Transport

14

Introduction

Transport policy is at the heart of efforts to reduce regional inequality and improve regional cohesion. The aim of regional transport statistics is to describe regions using a set of transport indicators and to quantify the flows of goods and passengers between, within and through regions. Regional transport statistics show patterns of variation across regions, where transport-related variables are often closely correlated with levels of economic activity.

This chapter is divided into four main sections. The first deals with passenger transport by road in the regions of Europe, studying the motorisation rate (passenger cars per inhabitant) in the regions and the role public transport vehicles (such as buses, trolleybuses and motor coaches) play. It highlights striking differences in the structure of passenger transport by road between regions in the western parts and in the central and eastern parts of the European Union. The second section examines the stock of freight vehicles in European regions and their weight in the total number of road vehicles, revealing regional patterns of transport infrastructure and differences between regions with respect to their economic characteristics and transport systems. The third and fourth sections review the top 20 European regions in terms of passenger and freight transport by air and sea and transport growth between 2003 and 2009.

The data are presented in four topical maps and four tables. The figures are taken from a larger set of regional transport statistics available in Eurostat's databases.

Main statistical findings

Stock of passenger cars, buses and coaches

There are clear differences in the number of passenger cars per inhabitant (known as the 'motorisation rate') within the regions of the European Union. The highest regional rate registered in the European Union was 10 times higher than the lowest.

The highest motorisation rate was in Valle d'Aosta in Italy, which was almost 40 % higher than the next highest region (Flevoland in the Netherlands). Eleven of the 20 regions with the highest motorisation rate in 2009 were in Italy.

Generally, the figures show an east–west divide in the European Union, with more passenger cars per inhabitant registered in western European regions than in the regions of central and eastern Europe. Exceptions were in Denmark, Ireland and Greece (except the Attiki region around Athens),

which had relatively low motorisation rates. In central and eastern Europe, regions with relatively high motorisation rates are found in the Czech Republic, Lithuania and parts of Poland.

Within the European Union, the seven regions with the lowest numbers of passenger cars per inhabitant were all in Romania, with the lowest in the Nord-Est region. These were followed by Peloponnisos in Greece, Vychodne Slovensko in Slovakia and Inner London in the United Kingdom.

The motorisation rates recorded in the European Union are often linked to economic issues. For instance, the top region, Valle d'Aosta, has especially low petrol prices. A number of regions close to larger cities also have a high number of passenger cars, suggesting a larger number of commuters. Examples of this are Flevoland in the Netherlands, Cheshire in the United Kingdom, Lazio in Italy and Attiki in Greece. Several island regions also have high motorisation rates, including Åland in Finland, Illes Balears in Spain, Sicilia in Italy and Corse in France.

The number of passenger cars per inhabitant is calculated on the basis of the stock of vehicles as of 31 December and population figures as of 1 January the following year.

Interestingly, the figures for public transport vehicles such as buses, trolleybuses and motor coaches are in contrast to those for passenger cars per inhabitant. The share of public transport vehicles in the total number of road vehicles for passenger transport also differs clearly between western Europe and central and eastern Europe. The regions in central and eastern Europe record the highest shares of public transport vehicles, which make up a much smaller share in most western European regions.

Out of the 10 European regions with the highest shares of public transport vehicles, five are Romanian, four Bulgarian and the other is Latvian. The highest share is found in Yugoiztochen, the region with the lowest population density in Bulgaria. This is followed by the Sud-Est region in Romania.

The regions in western Europe with the highest shares of public transport vehicles are all found in the United Kingdom. However, there are stark contrasts between these regions: on one hand they are the regions with a low population density, including the Highlands and Islands, West Wales and the Valleys and Cumbria, and on the other hand they are the densely populated urban regions of Inner London and Merseyside.

Generally, the United Kingdom stands out as having high numbers of passenger cars per inhabitant and at the same time a relatively high share of buses, trolleybuses and motor coaches in the total number of passenger road vehicles.

The share of public transport vehicles is calculated per 10 000 passenger road vehicles as of 31 December.

Stock of road freight vehicles

The picture is quite different when looking at road freight vehicles, where no systematic differences can be seen between west and east European regions.

The two regions with the highest number of registered freight vehicles are both located on the Mediterranean Sea: Andalucía and Cataluña in Spain. These two regions play a key role in freight transport in the western Mediterranean, with direct ferry connections not only to the Spanish islands, Ceuta and Melilla, but also from Andalucía to Morocco and Algeria and between Cataluña and Italy.

The region with the third highest number of freight vehicles is Lombardia, with its main city Milan, which is one of the key economic centres of Italy. The geographical position of this region also seems to play a key role in the regional need for freight vehicles: Lombardia, located at the heart of international freight corridors between Italy, France, Switzerland and Austria, registers a very high volume of trans-Alpine freight transport.

The other regions registering more than half a million freight vehicles are all economic centres dominated by the national capital or a major city: Île de France (Paris), Comunidad de Madrid, Istanbul, Mazowieckie (Warszawa), Rhône-Alpes (Lyon), Comunidad Valenciana (Valencia), Oberbayern (München) and Etelä-Suomi (Helsinki).

The share of freight vehicles out of all road vehicles in a region depends on a number of different factors. These include the regional transport system and its infrastructure for different modes of freight transport, such as the capacity of motorways, railway lines, ports and airports. They also include the economic characteristics of the region, i.e. whether the regional economy is driven by manufacturing or services, and whether the region is located on key European freight corridors.

Reflecting these fundamental differences, there are huge disparities in the regional structure of vehicle stocks. The highest regional share of freight vehicles is found in the Nordjylland region in Denmark (38.6 %). This is more than five times higher than in the region with the lowest share, Inner London in the United Kingdom (7.4 %).

The highest shares of freight vehicles are registered in regions in northern Europe: eight of the 10 regions with the highest shares of freight vehicles are located in Denmark or Finland, indicating a large role for road transport in the freight transport systems of these countries. All three regions with the highest shares are Danish: Nordjylland, Syddanmark, and Midtjylland. Next are four Finnish regions (Åland, Pohjois-Suomi, Itä-Suomi and Länsi-Suomi), two Greek regions (Peloponnisos and Sterea Ellada) and a further Danish region (Sjælland).

At the other end of the scale, five of the 10 EU regions with the lowest shares of freight vehicles in all road vehicles are located in the United Kingdom, with Inner London, Outer London and Merseyside (Liverpool) joining Attika in Greece (Athina) and Liguria in Italy in the top five.

Air transport

The rapid growth of air transport has been one of the most significant developments in the transport sector, both in Europe and all over the world. Intra-EU air transport of passengers (including domestic flights) more than doubled between 1995 and 2009. The events of 11 September 2001 stalled growth in 2002, but it rapidly bounced back. The liberalisation of the air transport market in the European Union greatly helped this development, most evident in the expansion of low-cost airlines. This led to the rapid growth of several smaller regional airports, which are less congested and charge lower landing fees than large airports in the capital regions. However, from 2008 to 2009 most airports experienced a sharp decline in passenger and freight transport, reflecting the fall in economic activity and international trade during the worldwide economic crisis.

Eurostat's databases track regional air transport statistics on passengers and freight. The figures show passenger and freight movements by NUTS 2 region, measured in thousand passengers and thousand tonnes. Passenger data are divided into passengers embarking, disembarking and in transit. Freight statistics are divided into tonnes of freight and mail loaded and unloaded.
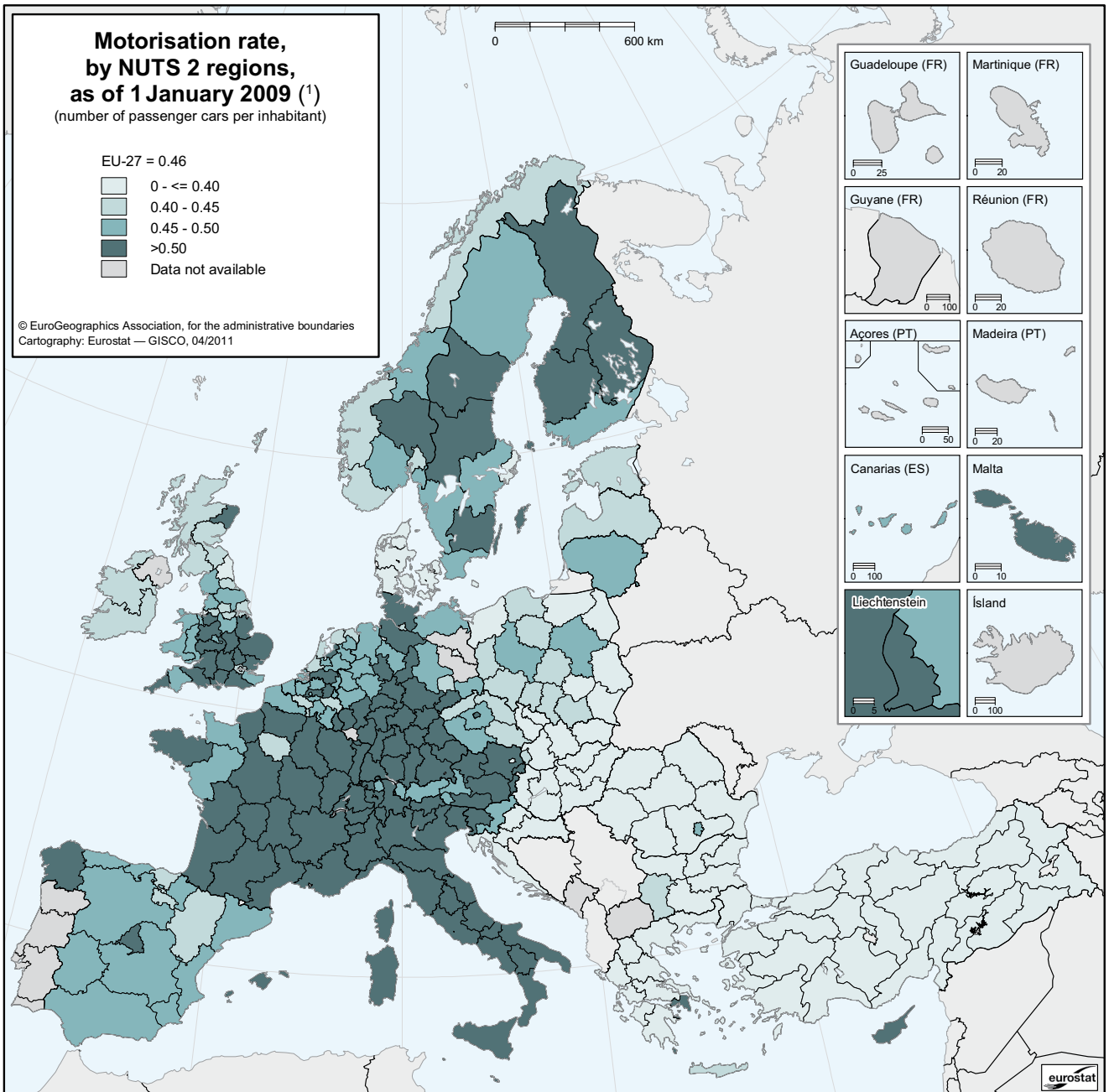
Currently, data on air transport are collected under Regulation (EC) No 437/2003 of the European Parliament and of the Council on statistical returns in respect of the carriage of passengers, freight and mail by air. This regulation provides detailed monthly data on airports handling more than 150 000 passengers a year. The data collected at airport level are then aggregated at NUTS 2 regional level.

This section on air transport focuses on the total number of passengers and the total number of tonnes loaded and unloaded in NUTS 2 regions in Europe. Tables 14.1 and 14.2 show the top 20 regions with the highest number of air passengers, and the highest volume of air freight and mail in 2009.

The top-ranking regions in terms of the total number of air passengers are the regions that are home to capital cities in western Europe. The list is headed by Île-de-France, with a total of 82.8 million passengers for Paris-Charles de Gaulle and Paris-Orly airports, followed by Outer London (Heathrow) with 65.9 million passengers, Darmstadt with Frankfurt/Main airport (50.6 million), Comunidad de Madrid (47.9 million), Noord-Holland (Amsterdam/Schiphol: 43.5 million) and Lazio with Roma/Fiumicino and Roma/Ciampino airports (38.2 million).

Map 14.1: Motorisation rate, by NUTS 2 regions, as of 1 January 2009 ([1])
(number of passenger cars per inhabitant)

**Motorisation rate,
by NUTS 2 regions,
as of 1 January 2009 ([1])**
(number of passenger cars per inhabitant)

EU-27 = 0.46

- 0 - <= 0.40
- 0.40 - 0.45
- 0.45 - 0.50
- >0.50
- Data not available

© EuroGeographics Association, for the administrative boundaries
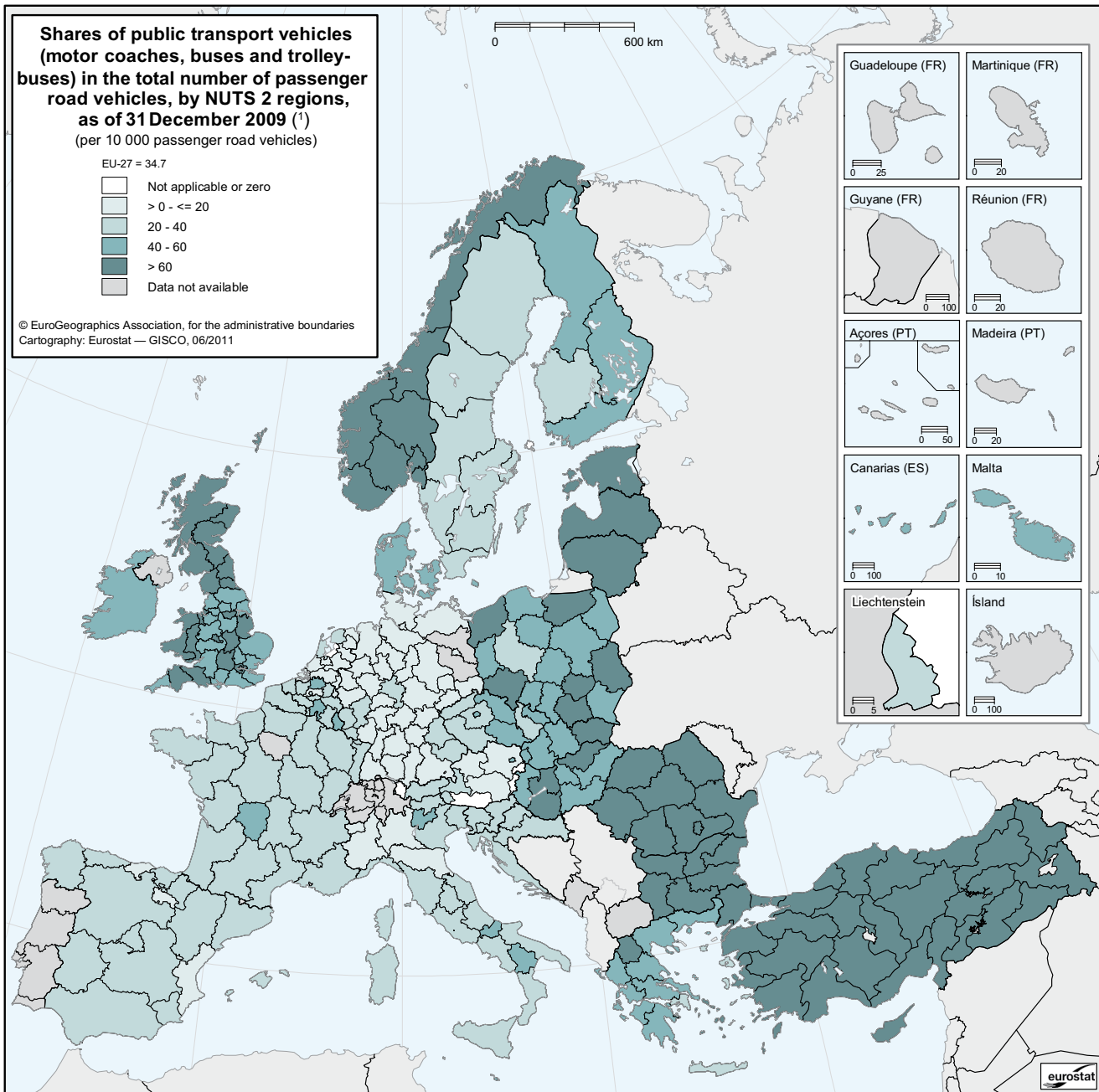Cartography: Eurostat — GISCO, 04/2011

([1]) Belgium and United Kingdom, 2008 data for population.

Source: Eurostat (online data code: tran_r_vehst).

Map 14.2: Shares of public transport vehicles (motor coaches, buses and trolleybuses) in the total number of passenger road vehicles, by NUTS 2 regions, as of 31 December 2009 [1]
(per 10 000 passenger road vehicles)

Shares of public transport vehicles (motor coaches, buses and trolleybuses) in the total number of passenger road vehicles, by NUTS 2 regions, as of 31 December 2009 [1]
(per 10 000 passenger road vehicles)

EU-27 = 34.7

- Not applicable or zero
- > 0 - <= 20
- 20 - 40
- 40 - 60
- > 60
- Data not available

© EuroGeographics Association, for the administrative boundaries
Cartography: Eurostat — GISCO, 06/2011

0   600 km

Guadeloupe (FR)   Martinique (FR)
0   25   0   20

Guyane (FR)   Réunion (FR)
0   100   0   20

Açores (PT)   Madeira (PT)
0   50   0   20

Canarias (ES)   Malta
0   100   0   10
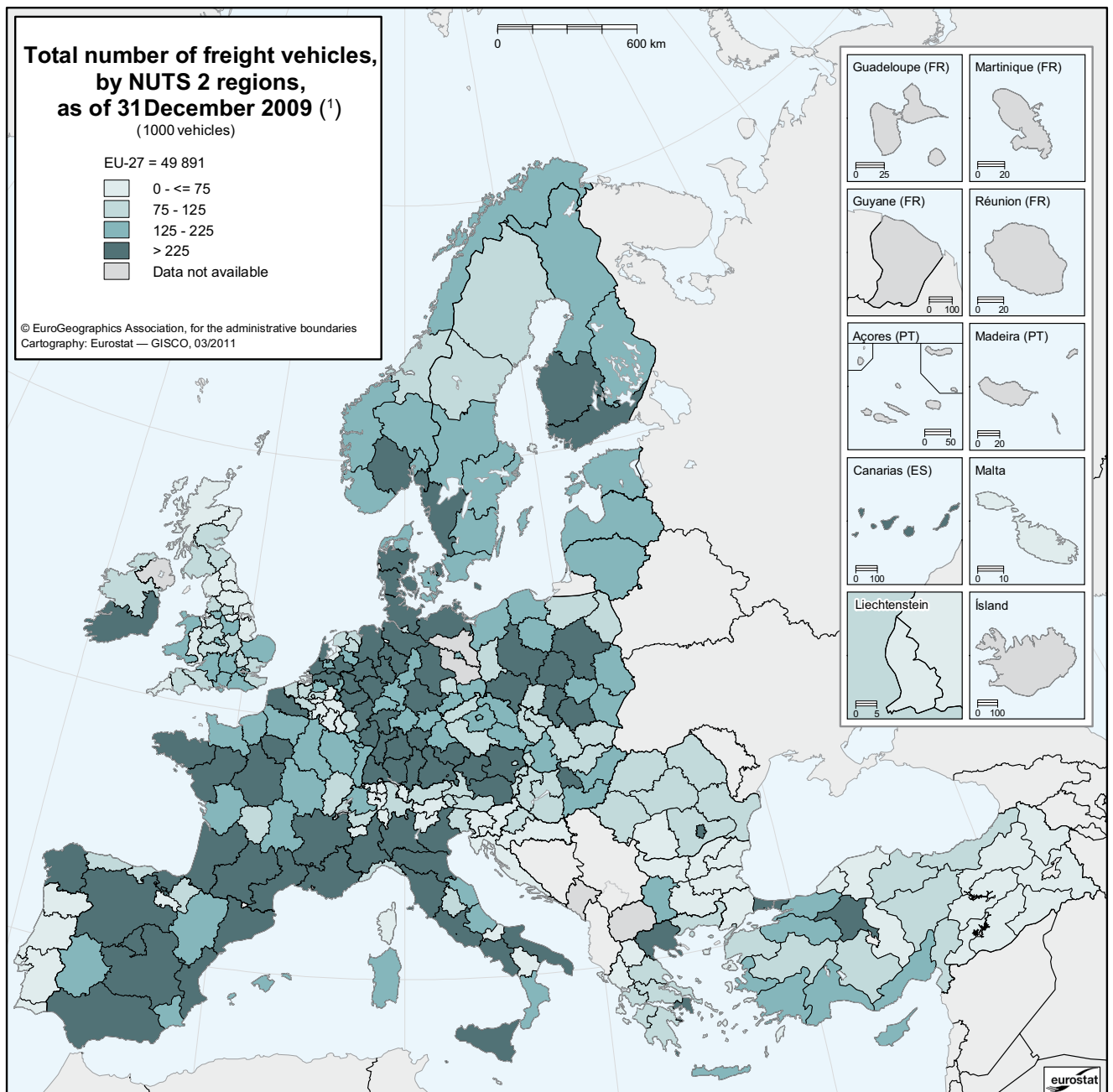
Liechtenstein   Ísland
0   5   0   100

[1] Denmark, data at national level as of 31 December 2008; Ireland, data at national level excluding motorcycles over 50 cm³.

Source: Eurostat (online data code: tran_r_vehst).

Map 14.3: Total number of freight vehicles, by NUTS 2 regions, as of 31 December 2009 (¹)
(1 000 vehicles)

**Total number of freight vehicles,
by NUTS 2 regions,
as of 31 December 2009 (¹)**
(1000 vehicles)

EU-27 = 49 891

- 0 - <= 75
- 75 - 125
- 125 - 225
- > 225
- Data not available

© EuroGeographics Association, for the administrative boundaries
Cartography: Eurostat — GISCO, 03/2011

0   600 km

Guadeloupe (FR)   Martinique (FR)
0   25   0   20

Guyane (FR)   Réunion (FR)
0   100   0   20

Açores (PT)   Madeira (PT)
0   50   0   20

Canarias (ES)   Malta
0   100   0   10

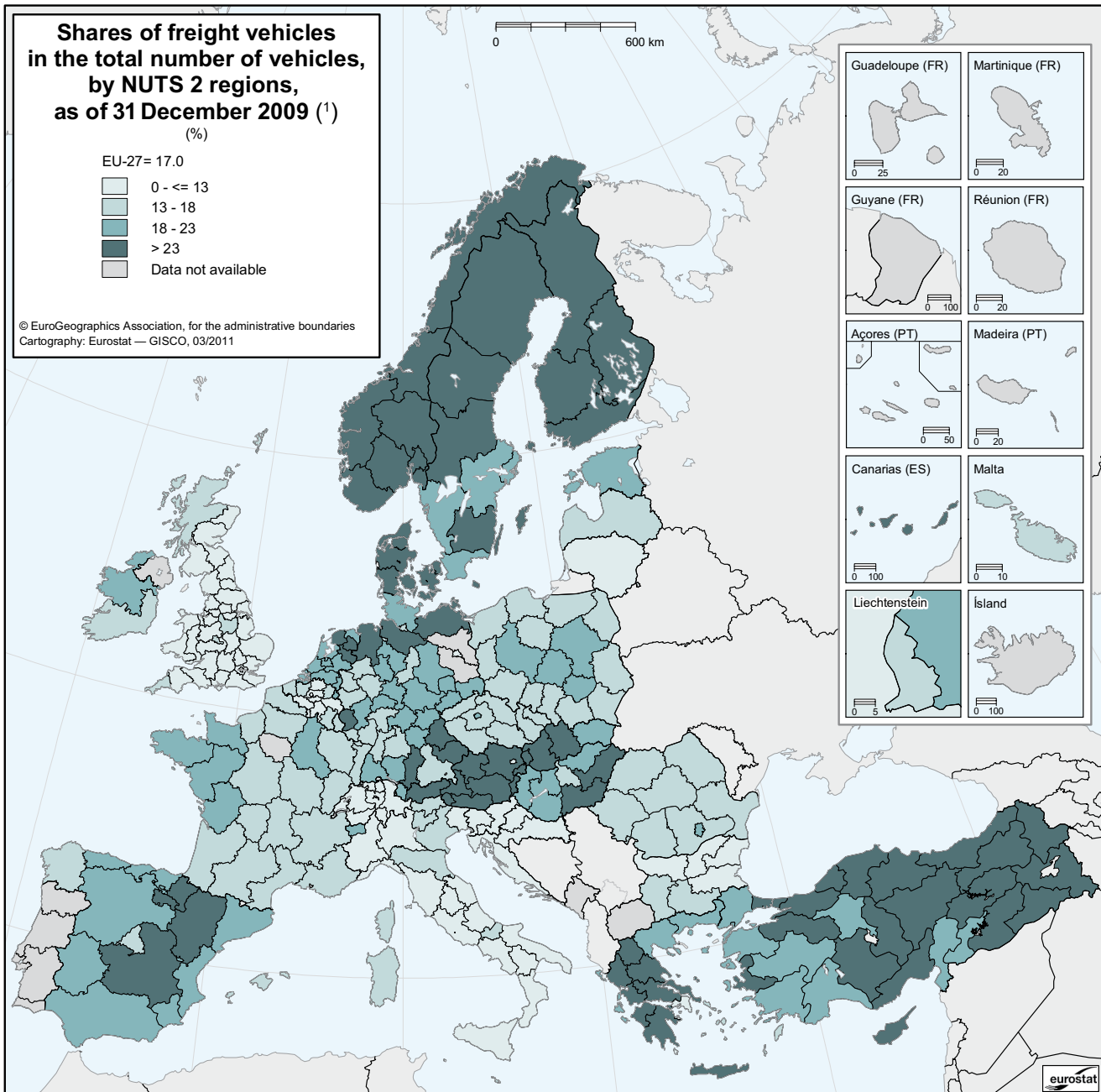Liechtenstein   Ísland
0   5   0   100

eurostat

(¹) Denmark, data as of 31 December 2008; Portugal, data as of 31 December 2008, excluding trailers and semi-trailers; Switzerland, data excluding special purpose road vehicles.

Source: Eurostat (online data code: tran_r_vehst).

Map 14.4: Shares of freight vehicles in the total number of vehicles, by NUTS 2 regions,
as of 31 December 2009 (¹)
(%)

**Shares of freight vehicles
in the total number of vehicles,
by NUTS 2 regions,
as of 31 December 2009 (¹)**
(%)

EU-27 = 17.0

- 0 - <= 13
- 13 - 18
- 18 - 23
- \> 23
- Data not available

© EuroGeographics Association, for the administrative boundaries
Cartography: Eurostat — GISCO, 03/2011

0   600 km

Guadeloupe (FR)   Martinique (FR)
0   25   0   20

Guyane (FR)   Réunion (FR)
0   100   0   20

Açores (PT)   Madeira (PT)
0   50   0   20

Canarias (ES)   Malta
0   100   0   10

Liechtenstein   Ísland
0   5   0   100

eurostat

(¹) Denmark, data as of 31 December 2008; Switzerland, data excluding special purpose road vehicles.

Source: Eurostat (online data code: tran_r_vehst).

Table 14.1: Top 20 NUTS 2 regions with highest number of air passengers, 2009

Rank-ing	NUTS	Region	Airports contributing by NUTS 2 regions	Total passengers in 2009 (1 000 passengers)	Growth rate 2008/09 (%)	Average annual growth 2003–08 (%)	Rank-ing 2003
1	FR10	Île de France	Paris-Charles De Gaulle Paris-Orly	82 776	-4.5	4.2	1
2	UKI2	Outer London	London Heathrow Biggin Hill	65 904	-1.5	1.1	2
3	DE71	Darmstadt	Frankfurt/Main	50 573	-4.9	2.1	3
4	ES30	Comunidad de Madrid	Madrid/Barajas	47 944	-4.8	7.3	5
5	NL32	Noord-Holland	Amsterdam/Schiphol	43 532	-8.2	3.6	4
6	ITE4	Lazio	Roma/Fiumicino Roma/Ciampino	38 172	-3.5	7.8	9
7	ES51	Cataluña	Barcelona Girona/Costa Reus	34 234	-7.8	8.4	11
8	ITC4	Lombardia	Milano/Malpensa Bergamo/Orio Al Serio Milano/Linate Brescia/Montichiari	32 984	-5.6	3.6	7
9	DE21	Oberbayern	München Oberpfaffenhofen	32 560	-5.3	7.5	12
10	UKJ2	Surrey, East and West Sussex	London Gatwick	32 360	-5.3	2.7	6
11	ES53	Illes Balears	Palma De Mallorca Ibiza Menorca/Mahon	27 515	-6.2	3.0	10
12	ES70	Canarias (ES)	Las Palmas/Gran Canaria Tenerife Sur/Reina Sofia Arrecife/Lanzarote Puerto Del Rosario/Fuerteventura Tenerife Norte Santa Cruz De La Palma Hierro	26 223	-12.0	1.2	8
13	IE02	Southern and Eastern	Dublin Cork Shannon Kerry	25 540	-12.6	8.0	13
14	CH04	Zürich	Zürich	21 911	-0.7	5.5	17
15	DEA1	Düsseldorf	Düsseldorf Mönchengladbach Essen-Mülheim Niederrhein	20 115	2.5	6.7	22
16	UKH3	Essex	London Stansted Southend	19 953	-10.9	3.6	15
17	DK01	Hovedstaden	Kobenhavn/Kastrup Bornholm	19 609	-9.6	4.2	16
18	UKD3	Greater Manchester	Manchester	18 630	-11.5	1.5	14

Rank-ing	NUTS	Region	Airports contributing by NUTS 2 regions	Total passengers in 2009 (1 000 passengers)	Growth rate 2008/09 (%)	Average annual growth 2003–08 (%)	Rank-ing 2003
19	ES61	Andalucia	Malaga Sevilla Jerez Granada Almeria	18 592	-10.4	5.6	19
20	NO01	Oslo og Akershus	Oslo/Gardermoen Kjeller	18 183	-1.9	8.0	24

Source: Eurostat (online data codes: tran_r_avpa_nm).

The big airports in and around western Europe's capitals also serve as central hubs for intercontinental air traffic. This is especially true for Heathrow (London), Charles de Gaulle (Paris), Frankfurt/Main and Schiphol (Amsterdam) airports.

Although this is not visible from Table 14.1, a significant number of smaller regional airports are among the fastest growing, due to the success of low-cost carriers using them as their main hubs.

Düsseldorf was the only one of the top 20 airports for passenger transport to record an increase in passenger numbers between 2008 and 2009. Zürich, Outer London (Heathrow) and Oslo og Akershus (Gardermoen) had the lowest losses in passenger numbers, with less than 2 %. The other top 20 regions for air passenger transport faced losses of more than 3.5 %, with the highest losses in the Canarias (– 12 %) and Southern and Eastern Ireland (Dublin, Cork and Shannon, – 12.6 %). By contrast, all of the top 20 regions recorded positive average annual growth over the previous five-year period.

For air freight and mail, Darmstadt (Frankfurt/Main) leads the top 20 European regions with 1.88 million tonnes, followed by Outer London (Heathrow: 1.35 million tonnes), Noord-Holland (Amsterdam/Schiphol: 1.32 million tonnes) and Île-de-France (Paris: 1.27 million tonnes). Volumes at other European airports are significantly lower, indicating that the biggest European airports serve as the main European hubs for air freight and mail. Relatively high volumes can also be observed in Luxembourg (0.63 million tonnes), Köln (Köln-Bonn: 0.55 million tonnes), Leipzig/Halle (0.51 million tonnes) and Lombardia (Milano/Bergamo/Brescia: 0.50 million tonnes).

While the total volume of air freight is limited compared with the much higher volumes of freight transported by road, rail, inland waterways and especially sea, air freight is important and growing steadily for articles with high added value, perishable goods (especially food) and express parcels.

Air freight volumes fell even further than the volume of air passengers from 2008 to 2009, with 10 of the top 20 regions for air freight and mail transport recording losses of 10 % or more. The only regions in the top 20 to record an increase over this period were Leipzig/Halle (+ 18.4 %) and Province de Liège (+ 5.2 %). Much of the increase in Leipzig/Halle can be explained by a major international express mail company moving its European hub from Brussels to Leipzig/Halle in the middle of 2008. Correspondingly, the air freight volume for Vlaams-Brabant (Bruxelles) fell by 40.7 % in this period. Hovedstaden (København/Kastrup) also experienced a dramatic fall, with 38.5 % less air freight handled in 2009 than in 2008.

Maritime transport

The number of passengers embarking or disembarking in EU ports fell slightly (– 2.2 %) in 2009, after remaining stable over the previous five-year period. However, the volume of freight handled in EU ports dropped by 12.5 % in 2009, after growing by more than 13 % over the previous five-year period. Despite this fall, maritime transport plays an important role in transporting goods in extra-EU trade. The geographical spread of the main European seaports illustrates the flexibility of maritime transport, allowing large volumes to be loaded and unloaded close to the main recipients and producers. Landlocked Member States (Czech Republic, Luxembourg, Hungary, Austria and Slovakia) are not active in this sector.

Eurostat's databases contain regional maritime transport statistics on passengers and freight. They show passenger and freight movements by NUTS 2 region, measured in thousand passengers and tonnes. Passenger data are divided into passengers embarking and disembarking. Freight statistics are divided into tonnes of freight loaded and unloaded. Two series are available on maritime passenger transport, based on different methods. One series started in 1997 and ended in 2003 and was replaced by a new time series with different definitions in 2004 (now excluding passengers on cruises).

Table 14.2: Top 20 NUTS 2 regions with highest volume of air freight and mail, 2009
(1 000 tonnes of total freight and mail loaded and unloaded)

Rank-ing	NUTS	Region	Airports contributing by NUTS 2 regions	Total freight and mail in 2009 (1 000 tonnes)	Growth rate 2008/09 (%)	Average an-nual growth 2003–08 (%)	Rank-ing 2003
1	DE71	Darmstadt	Frankfurt/Main	1 883	-10.5	5.1	1
2	UKI2	Outer London	London Heathrow	1 349	-9.0	2.7	3
3	NL32	Noord-Holland	Amsterdam/Schiphol	1 317	-17.3	3.3	2
4	FR10	Île de France	Paris-Charles De Gaulle Paris/Orly	1 266	-13.5	2.8	4
5	LU00	Luxembourg	Luxembourg	627	-20.4	5.5	6
6	DEA2	Köln	Köln/Bonn Bonn-Hangelar	549	-4.4	1.6	7
7	DED3	Leipzig	Leipzig/Halle	509	18.4	93.1	58
8	ITC4	Lombardia	Milano/Malpensa Bergamo/Orio Al Serio Milano/Linate Brescia/Montichiari	496	-15.2	4.4	8
9	BE33	Prov. Liège	Liege/Bierset	402	5.2	:	:
10	BE24	Prov. Vlaams Brabant	Bruxelles/National	364	-40.7	0.2	5
11	ES30	Comunidad de Madrid	Madrid/Barajas	330	-7.0	3.7	9
12	UKF2	Leicestershire, Rutland and Northants	Nottingham East Midlands	287	-1.7	4.3	11
13	CH04	Zürich	Zürich	259	-8.2	1.6	10
14	DE21	Oberbayern	München Oberpfaffenhofen	234	-11.7	10.2	15
15	UKH3	Essex	London Stansted Southend	213	-7.4	2.5	13
16	AT12	Niederösterreich	Wien-Schwechat	198	-1.5	9.6	17
17	ITE4	Lazio	Roma/Fiumicino Roma/Ciampino	156	-9.8	-1.1	14
18	DK01	Hovedstaden	Kobenhavn/Kastrup) Bornholm	152	-38.5	:	:
19	FI18	Etelä-Suomi	Helsinki-Vantaa Turku Lappeenranta Utti Helsinki-Malmi Immola	126	-13.7	10.7	20
20	IE02	Southern and Eastern	Dublin Shannon Cork Kerry	112	-11.8	24.8	35

Source: Eurostat (online data code: tran_r_avgo_nm).

Table 14.3: Top 20 NUTS 2 regions with highest number of maritime passengers, 2009
(1 000 passengers carried)

Rank-ing	NUTS	Region	Ports contributing by NUTS 2 regions		Total pas-sengers in 2009 (1 000 passengers)	Growth rate 2008/09 (%)	Average annual growth 2003–08 (%)	Rank-ing 2003
1	GR30	Attiki	Eleusina Lavrio Megara Paloukia Salaminas	Perama Pireus Rio	30 228	-3.9	-4.6	1
2	ITG1	Sicilia	Augusta Catania Gela Lipari Milazzo	Messina Palermo Pozzallo Santa Panagia Trapani	13 816	-7.3	1.4	7
3	SE22	Sydsverige	Helsingborg Karlskrona Karlshamn Malmö	Sölvesborg Trelleborg Ystad	13 304	-11.1	-0.9	3
4	UKJ4	Kent	Dover Medway	Ramsgate	13 238	-5.5	-1.2	4
5	HR03	Jadranska Hrvatska	Bakar Biograd na Moru Bol Cres Dubrovnik - Gruž Hvar - passenger port Jablanac Korcula Krk Makarska Novalja Omišalj Ploce Porec - passenger port Preko - passenger port	Pula Rab Rijeka - basin Raša - Bršica Rabac Rogac Rijeka Stari Grad Šibenik Split Sucuraj - passenger port Supetar Vodice Vis - passenger port Zadar - passenger port	12 964	3.1	:	:
6	FR30	Nord - Pas-de-Calais	Calais	Dunkerque	12 947	-6.2	-0.7	6
7	FI18	Etelä-Suomi	Helsinki Hanko Hamina Inkoo Kotka Koverhar	Loviisa Naantali Parainen Sköldvik Turku Uusikaupunki	12 676	0.7	0.0	8
8	ITF3	Campania	Napoli	Salerno	12 533	5.8	0.7	10
9	SE11	Stockholm	Bergs Oljehamn Kappelskär	Nynäshamn (ports) Stockholm	12 242	3.4	1.9	11
10	DK01	Hovedstaden	Avedøreværkets Havn Københavns Havn Helsingør (Elsinore) Rønne	Frederiskværk Havn (Frederiksværk Stålvalseværk)	12 000	-11.9	-1.3	5

Rank-ing	NUTS	Region	Ports contributing by NUTS 2 regions		Total pas-sengers in 2009 (1 000 passengers)	Growth rate 2008/09 (%)	Average annual growth 2003–08 (%)	Rank-ing 2003
11	DEF0	Schleswig-Holstein	Föhr I. Amrum I. Brunsbüttel Büsum Dagebüll Helgoland I. List/Sylt	Nordstrand, Insel Pellworm I. Flensburg Kiel Lübeck Puttgarden	11 449	-3.1	1.9	12
12	DK02	Sjælland	Asnæsværkets Havn Gedser Kalundborg Køge	Rødby (Færgehavn) Stigsnæsværkets Havn Statoil-Havnen	11 162	-7.1	0.4	9
13	ITF6	Calabria	Gioia Tauro		11 047	9.2	0.8	13
14	ITG2	Sardegna	Cagliari Olbia Porto Foxi	Porto Torres Portovesme Oristano	10 271	3.7	2.8	14
15	ITE1	Toscana	Livorno Marina Di Carrara	Piombino	8 374	-9.2	8.2	17
16	GR42	Notio Aigaio	Milos Island	Rhodes	8 027	-4.4	10.4	20
17	EE00	Eesti	Kunda Miiduranna Pärnu	Tallinn Vene-Balti	6 841	-0.4	5.8	19
18	ES61	Andalucia	Málaga Algeciras Cádiz	Huelva Almería Sevilla	6 078	-5.2	0.4	15
19	DE94	Weser-Ems	Wangerooge I. Bensersiel Brake Borkum I. Baltrum I. Carolinensiel Emden Juist	Langeoog, Insel Nordenham Neuharlingersiel Norddeich Norderney I. Spieckeroog I. Wilhelmshaven	5 677	10.2	3.9	21
20	DK05	Nordjylland	Aalborg Frederikshavn Hirtshals	Aalborg Portland (Cementfabrikken Rordal)	4 879	-6.2	-3.6	16

Source: Eurostat (online data code: tran_r_mapa_nm).

Table 14.4: Top 20 NUTS 2 regions with highest volume of maritime goods, 2009
(1 000 tonnes of total goods loaded and unloaded)

Rank-ing	NUTS	Region	Ports contributing by NUTS 2 regions	Total goods in 2009 (1 000 tonnes)	Growth rate 2008/09 (%)	Average an-nual growth 2003–08 (%)	Rank-ing 2003
1	NL33	Zuid-Holland	Dordrecht Rotterdam Scheveningen Vlaardingen Zwijndrecht	349 303	-10.7	4.4	1
2	BE21	Prov. Antwerpen	Antwerpen	142 116	-17.0	6.3	2
3	DE60	Hamburg	Hamburg	94 762	-20.3	4.9	3
4	FR23	Haute-Normandie	Dieppe Le Havre Rouen	92 213	-7.2	2.0	5
5	ES61	Andalucia	Málaga Algeciras Cádiz Huelva Almería Sevilla	83 366	-14.7	2.8	6
6	NL32	Noord-Holland	Amsterdam Den Helder Velsen/Ijmuiden Zaanstad	82 561	-15.8	10.5	13
7	FR82	Provence-Alpes-Côte d'Azur	Marseille Toulon	80 887	-13.1	0.1	4
8	UKE1	East Yorkshire and Northern Lincolnshire	Trent River River Hull & Humber Goole Hull Immingham	76 676	-15.7	2.4	8
9	ITC3	Liguria	Genova La Spezia Savona - Vado	73 170	-8.2	1.8	10
10	NO05	Vestlandet	Ålesund Bergen, Mongstad, Sture, Ågotnes, Eikefet, Askøy, Modalen Bremanger Florø/Flora Kristiansund N/Grip Måløy	71 023	3.0	-3.0	9
11	ITG1	Sicilia	Augusta Catania Gela Lipari Milazzo Messina Pozzallo Santa Panagia Trapani	69 212	-15.8	-0.4	7
12	ES51	Cataluña	Barcelona Tarragona	68 677	-6.7	4.8	15

Rank-ing	NUTS	Region	Ports contributing by NUTS 2 regions	Total goods in 2009 (1 000 tonnes)	Growth rate 2008/09 (%)	Average an-nual growth 2003–08 (%)	Rank-ing 2003
13	SE23	Västsverige	Brofjorden Preemraff Göteborg Halmstad Stenungsund (Ports) Uddevalla Varberg	64 271	-7.3	3.5	14
14	ES52	Comunidad Valenciana	Alicante Castellón Valencia	61 388	-6.8	8.6	27
15	LV00	Latvia	Liepaja Riga Ventspils	58 569	-2.3	2.2	18
16	FI18	Etelä-Suomi	Helsinki Hanko Hamina Inkoo Kotka Koverhar Loviisa Naantali Parainen Sköldvik Turku Uusikaupunki	56 863	-18.5	1.9	11
17	FR30	Nord - Pas-de-Calais	Calais Dunkerque	56 836	-17.8	2.0	12
18	ITG2	Sardegna	Cagliari Olbia Porto Foxi Porto Torres Portovesme Oristano	54 130	-11.5	5.3	23
19	DE50	Bremen	Bremen, Blumenthal Bremerhaven	53 941	-15.1	8.4	29
20	ITF4	Puglia	Brindisi Barletta Bari Manfredonia Taranto	51 413	-21.3	5.4	21

Source: Eurostat (online data code: tran_r_mago_nm).

Currently, data on maritime transport are collected under Directive 2009/42/EC on statistical returns in respect of carriage of goods and passengers by sea. This directive provides detailed quarterly data for ports handling more than 1 million tonnes of goods or recording more than 200 000 passenger movements a year. The data collected at port level are then aggregated at NUTS 2 regional level.

This section on maritime transport focuses on the total number of passengers and the total number of tonnes loaded and unloaded in NUTS 2 regions in Europe. Tables 14.3 and 14.4 show the top 20 regions with the highest number of sea passengers and highest volume of sea freight in 2009.

Unsurprisingly, maritime passenger transport is dominated by regions with a sea-faring tradition. By far the largest number of passengers transported by sea (30.2 million) is recorded by the Attiki region, where the port of Piraeus is the main gateway for passengers to the Greek islands. The second highest number of passengers was recorded in Sicilia, with 13.8 million passengers; Sicilia services several ferry connections to the mainland of Italy, as well as ferry routes to Malta and Tunisia. The ports of the Sydsverige region in Sweden, counting 13.3 million passenger movements in 2009, service a large number of ferry connections to the other countries around the Baltic Sea. The high passenger counts in Kent (13.2 million) and Nord - Pas-de-Calais (12.9 million) reflect the close ties across the English Channel, with the ports of Dover, Medway and Ramsgate on the English side and Calais and Dunkerque on the French side.

As in previous years, the rise in passenger numbers from 2008 to 2009 varied greatly between the top 20 European regions in terms of maritime passenger transport. In 13 of the 20 top regions, passenger numbers fell, but they increased in the other seven regions. The largest region in terms of maritime passenger transport, Attiki, continued the negative trend seen over the previous five years, with a 3.9 % fall in passenger numbers from 2008 to 2009. The other top regions also recorded declines: Sicilia (– 7.3 %), Sydsverige (– 11.1 %) and Kent (– 5.5 %). By contrast, the Weser-Ems region with its connections to the East Frisian Islands recorded a 10.2% increase from 2008 to 2009, continuing the increase over the previous five-year period. Other regions with notable increases in maritime passenger numbers included Calabria (9.2 %) and Campania (5.8 %).

For maritime freight, Zuid-Holland in the Netherlands with the port of Rotterdam is in the lead by far. It handled 349 million tonnes of freight in 2009, more than twice the volume of the second of the top 20 European regions, Antwerpen in Belgium (142 million tonnes). These two regions were followed by Hamburg in Germany (95 million tonnes) and Haute Normandie (Dieppe, Le Havre, Rouen) in France (92 million tonnes). These volumes are far

higher than those recorded for other modes of transport and illustrate the key role maritime freight plays in the European economy. Maritime transport is characterised by high flexibility, allowing large volumes to be loaded and unloaded close to the main recipients and producers.

From 2008 to 2009, freight volumes fell in all but one of the top 20 regions in terms of maritime freight handled. In nine regions, it fell by more than 15 %. Nevertheless, the magnitude of the decline reflects to a varying extent the global economic crisis and associated fall in international trade from 2008 to 2009. Amongst the top 20 regions, the most dramatic decreases were seen in Puglia in Italy (– 21.3 %) and Hamburg in Germany (– 20.3 %). The only region in the top 20 to record an increase in freight volumes from 2008 to 2009 (+ 3 %) was Vestlandet in Norway, with the Mongstad crude oil terminal. However, freight volumes in Vestlandet had fallen by an annual average of 3 % over the previous five years.

Data sources and availability

Eurostat collects, compiles and disseminates a variety of regional indicators. Data on road and railway infrastructure, inland waterways, vehicle stocks and road accidents are currently collected by Member States and candidate countries on a voluntary basis. Data on road transport of goods and maritime and air transport for passengers and goods are derived directly from data collected under legal acts. Data on journeys made by vehicles are derived from a specific study of road transport data.

Regional transport indicators are available on Eurostat's website under 'Transport' and are mirrored in the 'General and regional statistics'. Full datasets and predefined tables are available, covering infrastructure, the vehicle fleet, journeys by road, rail, sea and air and road safety (numbers of deaths and injuries in road accidents). All data are annual.

The data used in the maps and tables were extracted from Eurostat's website, although not all the derived indicators are directly available there.

Further information can be found in Eurostat's *Statistics in focus* series on transport issues and in CARE, a database managed by the European Commission's Directorate-General for Energy and Transport, which contains detailed data on road accidents collected by the Member States (http://ec.europa.eu/transport/road_safety/specialist/ statistics/care_reports_graphics/index_en.htm).

Precise definitions of all the variables used can be found in the *Illustrated glossary for transport statistics* (fourth edition) (http://ec.europa.eu/eurostat/product?code=KS-RA-10-028&mode=view).