced in the footnotes of each figure/ table.

**Hungary:** Hungary started to report data on dangerous goods for the reference year 2007.

**Malta**: Since 2004, Malta has not reported any road transport data.

**Liechtenstein:** Liechtenstein reports only international road freight.

**EU-27 totals** calculated in this publication refer to road freight transport reported by the 27 Member States excluding Malta which is not reporting road freight statistics.

#### **Total transport**

Total transport includes national transport, international transport of goods loaded in the reporting countries, international transport of goods unloaded in the reporting countries, cross-trade and cabotage transport.

## International transport loaded and unloaded

International transport as presented in this publication is based on goods loaded and unloaded in the reporting Member States. Double counting is avoided since reporting relates only to resident carriers of the reporting countries: the figures sum up the goods transported by resident carriers to all other countries of the world and the goods brought into the reporting country by resident carriers from all other countries of the world.

#### **Cross-trade transport**

Cross-trade transport is defined as international road transport between two countries performed by a road motor vehicle registered in a third country (movement of goods by road from country A to country B by hauliers registered in country C).

#### Cabotage transport

Cabotage is declared by Member States for hauliers registered in their country performing transport on the national territory of another country.

Cabotage was completely liberalized in 1998 in the EU-15. The cabotage regime was extended to the EFTA states (except Switzerland) following the creation of the EEA (European Economic Area). Cabotage between EU-15 and the new Member States was liberalized in May 2009.

#### Breakdown by goods groups

Starting with the reference year 2008, Commission Regulation (EC) No 1304/2007 amends Council Regulation (EC) No 1172/98 and establishes NST 2007 as the sole classification for goods carried in road freight transport. Germany still collects data according to NST/R but reclassifies them according to NST 2007 before the submission to Eurostat.

For detailed information on the NST 2007 classification, please refer to 'Ramon', Eurostat's Metadata Server.

#### Dangerous goods

Council Regulation (EC) 1172/98 stipulates the collection of information on different categories of dangerous goods on an obligatory basis. Annex E of the Council Regulation (EC) 1172/98 provides the categories to be used.

As the carriage of dangerous goods by road represents only a small percentage of total road transport and the data are collected on the basis of sample surveys, the margins of error in any statistics will be substantial. Any figures for the transport of dangerous goods should be treated with caution.

#### Age of vehicle

The age of vehicle is the length of time after the first registration of a goods road vehicle, irrespective of the registering country. If the year of first registration is not known, the year of manufacture is used as a proxy.

Some countries might apply age thresholds for their sampling frame and thus exclude oldest vehicles (e.g. over 20 years old) from the survey.

#### **Economic activity**

The economic activity considered here is the main economic activity of the business performing the transport of goods. It is reported according to NACE rev. 2.

More detailed data and metadata are available in the Eurostat dissemination database and on CIRCA.

#### Data availability

The figures presented in this publication have been extracted from Eurostat's free dissemination database and reflect the state of data availability on the 20/12/2011.

#### **Country codes**

EU-27: European Union of 27 Member States from 1 January 2007: Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK).

EFTA countries: Liechtenstein (LI), Norway (NO), Switzerland (CH).

Candidate countries: Croatia (HR).

## In this publication

1 billion = 1 000 000 000 not applicable not available

This publication was prepared with the assistance of Richard Butchart and Marie-Noëlle Dietsch.

## **Further information**

Eurostat Website: http://ec.europa.eu/eurostat

Data on "Transport statistics"

http://epp.eurostat.ec.europa.eu/portal/page/portal/transport/data/database

Further information about "Transport statistics"

http://epp.eurostat.ec.europa.eu/portal/page/portal/transport/introduction

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#### **European Statistical Data Support:**

With the members of the 'European statistical system', Eurostat has set up a network of support centres in nearly every Member State and in some EFTA countries.

Their role is to provide help and guidance to Internet users of European statistics.

Contact details for this support network can be found on the Eurostat website at: http://ec.europa.eu/eurostat/.

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