



## Introduction

An efficient and well-functioning passenger and freight transport system is vital for European Union (EU) enterprises and inhabitants. The EU's transport policy aims to foster clean, safe and efficient travel throughout Europe, underpinning the internal market for goods (transferring them between their place of production and consumption) and the right of citizens to travel freely throughout the EU (for both work and pleasure).

Eurostat's transport statistics describe the most important features of transport, not only in terms of the quantities of freight and numbers of passengers that are moved each year, or the number of vehicles and infrastructure that are used, but also the contribution of transport services to the economy as a whole. Data collection is supported by several legal acts obliging the Member States to report statistical data, as well as voluntary agreements to supply additional data.

Transport has seen its share of greenhouse gas emissions within the EU grow from 13.8% in 1990 to 17.9% in 2000 and to 20.2% in 2009 (based on data from the European Environment Agency). This development may be linked to a sizeable increase in transport volumes, as a result of (among others), trade liberalisation, globalisation, higher motorisation rates, and an increase in the number of holidays and short breaks that are taken by Europeans. Such changes have resulted in an increase in the relative share of greenhouse gas emissions accounted for by the transport sector.

On the other hand, some progress has been made in reducing air pollution within the transport sector: for example, through the application of stricter Euro emission standards. Furthermore, the energy efficiency of the transport sector has improved: for example, through the development of more efficient and hybrid vehicles, or a shift in freight transport to alternative modes such as short sea shipping. Generally, these efficiency gains have failed to outweigh the increased volume of transport. In 2009 the EU established a binding target (<sup>5</sup>) for Member States, whereby 10% of the fuel used within transport should be derived from renewable energy sources by 2020.

The European Commission's Directorate-General for Mobility and Transport is responsible for developing transport policy within the EU. Its remit is to ensure mobility in a single European transport area, integrating the needs of the population, environmental policy, and competitiveness. It aims to do so by:

- completing the European internal market: so as to ensure the seamless integration of all modes of transport into a single, competitive transport system, while protecting safety and security, and improving the rights of passengers;
- developing an agenda for innovation: promoting the development of a new generation of sustainable transport technologies, in particular for integrated traffic management systems and lowcarbon vehicles;
- building a trans-European network as the backbone of a multimodal, sustainable transport system capable of delivering fast, affordable and reliable transport solutions;
- projecting these mobility and transport objectives and defending EU political and industrial interests on the world stage, within international organisations, and with strategic partners.

The European Commission's White paper titled, 'European transport policy for 2010: time to decide' (COM(2001) 370 final) was the foundation of the EU's sustainable transport policy; it was supplemented in June 2006 by a mid-term review in the form of a Communication to the Council and the European Parliament, titled 'Keep Europe moving – sustainable mobility for our continent' (COM(2006) 314 final). The mid-term review proposed that each transport mode should

(5) Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources.

be: optimised to help ensure competitiveness and prosperity; more environmentally-friendly and energy-efficient; safe and secure; used efficiently on its own and in combination to achieve an optimal and sustainable utilisation of resources.

Since the 2001 White paper the European Commission has launched a range of action plans on key transport policy issues, among which: a Green paper on urban transport (COM(2007) 551 final); a proposal for a Directive on the charging of heavy goods vehicles for the use of certain infrastructures (COM(2008) 436 final); a Communication to the European Parliament and Council titled 'Greening transport' (COM(2008) 433 final); and a freight transport logistics action plan (COM(2007) 607 final).

As the ten-year period covered by the White paper drew to an end, the European Commission adopted a Communication in mid-2009, titled, 'A sustainable future for transport: towards an integrated, technology-led and user friendly system' (COM (2009) 279 final). The Communication was both consultative and strategic in nature, and underlined the challenges to be faced in the coming years, such as: the need to reduce greenhouse gas emissions, the growing demand for – but increasing scarcity of – fossil fuels, and increasing levels of congestion in many European cities, airports and ports.

Following on from this, in March 2011 the European Commission adopted a White paper titled 'Roadmap to a single European transport area – towards a competitive and resource efficient transport system' (COM(2011) 144 final). This comprehensive strategy contains 40 specific initiatives for the next decade to build a competitive transport system that aims to increase mobility, remove major barriers in key areas and fuel growth and employment. Some of these initiatives concern a specific mode of transport, such as developing a true internal market for rail services or a suitable framework for inland navigation. Several modal specific initiatives concern safety or security, including for land transport security, road safety, civil aviation safety, safer shipping and rail safety. Others concern transport terminals, notably the capacity and quality of airports and market access to ports. Freight transport is the focus of many of the initiatives, including road freight, multimodal transport of goods (e-freight), cargo security, transport of dangerous goods and multimodal freight corridors for sustainable transport networks. Equally some of the initiatives are specific to passenger transport, for example, attaining high levels of passenger security with minimum inconvenience or passengers' rights. The proposals aim to reduce dependence on imported oil and cut carbon emissions in transport by 60 % by 2050. The strategy sets different goals for different types of journey - within cities, between cities, and long distance. The key goals for 2050 include:

- no more conventionally-fuelled cars in cities;
- 40% use of sustainable low carbon fuels in aviation; a cut of at least 40% in shipping emissions;
- a 50% shift of medium distance inter-city passenger and freight journeys from road to rail and waterborne transport;
- all of which should contribute towards a 60% cut in transport emissions by the middle of the century.



## 10.1 Transport accidents

Safety and security are of primary concern for any transport system. According to Eurostat statistics on the causes of death, the number of people in the European Union (EU) who died as a result of transport accidents (covering all transport modes) fell by 37% between 1999 and 2009. Transport accidents remain the largest single cause of death among people aged 15 to 29.

While rail, air, or sea transport incidents often receive considerable media coverage as they generally involve larger numbers of people, road accidents are often treated in a more mundane manner by the media, despite the fact that the vast majority of transport accidents and deaths in the EU occur on the road; the high number of deaths related to road transport reflects in part the high level of road traffic.

## Main statistical findings

### **Road accidents**

The annual number of road fatalities in the EU is falling, despite growth (prior to the financial and economic crisis) in passenger and freight transport. The reduction in road fatalities may be attributed, among others, to: improved road design and construction; stricter enforcement of drinking and driving legislation; improved vehicle safety standards; the introduction of speed limits; stricter rules on lorry and bus driving times; and reduced lorry overloads.

Indeed, the number of road fatalities in the EU-27 fell sharply during the decade between 1999 and 2009, from 57691 deaths to an estimated 34500 deaths (down 40.2% overall). Nevertheless, the number of people killed on Europe's roads still accounted for almost nine out of every ten deaths resulting from transport accidents in 2009. The use of alcohol or drugs, the failure to observe speed limits, and the refusal to wear seatbelts are involved in about half of all road fatalities in the EU.

The road fatality rate, expressed as the number of deaths per million inhabitants, averaged 78 across the EU-27 in 2008, although there were stark differences between the Member States (see Figure 10.1.1).

The highest road fatality rates were recorded in Lithuania (148 deaths per million inhabitants), Poland (143), Romania (142), Bulgaria, Greece and Latvia (all 139). The rates reported by these six countries were considerably higher than in the other Member States, as the next highest figure was recorded for Slovenia (106). In contrast, road fatality rates were much lower in Sweden, the United Kingdom (both 43), the Netherlands (41) and Malta (37).

## **Rail accidents**

Some 1 428 people were killed in railway accidents in the EU-27 in 2009 (see Table 10.1.1); this represented a slight increase (119 more victims) compared with the year before; it should be noted that the number of victims in any particular year can be greatly influenced by a small number of major accidents. Of the total number of persons killed in railway accidents in the EU-27 in 2009, around 1 in 20 (5.1%) were either train passengers or railway employees. Approximately two thirds (63.0%) of the lives lost in rail accidents were from incidents involving rolling stock in motion, with almost all the others (30.6%) from incidents at level-crossings. The highest numbers of rail fatalities within the EU in 2009 occurred in Poland (365) and Germany (185).

### **Air accidents**

In a similar manner to rail accidents, the number of air fatalities has an irregular pattern, due to the relatively low number of accidents each year and the large variations in terms of people involved in each event. In the three years covered by the average presented in Figure 10.1.2 the largest single aircraft accident within the EU-27 happened in August 2008 when a flight crashed just after take-off from Madrid's Barajas International Airport, resulting in 154 fatalities. Accidents outside of the national territory are not included in the statistics presented, regardless of whether the airport of departure or destination was in a Member State: for example, the statistics do not include the June 2009 crash in the Atlantic Ocean of a flight from Brazil to France which resulted in 228 fatalities.



## Data sources and availability

#### **Road accidents**

CARE is the EU's road accident database that collects information on accidents resulting in death and/or injury. The legal basis for CARE is Council Decision 93/704/EC on the creation of a database on road accidents. Its purpose is to provide information which makes it possible to: identify and quantify road safety problems; evaluate the efficiency of road safety measures; determine the relevance of EU actions; and facilitate the exchange of experiences. Road injury accidents are defined as any accident involving at least one road vehicle in motion on a public road or private road to which the public has right of access, resulting in at least one injured or killed person. Included are: collisions between road vehicles: between road vehicles and pedestrians; between road vehicles and animals or fixed obstacles and with one road vehicle alone. Included are collisions between road and rail vehicles. Road deaths are defined as any person killed immediately or dying within 30 days as a result of an injury accident, excluding suicides.

#### **Rail accidents**

The legal basis for the collection of statistics on rail accidents is Regulation 91/2003 on rail transport statistics (Annex H), amended by Regulation 1192/2003. The data collected includes information on the number of persons killed or injured (by category of persons) and the number of accidents (by type of accident). An injury accident involves at least one rail vehicle in motion, resulting in at least one killed or injured person. Accidents in workshops, warehouses and depots are excluded. Rail deaths are defined in terms of any person who is killed immediately or dying within 30 days as a result of an accident, excluding suicides. Rail accident statistics are available from 2004 or 2006 onwards for all EU Member States, except for Malta and Cyprus (where there are no railways).

## **Air accidents**

The questionnaire on air transport safety statistics is not supported by any legal acts. Rather, it is based on a gentlemen's agreement with the participating countries (EU Member States, EFTA and candidate countries). The final section of the questionnaire (part IV) deals with the topic of accidents. It contains requests for information on the number of injuries and the number of fatalities that take place as a result of aircraft accidents. Accidents are measured during the operation of an aircraft, which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked (injuries sustained from natural causes or injuries that are selfinflicted are excluded). As with the other modes of transport, a fatal injury is one that results in death within 30 days of the accident.

## Context

In June 2003, a European Commission Communication launched an action programme for European road safety (COM(2003) 311), which encouraged:

- road users to improve their behaviour in particular through greater respect of existing rules, initial and continuous training of private and professional drivers, and better law enforcement against dangerous behaviour;
- the use of technical progress to make vehicles safer through improved safety performance standards;
- the improvement of road infrastructure, in particular through the identification and diffusion of best practices and the elimination of black spots through the European Road Assessment Programme (EuroRAP) and the European Tunnel Assessment Programme (EuroTAP).

Railway, aviation and shipping accidents result in far fewer deaths than road accidents. The main reason for this is the limited size of these sectors, relative to the number of cars and goods vehicles that are on Europe's roads. However, when accidents involving trains, planes or ships do occur they have the potential to cause considerable environmental damage and often result in serious commercial and financial consequences. Major transport accidents are almost always investigated in great depth in order to find the cause of the accident, such that a reoccurrence may be prevented.



In March 2011 the European Commission adopted the White paper titled 'Roadmap to a single European transport area – towards a competitive and resource efficient transport system' (COM(2011) 144 final). This comprehensive strategy contains a roadmap of 40 specific initiatives for the next decade including initiatives specifically related to road safety, civil aviation safety, safer shipping and rail safety – more information on the White paper is available in the introduction for transport.



**Figure 10.1.1:** People killed in road accidents, 2008 (persons killed per million inhabitants)

 Table 10.1.1: Rail accidents – number of fatalities, by type of victim and accident, EU-27, 2009 (number of persons)

	Total	Passengers	Railway employees	Others
Total	1 428	37	36	1 353
Collisions (excluding level-crossing accidents)	10	0	4	6
Derailments	32	0	2	30
Accidents involving level-crossings	433	2	5	426
Accidents to persons caused by rolling stock in motion	942	34	23	883
Fire in rolling stock	0	0	0	0
Others	11	1	2	8

Source: Eurostat (online data code: rail\_ac\_catvict)

Source: Eurostat (online data code: tsdtr420), European Commission CARE database (Community Database on Road Accidents)



Figure 10.1.2: Air transport accidents – number of fatalities, annual average 2007-2009 (<sup>1</sup>) (persons killed)

(!) Accidents on national territory regardless of the nationality of the aircraft operator; Germany, Norway, Switzerland and Turkey, 2007 only; Croatia, average 2008-2009; Iceland, average 2007-2008.

Source: Eurostat (online data code: avia\_ac\_fatal)

## 10.2 Passenger transport

This subchapter provides details relating to recent trends for passenger transport statistics within the European Union (EU). It presents information on a range of different passenger transport modes, such as road, rail, air and maritime transport. Among these, the most dominant mode of passenger transport is that of the car, likely fuelled by a desire to have greater mobility and flexibility. The high reliance on the use of the car as a means of passenger transport across the EU has resulted in increased congestion and pollution in many urban areas and on many major transport arteries.

## Main statistical findings

Passenger cars accounted for 83.3% of inland passenger transport in the EU-27 in 2008, with buses and coaches (9.4%) and railways, trams and metros (7.3%) both accounting for slightly less than a tenth of the total volume of traffic (as measured by the number of inland passenger-kilometres (pkm) travelled by each mode) – see Table 10.2.1.

In the vast majority of EU Member States, gross domestic product (GDP) grew faster than the volume of inland passenger transport between 2000 and 2008 (see Table 10.2.2). This was most notably the case in Slovakia and Hungary, where GDP grew about one third faster than the rate of growth for the volume of inland passenger transport. The main exceptions to this general pattern were Lithuania and Latvia where the rate of growth in the volume of inland passenger transport was between one quarter and one third faster than the rate of growth for GDP; other exceptions were recorded for Poland, Portugal and Greece.

It should be noted that the analysis above refers only to inland transport by car, bus or train and that a significant proportion of international passenger travel is accounted for by maritime and air transport passenger services, while in some countries national (domestic) maritime and air transport passenger services may also be of note.

#### **Road passengers**

Reliance on cars for passenger transport was particularly high in Lithuania, the United Kingdom, the Netherlands and Slovenia, where it accounted for upwards of 86% of all inland passengerkilometres in 2008. At least 20% of the inland passenger-kilometres travelled in Hungary and Bulgaria were by bus or coach.



Between 2000 and 2008 there was a marked increase in the use of passenger cars among many of the Member States that joined the EU in 2004 or 2007, in particular, Bulgaria and Poland, while Hungary was an exception to this development. In contrast, the relative importance of cars as a mode of inland passenger transport fell in ten of the EU-15 Member States. The most sizeable reductions in the relative importance of the car between 2000 and 2008 were recorded in Luxembourg (where the share of the car in total inland passenger transport fell 1.3 percentage points), Italy, Spain and the United Kingdom (-1.4 points), France (-1.9 points) and Belgium (-5.0 points).

### **Rail passengers**

There were 367251 million passenger-kilometres travelled on national railway networks within the EU-27 (excluding the Netherlands) in 2008; this figure was considerably higher than the 20388 million passenger-kilometres travelled on international journeys. More than a tenth of all inland passenger-kilometres travelled in Hungary, Austria and France were made on rail networks; these figures include trains, trams and underground railways/metros.

Approximately two thirds of all rail travel (national and international combined) was accounted for by the four largest EU Member States (note that neither Cyprus nor Malta has a railway network), with France and Germany together accounting for more than two fifths of the EU's passenger rail travel. The number of international passenger-kilometres travelled by French passengers in 2009 was, at 9983 million passenger-kilometres, more than twice the level for Germany (4162 million passenger-kilometres), which in turn recorded a figure that was more than double that for the United Kingdom (1641 million passenger-kilometres). In order to compare the relative importance of rail transport between countries, the data can be normalised by expressing passenger volumes in relation to population. France, Sweden and Denmark registered the longest average distances travelled on national railways in 2009, each of these countries averaging more than 1000 passengerkilometres per inhabitant. In terms of international rail travel, the highest average distances covered by rail were recorded for Luxembourg, Austria, France and Belgium (the only Member States to report averages over 100 passenger-kilometres per inhabitant). These figures may reflect, among others, the proximity of international borders, the importance of international commuters within the workforce, access to high-speed rail links, and whether or not international transport corridors run through a particular country.

Note that a subchapter on transport accidents provides more detailed information in relation to rail accidents, including a breakdown of EU-27 data according to the type of victim and accident.

#### **Air passengers**

London Heathrow was the busiest airport in the EU-27 in terms of passenger numbers in 2010 (65.7 million), followed by Paris' Charles-de-Gaulle airport (58.0 million), and then Frankfurt airport, Madrid's Barajas airport and Amsterdam's Schiphol airport (all with between 52.6 million and 45.1 million passengers) – see Figure 10.2.2.

With the exception of Barajas, the overwhelming majority (at least 88%) of passengers through the other four largest airports in the EU were on international flights. In contrast, national (domestic) flights accounted for 37.7% of the passengers carried through Barajas in 2010. There were also relatively high proportions of passengers on national flights to and from Paris Orly (53.0%), Barcelona airport (39.9%) and Roma Fiumicino (35.2%).

Just under 800 million passengers were carried by air in 2010 in the EU-27 (see Table 10.2.4). The number of air passengers carried in the EU-27 had stagnated in 2008, fell by 5.9% in 2009, and rebounded by 6.0% in 2010.

The United Kingdom reported the highest number of air passengers in 2010, with almost 193 million or 3.1 passengers per inhabitant (which was approximately double the EU-27 average). Relative to population size, the importance of air travel was particularly high for the popular holiday islands of Cyprus and Malta (8.7 and 7.9 passengers carried per inhabitant).

#### **Maritime passengers**

Table 10.2.4 also shows that ports in the EU-27 handled almost 404 million maritime passengers in 2009; this marked a reduction of 2.2% compared with 2008 following a fall of 0.3% in 2008 (compared with 2007). Italian and Greek ports handled more passengers in 2009 than in any other Member State (accounting for 23.0% and 21.9% of the EU-27 total respectively); they were followed by Danish ports and then, with roughly similar numbers, ports in Sweden, the United Kingdom and Germany.

Relative to national population, the importance of maritime passenger transport was particularly high in Malta (18.9 passengers per inhabitant), followed by Denmark (7.9), Greece (7.8) and Estonia (6.8); in the remaining Member States, other than Sweden, Finland and Italy, the number of maritime passengers per inhabitant in 2009 averaged less than 1.0 in each of the remaining EU Member States.

## Data sources and availability

The majority of inland passenger transport statistics are based on vehicle movements in each of the reporting countries, regardless of the nationality of the vehicle or vessel involved (the 'territoriality principle'). For this reason, the volume measure of passenger-kilometres is generally considered as a more reliable measure, as a count of passengers entails a higher risk of double-counting, particularly for international transport. The methodology used across the Member States is not harmonised for road passenger transport. As such, the figures, especially those for the smallest reporting countries, may be somewhat unreliable.

The modal split of inland passenger transport identifies transportation by passenger car, bus and coach, and train; it generally concerns movements on the national territory, regardless of the nationality of the vehicle. The modal split of passenger transport is defined as the percentage share of each mode and is expressed in passenger-kilometres (pkm), which represent one passenger travelling a distance of one kilometre. For the purpose of this subchapter, the aggregate for inland passenger transport excludes domestic air and water transport services (inland waterways and maritime).

The volume of inland passenger transport (measured in pkm) may also be expressed in relation to GDP; within this subchapter the indicator is presented in constant prices for the reference year 2000, providing information on the relationship between passenger demand and economic growth, with the series indexed on 2000 = 100, so that the annual intensity of passenger transport demand can be monitored relative to economic developments.

## **Rail passengers**

A rail passenger is any person, excluding members of the train crew, who makes a journey by rail. Rail passenger data are not available for Malta and Cyprus (or Iceland) as they do not have railways. Annual passenger statistics for national and international breakdowns generally only cover larger rail transport enterprises, although some countries use detailed reporting for all railway operators.

#### **Air passengers**

Air transport statistics concern national and international transport, as measured by the number of passengers carried; information is collected for arrivals and departures. Air passengers carried relate to all passengers on a particular flight (with one flight number) counted once only and not repeatedly on each individual stage of that flight. Air passengers include all revenue and non-revenue passengers whose journey begins or terminates at the reporting airport and transfer passengers joining or leaving the flight at the reporting airport; but excludes direct transit passengers. Air transport statistics are collected with a monthly, quarterly and annual frequency, although only the latter are presented in this subchapter. There are also air transport passenger statistics on the number of commercial passenger flights made, as well as information relating to individual routes and the number of seats available. Annual data are available for most of the EU Member States from 2003 onwards.



### Transport

#### **Maritime passengers**

Maritime transport data are available for most of the period from 2001 onwards, although some EU Member States have provided data since 1997. Maritime transport statistics are not transmitted by the Czech Republic, Luxembourg, Hungary, Austria or Slovakia, as none of these has any maritime traffic. A sea passenger is defined as any person that makes a sea journey on a merchant ship; service staff are not regarded as passengers, neither are non-fare paying crew members travelling but not assigned, while infants in arms are also excluded. Doublecounting may arise when both the port of embarkation and the port of disembarkation reports data; this is quite common for the maritime transport of passengers, which is generally a relatively short distance activity.

More detailed definitions of the statistical terms used within transport statistics are available in the Illustrated glossary for transport statistics, 4<sup>th</sup> edition, 2010.

## Context

EU transport policy seeks to ensure that passengers benefit from the same basic standards of treatment wherever they travel within the EU. With this in mind the EU legislates to protect passenger rights across the different modes of transport. Legislation for aviation (Regulation 261/2004 establishing 'common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delays of flights') and rail travel (Regulation 1371/2007 on 'rail passengers' rights and obligations') are already in force. For bus and coach travel, Regulation 181/2011 was adopted in February 2011 and will apply from March 2013; for sea and inland waterway passenger transport, Regulation 1177/2010 was adopted in November 2010 and will apply from December 2012.

Passengers already have a range of rights covering areas as diverse as: information about their journey; reservations and ticket prices; damages to their baggage; delays and cancellations; or difficulties encountered with package holidays. Specific provisions have also been developed in order to ensure that passengers with reduced mobility are provided with necessary facilities and not refused carriage unfairly.

In March 2011 the European Commission adopted a White paper, the 'Roadmap to a single European transport area – towards a competitive and resource efficient transport system' (COM(2011) 144 final). This comprehensive strategy contains a roadmap of 40 specific initiatives for the next decade to build a competitive transport system that aims to increase mobility, remove major barriers in key areas and fuel growth and employment. More information on the White paper is available in the introduction for transport. Table 10.2.1: Modal split of inland passenger transport, 2000 and 2008 (1) (% of total inland passenger-km)

		2000		2008				
	Passenger cars	Buses	Railways, trams and metros	Passenger cars	Buses	Railways, trams and metros		
EU-27	83.1	9.8	7.1	83.3	9.4	7.3		
Belgium	83.4	10.5	6.1	78.4	14.4	7.2		
Bulgaria	59.8	32.4	7.7	75.9	20.0	4.1		
Czech Republic	73.2	18.5	8.3	76.0	16.9	7.1		
Denmark	79.8	11.6	8.6	79.4	11.1	9.4		
Germany	85.2	7.1	7.7	85.1	6.3	8.6		
Estonia	:	:	:	79.4	18.5	2.1		
Ireland	83.7	13.3	3.0	83.8	12.8	3.4		
Greece	72.8	25.1	2.2	80.8	17.9	1.3		
Spain	81.5	13.5	5.0	80.1	14.4	5.5		
France	86.1	5.3	8.6	84.2	5.7	10.1		
Italy	83.8	10.8	5.4	82.4	11.9	5.7		
Cyprus	:	:	0.0	:	:	0.0		
Latvia	:	:	:	80.6	14.1	5.3		
Lithuania	:	:	:	90.9	8.2	1.0		
Luxembourg	85.5	9.5	5.1	84.2	11.4	4.3		
Hungary	62.1	25.0	12.9	62.1	25.7	12.3		
Malta	:	:	0.0	:	:	0.0		
Netherlands ( <sup>2</sup> )	86.0	4.6	9.4	86.5	3.8	9.7		
Austria ( <sup>3</sup> )	79.2	11.0	9.8	78.6	10.2	11.1		
Poland	72.8	15.4	11.7	85.5	8.4	6.2		
Portugal	81.9	13.6	4.4	85.2	10.7	4.1		
Romania	72.5	10.9	16.5	77.2	15.2	7.6		
Slovenia	82.9	14.3	2.9	86.2	10.9	2.9		
Slovakia	67.9	23.9	8.1	74.9	18.6	6.5		
Finland	83.4	11.5	5.1	84.5	10.1	5.4		
Sweden	83.7	8.7	7.6	83.3	7.4	9.3		
United Kingdom	88.2	6.4	5.3	86.8	6.4	6.8		
Iceland	87.0	13.0	0.0	88.6	11.4	0.0		
Norway	87.0	7.7	5.3	87.6	7.3	5.1		
Croatia	81.4	13.6	5.1	82.2	12.5	5.4		
FYR of Macedonia	83.2	13.3	3.5	78.3	19.4	2.3		
Turkey	45.9	50.7	3.4	51.0	46.8	2.2		

(1) Excluding powered two-wheelers.
 (2) Break in series.
 (3) The railway in Liechtenstein is owned and operated by the Austrian ÖBB and included in their statistics.

Source: Eurostat (online data code: tsdtr210)



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
EU-27	:	:	100.0	:	99.8	:	:	96.3	95.7	94.7	93.5
Belgium	104.8	103.1	100.0	101.8	102.4	100.7	99.8	98.4	96.9	97.6	96.4
Bulgaria	101.0	103.0	100.0	99.8	100.0	92.7	88.1	84.0	82.7	82.4	81.8
Czech Republic	100.0	100.6	100.0	98.6	96.9	95.5	90.5	86.6	82.6	79.5	77.7
Denmark	104.7	103.5	100.0	98.0	97.7	98.0	95.7	93.8	92.3	92.7	93.9
Germany	104.6	104.7	100.0	100.9	101.4	101.1	101.5	99.4	97.8	95.9	93.1
Estonia	:	:	100.0	:	:	:	:	83.3	76.6	71.3	75.6
Ireland	113.0	105.2	100.0	98.1	93.4	91.5	89.1	86.3	84.8	84.3	88.8
Greece	94.5	97.8	100.0	101.5	102.7	101.0	99.9	102.1	102.2	102.8	104.0
Spain	101.6	102.3	100.0	98.4	97.2	95.8	96.0	94.5	90.9	90.2	89.1
France	103.8	103.3	100.0	101.6	101.6	101.0	98.8	96.2	94.1	92.9	92.3
Italy (1)	96.4	95.5	100.0	97.4	96.4	96.4	96.1	92.7	97.1	98.2	93.9
Cyprus	:	:	100.0	:	:	:	:	:	:	:	:
Latvia	:	:	100.0	:	99.8	:	:	133.0	132.6	132.7	125.6
Lithuania	:	:	100.0	:	93.3	98.8	120.2	145.6	151.3	137.4	129.3
Luxembourg	105.3	97.5	100.0	101.3	99.8	98.6	95.9	94.3	91.7	88.9	91.8
Hungary	106.1	103.6	100.0	96.3	93.1	89.3	85.4	79.9	77.0	68.9	69.1
Malta	:	:	100.0	:	:	:	:	:	:	:	:
Netherlands ( <sup>2</sup> )	106.0	103.8	100.0	98.5	99.8	99.5	100.8	97.3	94.1	91.5	88.8
Austria	104.1	102.3	100.0	100.0	99.6	100.0	98.5	97.3	95.7	93.3	93.7
Poland	103.8	100.3	100.0	101.5	103.1	101.3	99.6	102.2	104.5	105.6	112.5
Portugal	99.8	100.6	100.0	99.8	102.8	108.2	108.8	110.4	109.5	108.5	109.3
Romania	:	101.4	100.0	94.9	89.0	90.0	85.3	87.0	83.8	81.9	80.1
Slovenia	105.4	105.7	100.0	98.7	96.7	94.7	92.5	89.7	86.4	85.5	84.0
Slovakia	89.9	93.0	100.0	96.4	94.1	88.3	81.9	79.3	74.8	66.9	61.8
Finland	105.4	103.7	100.0	99.1	99.5	99.5	97.7	96.4	92.7	90.8	89.8
Sweden	104.4	102.8	100.0	99.6	99.6	99.5	95.8	93.1	89.5	89.8	89.6
United Kingdom	106.4	104.2	100.0	99.7	100.7	97.6	96.0	93.6	92.3	90.7	89.7
Iceland	89.9	89.8	100.0	103.7	106.5	107.0	102.5	101.9	102.7	88.3	88.9
Norway	102.9	102.1	100.0	99.8	100.2	101.1	98.4	97.3	95.8	95.2	92.7
Croatia	93.1	98.5	100.0	100.8	99.4	96.9	95.3	93.3	92.9	92.6	94.7
FYR of Macedonia	:	:	100.0	100.0	103.7	107.9	107.7	104.9	101.6	97.9	102.0
Turkey	:	108.1	100.0	100.6	97.0	94.1	93.3	93.0	92.7	93.5	96.8

**Table 10.2.2:** Volume of inland passenger transport, 1998-2008(index of inland passenger transport volume relative to GDP (2000 = 100))

(1) Break in series, 2000. (2) Break in series, 2003.

Source: Eurostat (online data code: tsien070)

	Rail (mill	passeng ion pass	er trans enger-k	port m) (1)	Kail passenger transport (passenger-km per inhabitant) (1)				Rail accidents (number of persons)			
	Nati	onal	Intern	ational	Nati	ional	Intern	ational	Killed		Seriously injured	
	2008	2009	2008	2009	2008	2009	2008	2009	2009	2010	2009	2010
EU-27	:	:	:	:	:	:	:	:	1 4 2 8	:	1145	:
Belgium	8913	9005	1 226	1 2 3 2	836	837	114.9	114.6	26	35	13	188
Bulgaria	2 2 6 4	2089	52	49	296	275	6.8	6.4	28	16	22	22
Czech Republic	6324	6132	449	340	609	586	43.3	32.5	26	48	92	107
Denmark	5 606	5 590	477	377	1 0 2 4	1014	87.1	68.4	15	:	15	:
Germany	78558	77044	3 870	4162	955	940	47.1	50.8	185	:	138	:
Estonia	245	232	28	17	183	173	20.9	12.7	10	12	7	0
Ireland	1872	1683	104	:	425	378	23.6	:	4	8	5	0
Greece	1 5 9 9	:	59	:	143	:	5.3	:	22	29	22	20
Spain	21853	21 493	221	206	483	469	4.9	4.5	41	52	21	28
France	78970	78628	7546	9983	1 2 3 4	1 2 2 2	117.9	155.1	76	68	61	46
Italy	44 708	:	1059	:	750	:	17.8	:	82	86	71	64
Cyprus	-	-	-	-	-	-	-	-	-	-	-	-
Latvia	865	686	76	62	381	303	33.5	27.4	17	22	12	15
Lithuania	235	213	22	18	70	64	6.5	5.4	33	31	12	17
Luxembourg (2)	246	246	99	101	508	490	204.6	201.2	4	0	0	0
Hungary	7912	7680	379	321	788	766	37.7	32.0	92	82	84	70
Malta	-	-	-	-	-	-	-	-	-	-	-	-
Netherlands	:	:	:	:	:	:	:	:	14	10	9	10
Austria	8235	8178	1452	1 442	990	979	174.5	172.6	36	30	65	51
Poland	19324	17776	439	352	507	466	11.5	9.2	365	285	199	198
Portugal	4093	4115	120	97	385	387	11.3	9.1	32	:	18	:
Romania	6725	5842	152	133	312	272	7.1	6.2	150	139	187	182
Slovenia	713	718	53	55	355	353	26.4	27.1	11	14	14	12
Slovakia	2 0 9 4	2079	202	185	388	384	37.4	34.2	73	:	35	:
Finland	3 940	3 785	112	91	743	711	21.1	17.1	14	13	10	8
Sweden	10609	10725	537	615	1155	1159	58.5	66.4	19	45	18	25
United Kingdom	51348	51123	1654	1641	839	830	27.0	26.6	53	25	15	23
Liechtenstein	:	:	:	:	:	:	:	:	0	0	0	0
Norway	2988	2941	31	30	631	613	6.5	6.3	3	7	4	4
Switzerland	15673	16341	912	879	2064	2122	120.1	114.1	29	19	34	38
Croatia	1 703	1744	66	58	384	393	14.9	13.1	50	27	65	28
Turkey	4999	5271	98	103	71	74	1.4	1.4	89	69	303	142

## Table 10.2.3: Rail passenger transport, 2008-2010

(<sup>1</sup>) The railway in Liechtenstein is owned and operated by the Austrian ÖBB and included in their rail passenger transport statistics. (<sup>2</sup>) 2010 instead of 2009 for rail passenger transport.

Source: Eurostat (online data codes: rail\_pa\_typepkm, tps00001 and rail\_ac\_catvict)







(1) Greece and Italy, 2008; Cyprus and Malta, not applicable; the Netherlands, not available; the railway in Liechtenstein is owned and operated by the Austrian ÖBB and included in their statistics.

(2) International, not available.

Source: Eurostat (online data codes: rail\_pa\_typepkm and tps00001)

**Figure 10.2.2:** Top 15 airports, passengers carried (embarked and disembarked), EU-27, 2010 (million passengers)



Source: Eurostat (online data code: avia\_paoa)



	Air passe	ngers, 2010 (²)	Maritime passengers, 2009 ( <sup>3</sup> )			
	(1 000)	(passengers per inhabitant)	(1 000)	(passengers per inhabitant)		
EU-27	796 396	1.6	403 752	0.8		
Belgium	22691	2.1	751	0.1		
Bulgaria	6168	0.8	0	0.0		
Czech Republic	12242	1.2	-	-		
Denmark	24331	4.4	43 561	7.9		
Germany	166 131	2.0	29573	0.4		
Estonia	1 381	1.0	9140	6.8		
Ireland	23 094	5.2	2878	0.6		
Greece	32132	2.8	88 351	7.8		
Spain	153 387	3.3	21 458	0.5		
France	123 021	1.9	25 067	0.4		
Italy	109174	1.8	92 707	1.5		
Cyprus	6 948	8.7	96	0.1		
Latvia	4656	2.1	591	0.3		
Lithuania	2 283	0.7	205	0.1		
Luxembourg	1614	3.2	_	-		
Hungary	8175	0.8	_	-		
Malta	3 2 9 4	7.9	7 799	18.9		
Netherlands	48617	2.9	1632	0.1		
Austria	23 5 3 2	2.8	_	_		
Poland	18383	0.5	2481	0.1		
Portugal	25732	2.4	833	0.1		
Romania	8 8 4 9	0.4	0	0.0		
Slovenia	1 382	0.7	56	0.0		
Slovakia	1 882	0.3	_	_		
Finland	14 22 1	2.7	17 226	3.2		
Sweden	26 647	2.9	31 066	3.4		
United Kingdom	192 885	3.1	28 28 1	0.5		
Iceland	2 0 3 6	6.4	433	1.4		
Norway	29517	6.1	5728	1.2		
Switzerland	37616	4.8	_	_		
Croatia	4677	1.1	26037	5.9		
Turkey	:	:	1 386	0.0		

## Table 10.2.4: Air and sea passenger transport, 2009 and 2010 (1)

(') For air: aggregates exclude the double-counting impact of passengers flying between countries belonging to the same aggregate. For maritime: figures refer to the number of passengers 'handled in ports' (i.e. the sum of passengers embarked and then disembarked in ports); if both the port of embarkation and disembarkation report data to Eurostat, then these passengers are counted twice. (<sup>2</sup>) Total passengers carried (arrivals and departures for national and international). (<sup>3</sup>) Iceland, 2006.

Source: Eurostat (online data codes: ttr00012, tps00001 and mar\_pa\_aa)



Transport

## 10.3 Freight transport

The ability to move goods safely, quickly and costefficiently to markets is important for international trade, national distributive trades, and economic development. This subchapter presents information on the freight transport sector in the European Union (EU), which includes the following transport modes: road, rail, air, maritime and inland waterways.

The rapid increase in global trade up to the onset of the financial and economic crisis and the deepening integration of the enlarged EU, alongside a range of economic practices (including the concentration of production in fewer sites to reap economies of scale, delocalisation, and just-in-time deliveries), may explain the relatively fast growth of freight transport within the EU. In contrast, strains on transport infrastructure (congestion and delays), coupled with constraints over technical standards, interoperability and governance issues may slow down developments within the freight transport sector.

## Main statistical findings

Total inland freight transport in the EU-27 was estimated to be close to 2200000 million tonnekilometres (tkm) in 2009; a little over three quarters (77.5%) of this freight total was transported over roads in 2009 (see Table 10.3.1). The relative importance of road freight transport, as a share of total inland freight transport, rose by 3.8 percentage points between 2000 and 2009. The volume of inland freight transported by road was a little over four times as high as the volume transported by rail (16.5% of inland freight transported in the EU-27 in 2009), while the remainder (5.9%) of the freight transported in the EU-27 was carried along inland waterways. It should be noted that this analysis refers only to inland freight transport and that considerable volumes of freight may be transported by maritime freight services and for some product groups by air transport or by pipelines.

The relative ascendancy of road freight transport was common in most of the Member States, with the exception of the Baltic Member States, Austria and Sweden, where at least one third of the inland freight transported took place on the railways in 2009; in Latvia and Estonia a majority of inland freight was transported by rail, 69.8% and 52.7% respectively. More than 10% of total inland freight was transported on the inland waterways of Belgium and Germany in 2009, with this share increasing to just over 20% in Bulgaria and Romania and to more than one third (34.7%, 2008) of the total in the Netherlands.

The volume of EU-27 inland freight transport grew at a slower pace than constant price GDP during the period from 2000 to 2009; this can be seen from the index shown in Table 10.3.2, as the index value in 2009 was 3.6% lower than in 2000. Nevertheless, it should be noted that this was in large part due to the results for 2008 and 2009 when the index level fell sharply and that prior to this in 2007 the index had shown the volume of inland freight transport increasing more than GDP. Bulgaria and Slovenia recorded the greatest increase in inland freight transport relative to GDP, with their respective indices close to 50% higher in 2009 than they had been in 2000. In contrast, the ratio of freight transport to GDP fell at its most rapid pace between 2000 and 2009 in Cyprus and Estonia, in both cases down by around two fifths.

### **Road freight**

Relative to the size of their respective populations, the greatest volume of road freight transport was reported for Luxembourg, over 17000 tonnekilometres per inhabitant in 2010, around 2.2 times the next highest volume in Slovenia; in both cases, the vast majority of this road freight transportation was international, performed by vehicles registered in each of these Member States. Indeed, it is important to note that road freight statistics are generally based on movements in the registration country or abroad, of vehicles registered in the reporting country ('nationality principle').

Slightly more than two thirds of the goods transported on the EU-27's roads in 2010 related to the transportation of goods on national road networks. However, this proportion varied considerably between the Member States (see Figure 10.3.1): the highest proportion of national road freight transport was in the islands of Cyprus (98.1%) and the United Kingdom (94.3% in 2009), while the relative importance of national freight was much lower in Slovakia (18.9%), Slovenia (14.4%), Lithuania (11.8%) and Luxembourg (6.6%). For most freight hauliers registered in the EU, international road freight transport mostly relates to exchanges with other EU Member States (intra-EU partners).

#### Air freight

About 14.2 million tonnes of air freight (both national and international) was carried through airports within the EU-27 in 2010 (see Figure 10.3.2). Airports in Germany dealt with 4.1 million tonnes of air freight, considerably more than in any other EU Member State – the United Kingdom had the second highest amount of air freight at 2.4 million tonnes. Some of the smaller Member States are relatively specialised in air freight, notably all of the Benelux countries, and in particular, Luxembourg (which ranked as the seventh largest air freight transporter among the EU Member States).

#### Maritime freight

Maritime ports in the EU-27 handled 3 445 million tonnes of seaborne goods in 2009, which marked a reduction of 12.1% when compared with 2008. Sea ports in the United Kingdom handled 501 million tonnes of goods in 2009, more than any other Member State and equivalent to 14.5% of the EU-27 total. Among the smaller Member States, the quantity of goods handled in maritime ports of the Netherlands, Belgium and the Nordic Member States was particularly high (see Figure 10.3.3).

## Data sources and availability

The development of freight transport statistics is based upon a raft of framework legislation and implementing legislation, generally broken down according to the mode of transport under consideration. Information on inland freight transport is available with an annual frequency and the time series generally begin in the early 1990s. The majority of inland freight transport statistics are based on movements in each reporting country, regardless of the nationality of the vehicle or vessel involved (the 'territoriality principle'). For this reason, the volume measure of tonne-kilometres is generally considered as a more reliable measure, as the use of tonnes entails a higher risk of double-counting, particularly for international transport. The methodology used across the EU Member States is not completely harmonised, for example, road freight statistics are generally based on all movements (in the registration country or abroad) of vehicles registered in the reporting country (the 'nationality principle'). Therefore, the statistics presented, especially those for the smallest reporting countries, may be somewhat unrepresentative.

The modal split of inland freight transport is based on transportation by road, rail and inland waterways, and therefore excludes air, maritime and pipeline transport. It measures the share of each transport mode in total inland freight transport and is based on the volume of goods transported in tonne-kilometres, in other words, one tonne of goods travelling a distance of one kilometre.

The volume of inland freight transport may also be expressed in relation to gross domestic product (GDP); within this subchapter the indicator is presented in constant prices for the reference year 2000, providing information on the relationship between the demand for freight transport and economic growth, with the series indexed on 2000 = 100, so that the annual intensity of freight transport demand can be monitored relative to economic developments.

Goods loaded are those goods placed on a road vehicle, a railway vehicle or a merchant ship for dispatch by road, rail or sea. The weight of goods transported by rail and inland waterways is the gross-gross weight. This includes the total weight of the goods, all packaging, and the tare weight of the container, swap-body and pallets containing goods; in the case of rail freight transport, it also



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includes road goods vehicles that are carried by rail. In contrast, the weight measured for maritime and road freight transport is the gross weight (in other words, excluding the tare weight).

## **Road freight**

Road freight transport statistics are collected under the framework provided by Regulation 1172/98 on statistical returns in respect of the carriage of goods by road, amended by Regulation 399/2009 which details implementing powers conferred on the European Commission. The data are based on sample surveys carried out in the reporting countries and record the transport of goods by road, as undertaken by vehicles registered in each of the Member States. It is important to note that almost all of the Member States apply a cut-off point for carrying capacity under which vehicles are not surveyed; this should not be greater than 3.5 tonnes carrying capacity, or 6 tonnes in terms of gross vehicle weight; some of the Member States also apply a limit on the age of the vehicles surveyed.

## **Rail freight**

Rail freight data are collected under the framework provided by Regulation 91/2003 on rail transport statistics. The data are collected for a quarterly frequency (usually limited to larger enterprises) and for an annual frequency (which covers enterprises of all sizes). Rail freight data are not available for Malta and Cyprus (or Iceland) as they do not have a railway infrastructure. Rail statistics are also collected every five years in relation to a regional breakdown (NUTS 2 level).

Aside from the mandatory collection of data based on legal acts, Eurostat also collects rail transport statistics through a voluntary data collection exercise. The questionnaire used for this exercise provides information in relation to railway transport infrastructures, equipment, enterprises, traffic and train movements.

### **Maritime freight**

The legal framework for the collection of statistics on maritime freight transport is Directive 2009/42/ EC on statistical returns in respect of carriage of goods and passengers by sea (Recast). Maritime

transport data are available for most of the period from 2001 onwards, although some EU Member States have provided data since 1997. Maritime freight statistics are not transmitted to Eurostat by the Czech Republic, Luxembourg, Hungary, Austria and Slovakia as they have no maritime ports.

## Inland waterways freight

The legal framework for the collection of statistics on inland waterway freight transport is Regulation 1365/2006 on statistics of goods transport by inland waterways. Data on inland waterways are only required for those Member States with an annual quantity of goods transported that exceeds one million tonnes, namely Belgium, Bulgaria, the Czech Republic, Germany, France, Luxembourg, Hungary, the Netherlands, Austria, Poland, Romania, Slovakia and the United Kingdom; Croatia also provides data. Data collection is based on an exhaustive survey of all inland waterway undertakings for all goods that are loaded or unloaded. In the case of transit, some countries make use of sampling methods in order to estimate the quantity of goods.

### Air freight

The legal framework for air transport statistics is provided by Regulation 437/2003 on statistical returns in respect of the carriage of passengers, freight and mail by air. Air freight statistics are collected for freight and mail loaded and unloaded in relation to commercial air flights. The information is broken down to cover national and international freight transport.

Air transport statistics are collected at the airport level by the EU Member States, Norway, Iceland, Switzerland and candidate countries. Annual data are available for most of the EU Member States for the period from 2003 onwards, while some countries have provided data back to 1993. The statistics that are collected are also available for a monthly and a quarterly frequency. Air freight statistics are also collected for a regional breakdown (NUTS 2 level).

More detailed definitions of the statistical terms used within transport statistics are available in the Illustrated Glossary for Transport Statistics -4<sup>th</sup> edition, 2010.

## Context

One of the main challenges identified by the 2001 White paper, titled 'European transport policy for 2010: time to decide' (COM(2001) 370) was to address the imbalance in the development of different transport modes.

A mid-term review of the White paper, titled 'Keep Europe moving – sustainable mobility for our continent' (COM(2006) 314) made a number of suggestions for new policy developments, which have been subsequently expanded upon in the form of a series of European Commission Communications, these include:

- The EU's freight transport agenda: boosting the efficiency, integration and sustainability of freight transport in Europe (COM(2007) 606);
- A freight transport logistics action plan (COM (2007) 607);
- A move towards a rail network giving priority to freight COM(2007) 608);
- A European ports policy (COM(2007) 616);
- A 'Greening transport' package (COM(2008) 433);

- A set of strategic goals and recommendations for the EU's maritime transport policy until 2018 (COM(2009) 8);
- A European maritime transport space without barriers (COM(2009) 10).

As the ten-year period covered by the White paper drew to an end, the European Commission adopted a Communication in mid-2009 titled 'A sustainable future for transport: towards an integrated, technology-led and user friendly system' (COM(2009) 279 final). Following on from this, in March 2011 the European Commission adopted a White paper titled 'Roadmap to a single European transport area - towards a competitive and resource efficient transport system' (COM(2011) 144 final). This comprehensive strategy contains a roadmap of 40 specific initiatives for the next decade to build a competitive transport system that aims to increase mobility, remove major barriers in key areas and fuel growth and employment. More information on the White paper is available in the introduction for transport.



## Table 10.3.1: Modal split of inland freight transport, 2000 and 2009 (1) (% of total inland tkm)

	2000			2009				
	Roads	Railways	Inland waterways	Roads ( <sup>2</sup> )	Railways (³)	Inland waterways (4)		
EU-27	73.7	19.7	6.6	77.5	16.5	5.9		
Belgium	77.4	11.6	10.9	72.9	15.1	14.3		
Bulgaria	52.3	45.2	2.6	67.4	11.9	20.7		
Czech Republic	68.0	31.9	0.2	77.8	22.1	0.1		
Denmark	92.1	7.9	-	90.8	9.2	-		
Germany	65.3	19.2	15.5	67.0	20.9	12.1		
Estonia	37.3	62.7	0.0	47.3	52.7	0.0		
Ireland	96.2	3.8	-	99.4	0.6	-		
Greece	:	:	-	97.8	2.2	-		
Spain	92.8	7.2	-	96.6	3.4	-		
France	76.0	20.6	3.4	81.0	15.9	4.1		
Italy	89.0	11.0	0.1	91.0	9.0	0.0		
Cyprus	100.0	-	-	100.0	-	_		
Latvia	26.5	73.5	0.0	30.2	69.8	0.0		
Lithuania	46.6	53.4	0.0	59.9	40.1	0.0		
Luxembourg	87.8	7.9	4.4	94.6	2.3	3.1		
Hungary	68.1	28.8	3.1	78.8	20.6	4.1		
Malta	100.0	_	-	100.0	-	-		
Netherlands	63.4	3.7	32.9	63.4	4.9	34.7		
Austria ( <sup>5</sup> )	64.8	30.6	4.5	59.5	36.4	4.1		
Poland	56.9	42.2	0.9	80.5	19.4	0.1		
Portugal	92.5	7.5	-	94.3	5.7	-		
Romania	42.9	49.1	7.9	60.0	19.4	20.6		
Slovenia	71.9	28.1	-	84.0	16.0	-		
Slovakia	53.0	41.7	5.3	77.9	19.6	2.5		
Finland	75.8	24.0	0.3	73.3	24.1	0.2		
Sweden	63.9	36.1	-	62.5	37.5	-		
United Kingdom	90.0	9.8	0.1	86.7	13.2	0.1		
Iceland	100.0	_	-	100.0	_	-		
Norway	83.5	16.5	_	83.4	16.6			
Croatia	:	:	:	73.7	20.6	5.7		
FYR of Macedonia	86.9	13.1	-	84.3	15.7	-		
Turkey	94.3	5.7	_	94.9	5.1	_		

(<sup>1</sup>) Excluding pipelines; EU-27, Bulgaria, Greece, Austria, Poland, Portugal, Romania and Croatia, break in series. (<sup>2</sup>) Finland, 2008; FYR of Macedonia and Turkey, 2007.

France, Hungary and FYR of Macdonia, 2008; Turkey, 2007.
 (\*) Netherlands, 2008; Czech Republic, Estonia, Italy and the United Kingdom, 2007.

(5) The railway in Liechtenstein is owned and operated by the Austrian ÖBB and included in their statistics.

Source: Eurostat (online data code: tsdtr220)



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
EU-27	100.1	100.0	99.0	100.2	99.3	105.2	105.1	105.7	106.4	103.8	96.4
Belgium	80.2	100.0	102.2	101.3	97.3	91.3	84.9	82.5	80.0	73.5	67.2
Bulgaria	49.9	100.0	104.8	105.0	109.9	119.7	128.0	118.3	116.6	120.7	147.4
Czech Republic	101.5	100.0	99.6	103.9	105.2	98.6	88.5	94.0	86.2	86.6	79.2
Denmark	100.1	100.0	91.9	92.7	94.4	93.9	91.1	80.7	77.9	73.8	67.6
Germany	100.4	100.0	99.9	98.9	100.0	104.5	106.1	109.7	111.7	110.0	101.9
Estonia	91.7	100.0	89.5	92.7	84.6	90.1	87.0	76.7	66.5	61.8	61.1
Ireland	92.0	100.0	95.1	102.3	107.0	111.8	109.3	100.6	102.9	97.0	76.4
Greece	:	100.0	:	:	:	:	:	:	:	:	:
Spain	95.5	100.0	104.0	114.9	116.1	128.4	130.0	129.4	133.1	123.9	111.3
France	103.0	100.0	96.9	94.9	92.4	92.7	87.2	87.6	88.7	83.3	71.4
Italy	99.4	100.0	98.8	100.4	91.6	101.7	108.2	95.5	91.2	92.2	94.0
Cyprus	101.6	100.0	99.3	101.2	105.2	80.6	96.6	77.6	76.1	80.0	59.3
Latvia	96.7	100.0	99.9	101.9	111.0	107.2	105.0	91.6	95.2	101.0	103.6
Lithuania	96.5	100.0	89.9	107.6	109.2	106.2	116.8	118.5	120.5	119.0	117.9
Luxembourg	91.6	100.0	109.2	109.4	111.6	107.1	92.2	88.2	87.7	96.1	79.2
Hungary	101.9	100.0	93.9	89.5	85.8	93.6	105.1	118.4	132.4	131.1	131.1
Malta	:	100.0	:	:	:	:	:	:	:	:	:
Netherlands	106.9	100.0	97.4	97.8	96.2	105.6	98.7	95.2	91.4	89.1	80.3
Austria	98.1	100.0	104.7	105.7	105.2	104.3	98.5	102.2	97.7	91.4	79.1
Poland	103.0	100.0	97.6	98.4	98.4	108.2	108.9	115.2	121.6	122.5	124.4
Portugal	101.2	100.0	108.4	107.0	99.7	143.5	148.6	153.8	155.9	133.0	124.6
Romania	95.2	100.0	106.3	119.6	127.1	145.1	174.2	171.4	165.6	148.5	113.7
Slovenia	102.4	100.0	101.3	95.5	98.8	114.5	128.7	132.0	138.4	152.5	147.0
Slovakia	112.9	100.0	92.3	87.0	88.1	88.2	93.7	86.9	92.0	90.9	85.5
Finland	98.7	100.0	93.7	95.0	91.6	91.1	86.7	81.4	76.7	76.4	74.8
Sweden	98.0	100.0	95.4	96.9	96.7	94.4	95.3	94.4	94.4	97.1	87.4
United Kingdom	104.3	100.0	97.0	95.1	94.1	91.0	88.3	90.3	90.0	84.0	76.7
Iceland	103.8	100.0	105.5	108.3	108.8	109.6	113.1	119.2	:	:	:
Norway	101.5	100.0	97.8	96.6	101.4	103.1	105.9	109.9	107.6	111.9	103.7
FYR of Macedonia	:	100.0	93.5	111.8	146.1	139.0	141.5	198.5	141.2	:	:
Turkey	99.2	100.0	98.4	92.2	89.1	84.2	82.2	81.7	79.8	:	:

**Table 10.3.2:** Volume of inland freight transport, 1999-2009 (<sup>1</sup>) (index of inland freight transport volume relative to GDP, 2000 = 100)

(1) Excluding pipelines; breaks in series: Bulgaria, Hungary and Slovakia, 2000; Bulgaria, 2001; EU-27, Portugal and Romania, 2004.

Source: Eurostat (online data code: tsien060)



	(million tkm)		(tkm	n per inhabit			
	Road (1)	Rail (²)	Inland water- ways (³)	Road (1)	Rail (²)	Inland water- ways (³)	National air freight and mail transport (tonnes) (4)
EU-27	:	360636	129516	:	722	259	575 080
Belgium	35 002	6268	7 087	3 2 2 9	578	659	495
Bulgaria	19433	3064	6048	2569	405	800	31
Czech Republic	51832	13770	43	4933	1311	4	1 735
Denmark	15018	1 700	-	2716	308	-	1 045
Germany	313104	107317	62 278	3828	1312	761	119618
Estonia	5614	6638	:	4189	4953	:	0
Ireland	10939	92	-	2 4 4 8	21	-	9349
Greece	28 5 8 5	435	-	2539	38	-	11 925
Spain	210068	8119	-	4568	177	-	78 922
France	182 193	29965	9445	2815	463	146	134873
Italy	175 775	18616	:	2913	309	:	55 859
Cyprus	1 0 8 7	-	-	1 353	-	-	0
Latvia	10590	17179	:	4710	7641	:	0
Lithuania	19398	13431	:	5827	4034	:	0
Luxembourg	8694	200	359	17316	405	715	0
Hungary	33721	8809	2 393	3 3 6 7	880	239	0
Malta	:	-	-	:	-	-	0
Netherlands	68 2 4 2	6385	35 656	4117	385	2163	0
Austria	28659	19833	2 375	3422	2368	284	695
Poland	210846	48 705	130	5524	1276	3	6 201
Portugal	35 368	2174	-	3 3 2 5	205	-	18723
Romania	25 889	12375	14317	1 206	577	667	185
Slovenia	15931	3421	:	7 783	1671	:	0
Slovakia	27 575	6964	899	5083	1 287	166	0
Finland	29532	9750	:	5519	1822	:	3 1 3 3
Sweden	36 268	23464	-	3883	2512	_	14296
United Kingdom	139536	18576	:	2 2 6 5	299	:	117 996
Liechtenstein	303	11	:	8442	306	:	:
Norway	19751	3 5 7 9	-	4065	737	-	7 412
Switzerland	12838	323	:	1649	41	:	3 991
Croatia	8780	2618	940	1 984	592	212	990
Turkey	:	11 300	-	:	156	-	:

### Table 10.3.3: Inland freight transport, 2010

(1) Greece and the United Kingdom, 2009; road transport is based on movements all over the world of vehicles registered in the reporting country. (2) EU-27, Denmark, Luxembourg, Portugal and Slovakia, 2009.

(\*) EU-27, Belgium, the Netherlands and Slovakia, 2009.
 (\*) Data based on departures; France underestimated as freight transport at Paris Charles-de-Gaulle and Paris Orly is incomplete.

Source: Eurostat (online data codes: road\_go\_ta\_tott, rail\_go\_typeall, ttr00007, tps00001 and avia\_gooc) and Directorate-General for Mobility and Transport



Transport



# **Figure 10.3.1:** National and international road transport of goods, 2010 (<sup>1</sup>) (% based on million tkm of laden transport)

(<sup>1</sup>) Greece and the United Kingdom, 2009; Malta, not available. Source: Eurostat (online data code: road\_go\_ta\_tott)

# Figure 10.3.2: Air freight transport, 2010 (1000 tonnes)



(1) Underestimated: freight transport at Paris Charles-de-Gaulle and Paris Orly is incomplete.

Source: Eurostat (online data code: ttr00011)







(1) The Czech Republic, Luxembourg, Hungary, Austria and Slovakia, not applicable.

Source: Eurostat (online data code: mar\_go\_aa)