

# Inland freight and passenger transport in the EU-27 up to 2007

## Performances, modal split and structural indicators

In 2007, EU-27 road freight transport, measured in tonne-kilometres (tkm), was 27% higher than in 2000. The modal share of road freight transport in inland total freight transport (road, rail and inland waterways) has slowly increased over the years and is now 76%. In 2006, passenger cars accounted for 83% of the inland total passenger transport (passenger cars, buses and coaches, and trains), measured in passenger-kilometres (pkm).

Road freight transport undertaken by hauliers registered in the EU-27 Member States amounted to 1 934 billion tkm in 2007, an increase of 4% compared to 2006.

Rail freight transport at EU-27 level was 449 billion tkm in 2007, an increase of 2% compared to 2006.

Germany alone accounted for a quarter of this transport, an increase of 7% in 2007 compared to 2006.

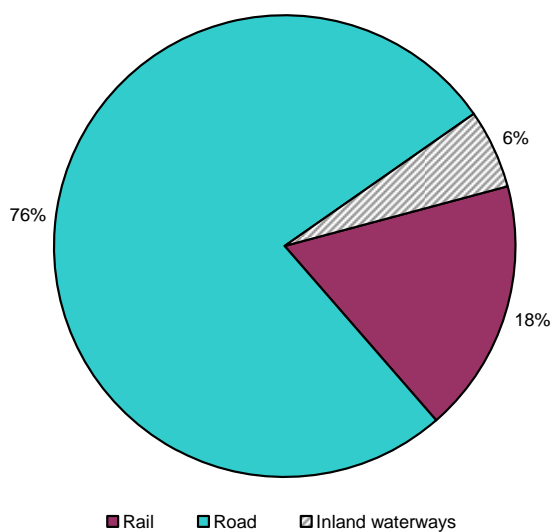
In 2007 the transport of goods by inland waterways in the EU-27 increased by 2% compared to 2006 to reach 140 billion tkm. Germany and the Netherlands accounted for 76% of the tkm performed.

Oil pipelines transport in 2006 had recovered to its 2001 level after a substantial fall in 2002.

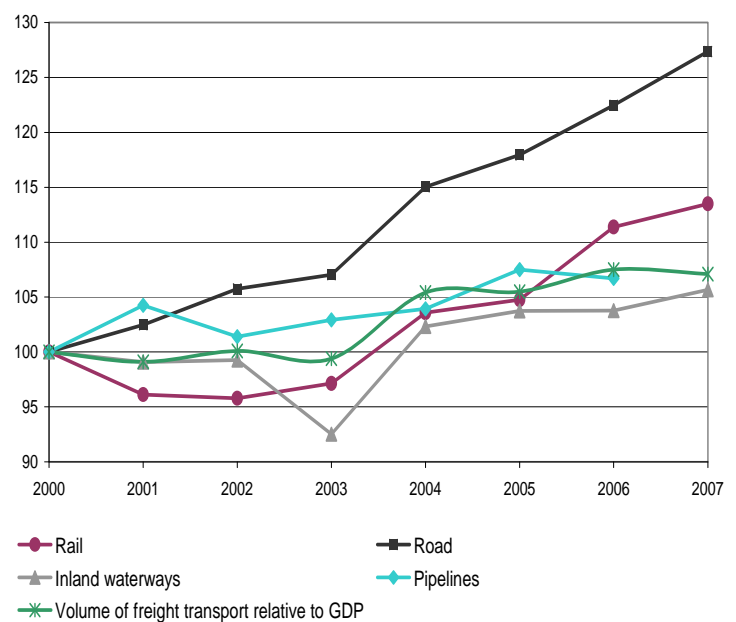
390 billion pkm were recorded in rail passenger transport in the EU-27 in 2007. Four countries accounted for two-thirds of this transport: France, Germany, the United Kingdom and Italy.

In 2006, road passenger transport in the EU-27 by passenger cars, buses and coaches was 5 100 billion pkm, an increase of 1.5% compared to 2005.

**Graph 1: Share of inland transport modes in EU-27 total inland freight transport, 2007 - % in tkm**



**Graph 2: Evolution of EU-27 freight transport for inland modes - based on tkm (2000=100)**



## Freight transport

As shown in Graph 1, in 2007 road freight transport accounted for 76% of total freight transport performed in rail, road and inland waterways transport in the EU-27 (in tkm).

In most of the countries road freight transport was the dominant mode. Exceptions are Latvia and Estonia where rail transport is far ahead of road transport, representing around 58% of total inland freight transport. For all other EU-27 Member States, the share of road transport in total inland transport is over 50%. Together with Cyprus and Malta - where rail and inland waterways do not exist - Ireland, Greece and Spain have the highest shares of road freight transport with more than 95%. Railway transport represented more than 25% of total inland freight transport in 10 Member

States, with an EU average of 18% in 2007. The same year, inland waterways had a share over 10% in 4 Member States - Belgium, Germany, the Netherlands and Romania - and represented 6% at EU-27 level.

As presented in Graph 2, road freight transport showed the fastest growth in transport performance in the EU-27 with an increase of 27% in 2007 compared to 2000, based on a continuous annual increase over this period. Rail had a growth of 13% over this period while inland waterways grew by only 6%. In comparison, the volume of freight transport relative to gross domestic product (GDP) had a low increase (7%), due to a significant increase of EU-27 GDP over the same period.

**Table 1: Freight transport by inland modes - million tkm**

	2004				2005				2006				2007			
	Rail	Road	Inland waterways	Oil pipe-lines	Rail	Road	Inland waterways	Oil pipe-lines	Rail	Road	Inland waterways	Oil pipe-lines	Rail	Road	Inland waterways	Oil pipe-lines
BE	7 691	47 878	8 392	1 533	8 130	43 847	8 566	1 517	8 572	43 017	8 908	1 572	7 842	42 085	9 000	:
BG	5 211	11 961	697	274	5 163	14 371	757	352	5 396	13 765	785	357	5 241	14 624	1 011	:
CZ	15 092	46 011	48	1 902	14 866	43 447	64	2 259	15 779	50 376	44	2 291	16 304	48 141	36	:
DK	2 013	23 114	-	5 254	1 976	23 299	-	5 125	1 892	21 254	-	4 872	1 779	20 960	-	4 627
DE	86 409	303 744	63 667	16 236	95 421	310 114	64 096	16 741	107 007	330 008	63 975	15 844	114 615	343 438	64 716	15 824
EE	10 488	5 099	-	-	10 639	5 824	-	-	10 418	5 548	-	-	8 430	6 417	-	:
IE	399	17 144	-	-	303	17 910	-	-	205	17 454	-	-	129	19 020	-	:
EL	592	36 773	-	85	613	23 761	-	90	662	34 002	-	100	835	27 791	-	:
ES	11 874	220 822	-	8 279	11 635	233 230	-	10 126	11 634	241 788	-	10 115	11 064	258 875	-	:
FR	45 121	212 201	8 420	20 559	40 701	205 284	8 905	20 200	41 190	211 445	9 005	21 800	42 000	219 212	9 208	:
IT	22 183	196 980	110	10 699	22 761	211 804	89	11 423	24 151	199 100	100	11 237	25 285	199 100	100	:
CY	-	1 119	-	-	-	1 393	-	-	-	1 165	-	-	-	1 202	-	:
LV	18 618	7 381	-	3 252	19 779	8 601	-	3 381	16 831	10 753	-	3 628	18 313	13 204	-	:
LT	11 637	12 279	1	4 287	12 457	15 908	1	4 406	12 896	18 134	2	2 670	14 373	20 278	10	:
LU	559	9 575	370	-	392	8 803	342	-	441	8 807	381	-	287	9 562	345	:
HU	8 749	20 608	1 904	2 546	9 090	25 152	2 110	2 600	10 167	30 479	1 913	2 670	10 136	35 805	2 212	:
MT	-	:	-	-	-	:	-	-	-	:	-	-	-	:	-	:
NL	5 831	89 695	43 092	6 090	5 865	84 163	42 225	5 939	6 289	83 193	42 310	5 828	7 216	77 921	42 500	:
AT	18 757	39 186	1 747	7 571	18 957	37 044	1 753	7 780	20 980	39 187	1 837	7 639	21 371	37 402	2 597	:
PL	52 332	102 807	370	24 806	49 972	111 826	327	25 388	53 622	128 315	289	25 588	51 801	150 879	277	:
PT	2 282	40 819	-	-	2 422	42 607	-	-	2 430	44 835	-	-	2 586	46 203	-	:
RO	17 022	37 219	6 955	1 898	16 582	51 532	8 436	2 210	15 791	57 288	8 157	2 027	15 757	59 524	8 195	:
SI	3 149	9 007	-	-	3 245	11 032	-	-	3 373	12 112	-	-	3 603	13 734	-	:
SK	9 702	18 527	91	5 200	9 463	22 566	88	5 300	9 988	22 212	106	5 600	9 647	27 159	1 004	:
FI	10 105	32 290	118	-	9 706	31 857	75	-	11 060	29 715	66	-	10 434	29 811	102	:
SE	20 856	36 949	-	-	21 675	38 575	-	-	22 271	39 918	-	-	23 307	40 540	-	:
UK	22 552	167 839	152	10 657	22 322	167 533	137	10 800	27 365	165 936	162	10 800	26 384	171 477	136	10 229
EU-27	409 224	1 747 027	136 134	131 128	414 135	1 791 483	137 970	135 637	440 410	1 859 806	138 041	134 638	448 739	1 934 364	141 448	:
IS	-	699	-	-	-	741	-	-	-	786	-	-	-	:	-	-
LI	21	:	-	-	17	391	-	-	18	339	-	-	18	338	-	-
NO	2 845	17 460	-	4 721	3 182	18 247	-	4 564	3 351	19 387	-	4 600	3 456	19 375	-	:
CH	10 122	10 241	45	238	11 527	10 327	47	230	12 345	10 738	42	260	:	:	:	:

DE: For rail transport, tare weight of loaded containers and swap bodies is not included in 2004; from 2005 onwards this weight is included.

SK: Pipelines data are estimated by DGTREN; in 2007, change of methodology of collection of transit transport for inland waterways.

CH: National road freight transport only.

Estimates are presented in italics.

In the EU-27, total freight transport performance by inland modes recorded a 3.5% increase in 2007 compared to 2006, to reach around 2 500 billion tkm.

Road freight transport undertaken by hauliers registered in the EU-27 amounted to 1 934 billion tkm in 2007. Hauliers from six Member States, Germany, Spain, France, Italy, Poland and the United Kingdom, performed more than two-thirds of this transport. Road freight transport increased by more than 10% in Estonia, Latvia, Lithuania, Hungary, Poland, Slovenia and Slovakia.

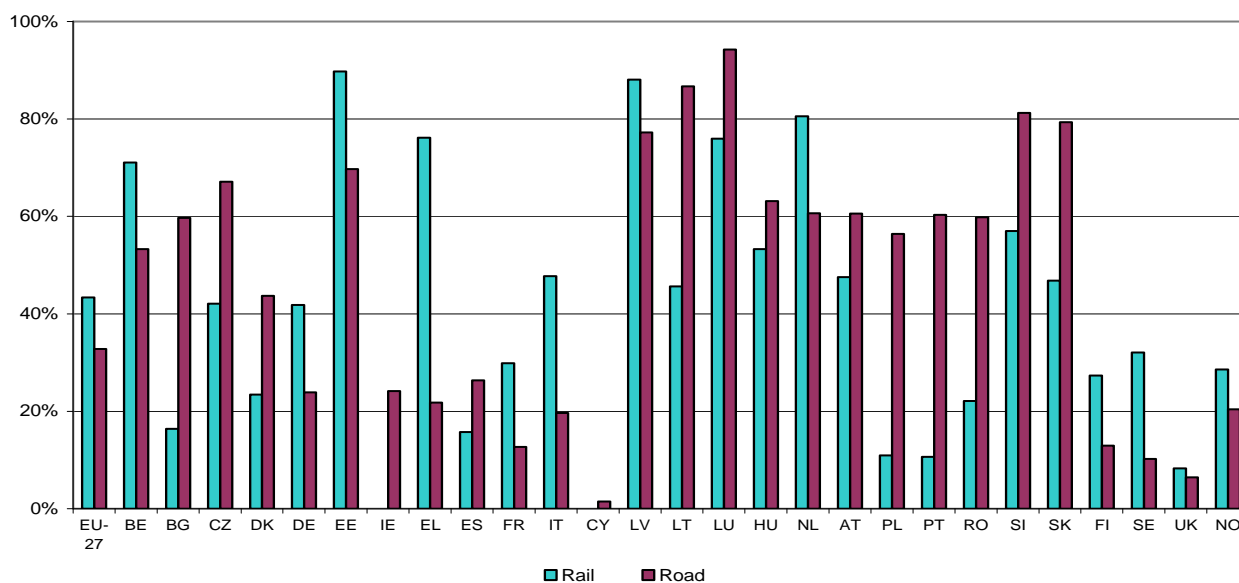
Rail freight transport at EU-27 level was 449 billion tkm in 2007. Germany recorded a quarter of EU freight transport, with a significant increase in 2007 compared to 2006 (+7%). The other important players in rail freight transport are Poland and France, each recording less than half of German tkm (final data from France is not yet available).

The transport of goods by inland waterways in the EU-27 reached 140 billion tkm in 2007 and was stable compared to the previous year. Germany

and the Netherlands accounted for 76% of the tkm performed in the EU-27. With 64 and 42 billion tkm respectively, both countries recorded transport performances far above the other Member States. They are followed by France, Belgium and Romania performing between 8 and 10 billion tkm each. All other Member States registered less than 3 billion tkm.

At the moment, most 2007 data are not available for pipeline transport. In 2006, the transport of oil and petroleum products through pipelines in the EU-27 was 135 billion tkm, a fall of 0.7% compared to 2005. This was the first year since 2002 that the transport performance decreased. The performance was stable in almost all Member States, with only small variations in 2006 compared to 2005. The major exception was Lithuania, which recorded a fall of 39% in one year. Three Member States accounted for almost half of the tkm performed in the EU-27: Poland, France and Germany, each reporting over 15 billion tkm in 2006.

**Graph 3: Share of international transport in total rail and road freight transport, 2007 - % in tkm**



Rail international transport is defined as the sum of incoming and outgoing transport and does not include transit transport. BE: 2005 data; FR, SE: 2006 data; IT: Eurostat estimate.

Graph 3 highlights the structure of rail and road freight transport by presenting for each mode the share of total transport corresponding to international transport.

In 2007, international transport represented 43% of total freight transport performed by rail in the EU-27, whereas the share of international journeys in total road freight transport performed by EU-27 hauliers was 33%.

However, there are big differences between the Member States. Five countries recorded more than 75% of their total rail transport as international:

Estonia, Greece, Latvia, Luxembourg and the Netherlands.

For road transport, most of the Member States reported that more than 50% of their freight transport is international transport, with five Member States having more than 75% of international transport: Latvia, Lithuania, Luxembourg, Slovenia and Slovakia. On the other hand, the major players in road freight transport, Germany, Spain, France Italy and the United Kingdom have relatively small shares of international transport (less than 30%).

In some cases like Ireland, Spain, Portugal, Finland, Sweden or the United Kingdom, the geographical position of these Member States at the periphery of the EU has an impact on their low proportion of international transport, in general for

rail and road. This is not valid for all countries having low levels of international transport. Germany and France are two such examples with a big internal market.

## Passenger transport

**Table 2: Passenger transport by rail - million pkm**

	2004	2005	2006	2007
BE	8 675	8 510	8 964	9 929
BG	2 404	2 389	2 422	2 423
CZ	6 580	6 667	6 922	6 898
DK	5 921	5 961	6 097	6 163
DE	72 879	74 944	78 735	79 116
EE	193	248	257	274
IE	1 582	1 781	1 872	2 007
EL	1 668	1 854	1 811	1 933
ES	20 328	21 153	22 334	19 989
FR	74 359	76 886	79 835	81 599
IT	49 254	50 088	50 185	45 985
CY	-	-	-	-
LV	806	889	986	975
LT	283	280	268	246
LU	253	267	298	317
HU	10 165	9 851	9 658	8 637
MT	-	-	-	-
NL	14 509	15 153	15 889	16 325
AT	8 274	8 685	8 907	9 167
PL	18 430	17 882	18 240	19 524
PT	3 693	3 809	3 876	3 987
RO	8 638	7 985	8 092	7 476
SI	695	716	724	812
SK	2 228	2 182	2 213	2 165
FI	3 352	3 478	3 540	3 789
SE	8 634	8 910	9 615	10 342
UK	43 348	44 415	47 037	50 105
<b>EU-27</b>	<b>367 151</b>	<b>374 983</b>	<b>388 777</b>	<b>390 183</b>
LI	1	1	1	2
NO	2 620	2 723	2 833	2 991
CH	14 914	16 144	16 500	:

BG: 2004-2006 DGTREN data

In 2007, four countries accounted for more than 65% of the EU passenger transport: France and Germany with around 80 billion pkm each, followed by the United Kingdom (around 50 billion pkm) and Italy (around 45 billion pkm).

Most of the Member States registered increases in their transport of passengers by rail in 2007 compared to 2004 – among Member States that reported 2007 annual data. Estonia, Ireland, the Netherlands and Austria reported growths over 10%. Decreases were observed in Romania, Slovakia, Spain, Italy, Lithuania and Hungary.

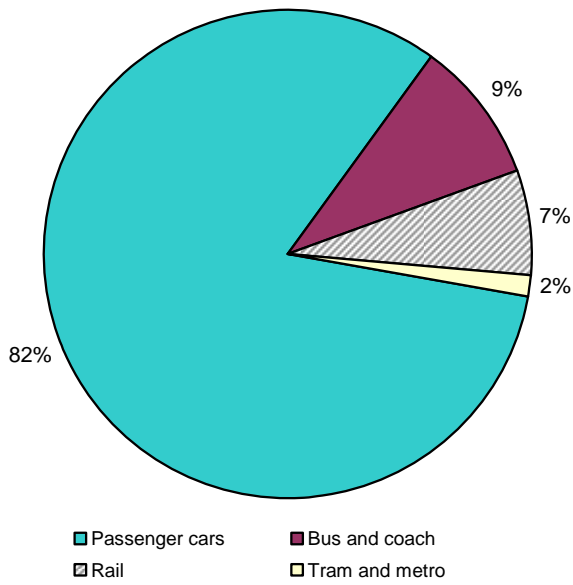
In 2006 road passenger transport performed in the EU-27 by passenger cars, buses and coaches was slightly over 5 100 billion pkm. This represented an increase of 3% compared to 2003. Since 2000, the increase has been 7%.

Over the period 2003 to 2006, most of the Member States reported increases in their road passenger transport, the highest growth rates being recorded in Estonia, Latvia, Lithuania, Latvia and Poland. Small decreases were observed in France, Italy and Hungary.

**Table 3: Passenger transport by road (passenger cars, buses and coaches) - million pkm**

	2003	2004	2005	2006
BE	123 452	125 778	126 391	127 990
BG	39 454	39 093	40 355	42 136
CZ	83 785	82 788	84 248	85 645
DK	58 264	59 517	60 141	61 489
DE	925 286	936 507	923 962	935 225
EE	11 729	12 468	12 913	14 381
IE	30 500	31 550	32 700	34 900
EL	97 950	101 600	106 700	111 800
ES	371 137	383 650	390 973	390 306
FR	781 300	780 900	771 300	768 700
IT	809 307	815 820	790 209	795 355
CY	5 430	5 840	6 060	6 260
LV	15 050	15 755	16 891	18 280
LT	31 987	34 549	38 484	43 168
LU	6 740	6 870	7 100	7 320
HU	65 067	64 673	64 445	64 780
MT	2 390	2 450	2 470	2 500
NL	157 350	163 150	160 550	160 000
AT	78 421	79 206	79 893	81 219
PL	202 396	211 618	226 614	247 388
PT	75 237	77 809	81 000	83 100
RO	63 500	65 500	67 812	71 735
SI	22 396	23 022	23 371	23 906
SK	32 981	32 214	33 564	34 158
FI	67 260	68 545	69 450	69 995
SE	105 400	105 900	106 100	105 700
UK	720 414	726 410	722 487	736 014
<b>EU-27</b>	<b>4 984 182</b>	<b>5 053 182</b>	<b>5 046 183</b>	<b>5 123 450</b>
IS	4 711	4 855	5 145	5 488
NO	56 344	56 653	57 345	57 383
CH	87 433	88 190	89 085	89 691

**Graph 4: Passenger transport in the EU-27 by type of transport, 2006 – % in pkm**



Graph 4 shows the share of passenger transport realised by passenger cars, buses and coaches, railway, and tram and metro in 2006.

Passenger cars accounted for 82% of the transport of passengers by rail and road in the EU-27, followed by buses and coaches with 9%.

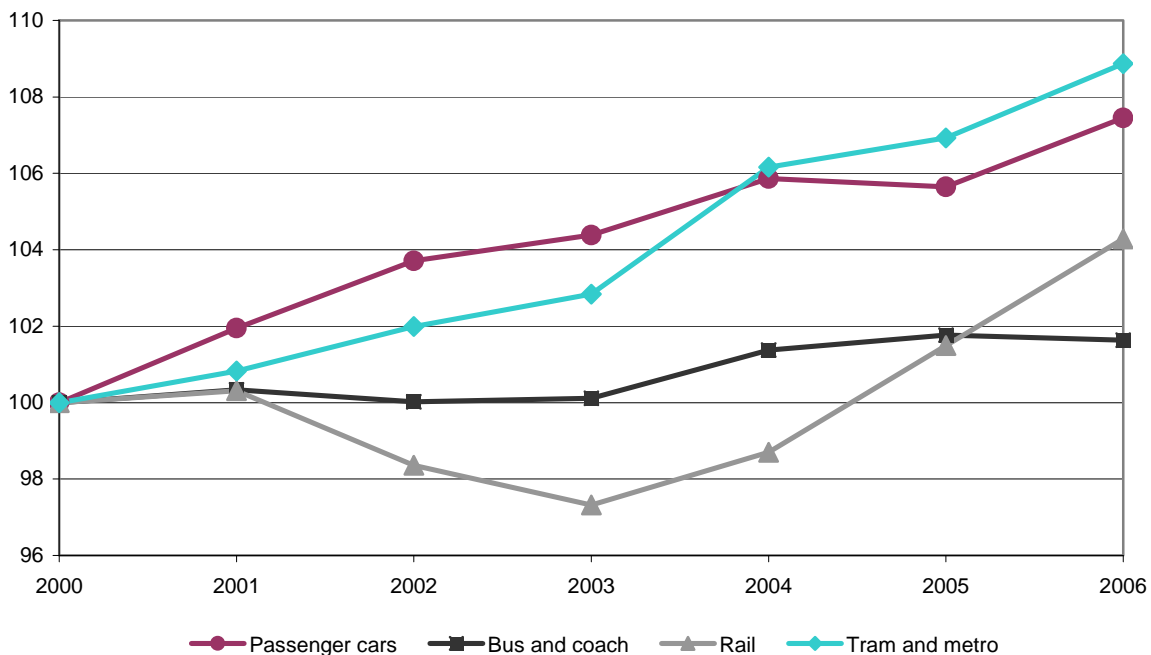
Transport by passenger cars dominates in all Member States. For the other modes, the situation is more varied. In 2006, Bulgaria, Hungary and Slovakia had more than 20% of passenger transport by buses and coaches. Railway transport had the highest share in Hungary, representing 12% of passenger transport, followed by Denmark, France and Austria. The Czech Republic had the highest share of tram and metro with 8%.

Graph 5 presents the evolution of passenger transport by passenger cars, buses and coaches, railway and tram and metro over the period 2000 to 2006 in the EU-27. It is worth noting that the numbers of passengers transported are very different for each type of transport.

Even if the share of passenger transport by tram and metro is small, its growth was highest over the period 2000 to 2006, at 9%. It was followed by passenger cars with an increase of 7%. These data correspond to annual average growth rates of 1.4% and 1.2% respectively.

After a decrease over the period 2001 to 2003, passenger transport by railway increased up to 2006 to reach an overall increase of 4% over the period 2000 to 2006. Over the same period, passenger transport by buses and coaches increased by 2%.

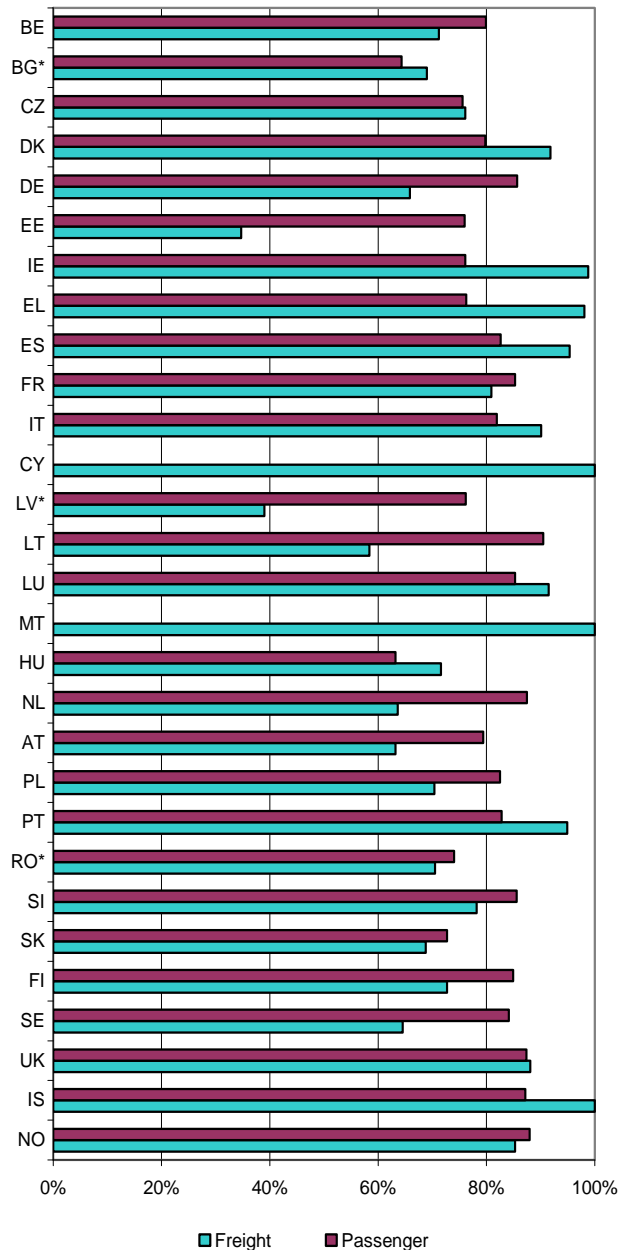
**Graph 5: Evolution of EU-27 passenger transport by rail and road - based on pkm (2000=100)**



Source: DGTREN

## Structural indicators

**Graph 6: Share of road in inland freight transport and share of cars in inland passenger transport, 2006 - % in tkm and pkm**



\* 2005 data

Structural indicators are a set of key indicators relating to several statistical domains that are used to monitor the development of the EU. Four structural indicators are related to transport statistics: volume of freight transport relative to GDP, presented in Graph 2; volume of passenger transport relative to GDP (not presented in this publication); road share of inland freight transport and car share of inland passenger transport, both presented in Graph 6.

This graph shows the share of road transport in total inland freight transport in tkm and the share of transport by passenger cars in total inland passenger transport in pkm. As 2007 data are not available for car share in inland passenger transport, 2006 data were used for both indicators.

In most of the countries road freight transport was the dominant mode in 2006. For all EU-27 Member States, the share of road transport in total inland freight transport was over 50%, except for Latvia and Estonia.

Looking at passenger transport, passenger cars were even more dominant in passenger transport than road in freight transport. For all EU-27 Member States except Bulgaria and Hungary, the share of passenger cars in total inland passenger transport was over 70% in 2006.

Comparing both indicators for freight and passenger transport shows that in 2006, a majority of Member States have higher shares of cars in inland passenger transport than road transport in inland freight transport.

The evolution over time of the share of road in inland freight transport is regular for the EU-27 total, with an annual average increase of 0.6% over the period 2000 to 2006. The share of cars in inland passenger transport is stable over the same period.

## ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

### Definitions

Terms and definitions for transport are based on the Glossary of transport statistics, prepared by Eurostat, ITF (International Transport Forum) and UNECE (the United Nations Economic Commission for Europe).

### Data source

The figures presented in this publication have been taken from Eurostat's free dissemination database and DG Energy and Transport Pocketbook 'EU energy and transport in figures'. Other sources include national publications.

Eurostat data, publications and background information can be found under the theme 'Transport' on Eurostat's website: <http://epp.eurostat.ec.europa.eu/>

Data compiled by the Commission DG Energy and Transport can be found in the Pocketbook 'EU energy and transport in figures':

[http://ec.europa.eu/dgs/energy\\_transport/](http://ec.europa.eu/dgs/energy_transport/)

### Rail transport

Rail transport statistics presented in this publication were collected in the frame of Regulation (EC) No 91/2003 that has replaced the Council Directive 80/1177/EEC since 2003. The data record the transport performed **on the territory of the reporting country**.

CY and MT have no railways.

Provisional quarterly data were used for countries that had not provided annual data for 2007. These data include only rail transport reported by major undertakings (small undertakings are not reporting quarterly data).

### Road freight transport

Road freight transport statistics presented in this publication were collected in the frame of Council Regulation (EC) No 1172/98 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 and record the road goods transport undertaken **by vehicles registered in these countries**.

Malta has not reported any road transport data.

### Road passenger transport

Road passenger transport statistics presented in this publication were taken from DG Energy and Transport Pocketbook 'EU energy and transport in figures'.

The data should record the transport performed **on the territory of the reporting country**.

### Inland Waterways

Inland waterways statistics presented in this publication were collected in the frame of Regulation (EC) No 1365/2006 that has replaced the Council Directive 80/1119/EEC since 2007 and were taken from DG Energy and Transport Pocketbook 'EU energy and transport in figures'. The data record the transport performed **on the territory of the reporting country**.

### Oil pipeline transport

Oil pipelines statistics presented in this publication were collected on a voluntary basis via Eurostat/UNECE/ITF Common Questionnaire on Transport statistics and were taken from DG Energy and Transport Pocketbook 'EU energy and transport in figures'. The data record the transport performed **on the territory of the reporting country**.

### Structural Indicators

*Volume of freight transport relative to Gross Domestic Product (GDP)*: Index of inland freight transport volume relative to GDP. Measured in tkm / GDP (in constant 2000 Euro), It is indexed on 2000 (2000=100). This indicator is defined as the ratio between tkm (inland modes) and GDP (in constant 2000 EUR). Inland freight transport includes transport by road, rail and inland waterways.

*Road share of inland freight transport*: share of road in total inland (road, rail and inland waterways) freight transport in tkm. This indicator is defined as the percentage of road in total inland transport performance measured in tkm. Inland freight transport includes road, rail and inland waterways.

*Car share of inland passenger transport*: share of car transport in total inland (passenger cars, buses and coaches and trains) passenger transport in pkm. This indicator is defined as the percentage of transport by passenger car in total inland transport performance measured in pkm. Inland passenger transport includes transport by passenger cars, buses and coaches, and trains.

### Methodology

Data for rail, inland waterways, pipelines and road passenger transport are reported according to the territoriality principle (i.e. they reflect the transport performances on each countries' territory). However, the methodology is not harmonised across countries for road passenger transport.

Data for road freight transport record the transport performed by vehicles registered in the reporting countries, independently from the territory where the transport takes place.

**Estimates** are presented in italic.

**Figures appearing in bold** refer to quarterly rail transport data.

**In this publication:** 1 billion = 1 000 000 000  
- Not applicable  
: Not available

**This publication** was produced with the assistance of Marie-Noëlle Dietsch, Artemis Information Management.

## Further information




---

Data: [Eurostat Website: http://ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)

Select your theme on the left side of the homepage and then 'Data' from the menu.

Data: [Eurostat Web site/Transport](#)

### Transport

-  [Railway transport](#)
-  [Road transport](#)
-  [Inland waterways transport](#)

---

### Journalists can contact the media support service:

Bech Building Office A4/125 L - 2920 Luxembourg

Tel. (352) 4301 33408 Fax (352) 4301 35349

E-mail: [eurostat-mediasupport@ec.europa.eu](mailto:eurostat-mediasupport@ec.europa.eu)

---

### European Statistical Data Support:

Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

Their mission is to provide help and guidance to Internet users of European statistical data.

Contact details for this support network can be found on our Internet site:

<http://ec.europa.eu/eurostat/>

---

A list of worldwide sales outlets is available at the:

### Office for Official Publications of the European Communities.

2, rue Mercier

L - 2985 Luxembourg

URL: <http://publications.europa.eu>

E-mail: [info@publications.europa.eu](mailto:info@publications.europa.eu)

---

Manuscript completed on: 10.02.2009

Data extracted on: 30.10.2008

ISSN 1977-0316

Catalogue number: KS-SF-09-011-EN-N

© European Communities, 2009