

Eurostat regional yearbook 2007





Eurostat regional yearbook 2007



Europe Direct is a service to help you find answers to your questions about the European Union

Freephone number (*):

00 800 6 7 8 9 10 11

(*) Certain mobile telephone operators do not allow access to 00 800 numbers or these calls may be billed.

More information on the European Union is available on the Internet (http://europa.eu).

Luxembourg: Office for Official Publications of the European Communities, 2007

ISBN 978-92-79-05077-0 ISSN 1681-9306 Cat. No. KS-AF-07-001-EN-N (Printed publication KS-AF-07-001-EN-C)

Theme: General and regional statistics Collection: Statistical books

© European Communities, 2007

Copyright for the photos: cover and the Introduction, Household accounts, Labour productivity, Urban statistics, Tourism and Education chapters: © the Central Audiovisual Library of the European Commission; the Population and Agriculture chapters: © Jean-Jacques Patricola; the Gross domestic product, Labour market, Science, technology and innovation, Structural business statistics and Transport chapters: © the Digital Photo Library of the Regional Policy DG of the European Commission.

For reproduction or use of these photos, permission must be sought directly from the copyright holder.



Preface

Dear Reader,

Once again Eurostat is pleased to provide you with an overview of the most recent developments in the regions of the European Union, covering as far as possible the current 27 Member States as well as EFTA countries. The themes selected represent those that we consider to have something interesting to show about the various facets of economic, social and demographic development across Europe's regions. For the first time we have included a contribution on the GDP aspect, authored in cooperation with the Regional Policy DG, our primary client for regional data.

This is a very significant moment in regional policy in that it is the first year of implementation of the new cohesion policy of the Union, which runs until 2013 and carries with it the largest ever investment the Community has made in regional development, some EUR 347 billion. These regional statistics will form part of the yardstick against which the development of the EU regions will be measured. You will



also find in this publication a chapter on urban statistics, which is the result of our cooperation with the Regional Policy DG on the Urban Audit exercise. This is an increasingly important component of the regional development policy initiative.

Meanwhile, in cooperation with our ESS partners we shall continue to progressively expand the regional information, both in terms of detail and coverage that we have available, to provide an increasingly complete picture of the complexities of regional development across the EU.

I wish you a pleasant and interesting reading.

Hervé Carré Director-General, Eurostat



Acknowledgements

The editors of *Eurostat regional yearbook 2007* would like to thank all those who were involved in its preparation. We thank the following chapter authors for making publication of this year's edition possible.

- Population: Gregor Kyi (Unit F.1 at Eurostat: Demographic and migration statistics)
- **Gross domestic product**: Lewis Dijkstra (Unit B.2 at the Directorate-General for Regional Policy: Development of Cohesion Policy, accession negotiations)
- Household accounts: Andreas Krüger (Unit C.2 at Eurostat: National accounts production)
- Labour market: Pedro Ferreira (Unit D.2 at Eurostat: Regional indicators and geographical information)
- Labour productivity: Berthold Feldmann (Unit D.2 at Eurostat: Regional indicators and geographical information)
- **Urban statistics**: Teodóra Brandmüller (Unit D.2 at Eurostat: Regional indicators and geographical information)
- Science, technology and innovation: Bernard Felix, Tomas Meri and Håkan Wilén (Unit F.4 at Eurostat: Education, science and culture statistics)
- Structural business statistics: Ulf Johansson (Unit G.1 at Eurostat: Structural business statistics)
- Transport: Anna Bialas-Motyl (Unit G.5 at Eurostat: Transport statistics) and An Heirman
- Tourism: Ulrich Spörel (Unit F.6 at Eurostat: Information society and tourism statistics)
- Education: Lene Mejer (Unit F.4 at Eurostat: Education, science and culture statistics)
- Agriculture: Peter Szabo (Unit E.1 at Eurostat: Agriculture statistics methodology)

The process of editing and coordinating this publication was done by Åsa Önnerfors (Unit D.2 at Eurostat: Regional indicators and geographical information) with the help of Pavel Bořkovec (Unit B.6 at Eurostat: Dissemination). Baudouin Quennery (Unit D.2 at Eurostat: Regional indicators and geographical information) produced the statistical maps.

We are also very grateful to:

- the European Free Trade Association (EFTA), and in particular Richard Ragnarsøn;
- the **Directorate-General for Translation of the European Commission**, and in particular the German, English and French translation units;
- the **Office for Official Publications of the European Communities**, and in particular Peter Johansson in Unit B.1, Cross-Media Publishing, and the proofreaders in Unit B.2, Editorial services.



Contents

INTRODUCTION	
Only regional statistics give the complete picture	1C
The NUTS classification	10
Coverage	10
More regional information	10
Data extraction.	
1 POPULATION	
Unveiling the regional pattern of demography	14
The drivers behind population change	14
Demographic ageing: the situation today	
and its impact in the future	21
Methodological notes	23
2. CDOSS DOMESTIC PRODUCT	
2 GROSS DOMESTIC PRODUCT	
Large regional disparities in GDP per inhabitant	
Cohesion policy 2007–13	
GDP growth is accelerating outside the EU's core	
The EU is converging but what is happening within Member States?	
Conclusion	
Methodological notes	
3 HOUSEHOLD ACCOUNTS	35
Introduction: measuring wealth	
Private household income	
Results for 2004	36
Primary income	36
Disposable income	37
Dynamic development on the edge of the Union	42
Executive summary	42
Data availability	45
4 LABOUR MARKET	47
EU employment objectives	
Target 1: Overall employment rate above 67 %	
Target 2: Female employment rate above 57 %	
Target 3: Older workers above 50 %	
Gender gap narrowing	
Unemployment	
Conclusion	
Methodological notes	
Definitions	



5 LABOUR PRODUCTIVITY	61
Introduction	62
Still considerable differences in regional labour productivity	62
Differing productivity growth rates are leading to increased convergence	62
Labour productivity in manufacturing industry and the services sector	
Conclusion	
Methodological notes	
6 URBAN STATISTICS	73
Introduction	7.4
Measuring quality of life in cities	
The spatial units	
Time	
Indicators.	
Exploring the patterns of population change	
The perceived picture	
Beyond the growth rates.	
beyond the growth fates	
7 SCIENCE, TECHNOLOGY AND INNOVATION	85
,	
Introduction	
Research and development	
Human resources in science and technology	
High-tech industries and knowledge-intensive services	
Patents	
Patstat	
Patenting in the regions	
Conclusion	
Methodological notes	95
8 STRUCTURAL BUSINESS STATISTICS	97
Introduction	98
The most specialised regions in different activities	
Specialisation in business services	
Employment growth in business services	
Characteristics of the top 30 most specialised regions in business services	
Conclusion	
Methodological notes	
9 TRANSPORT	111
Introduction	
Transport infrastructure	112
Transport equipment	
Maritime transport	115
Road freight.	117
Air transport	119



Conclusion
10 TOURISM
Introduction
Accommodation capacity124
Capacity utilisation data
Tourism intensity
The development of tourism 2000–05
Inbound international tourism
Outlook
Methodological notes
11 EDUCATION
Introduction
Participation of 4-year-olds in education
Students in upper secondary education and post-secondary non-tertiary education
Students in tertiary education
Tertiary educational attainment
Participation in lifelong learning141
Conclusion141
Methodological notes
12 AGRICULTURE
Introduction
Contribution of agriculture to GDP
Labour productivity of agriculture
Income diversification in the farming community151
Use of chemicals in agriculture
Agricultural productivity151
Conclusion
Methodological notes
ANNEX
European Union: NUTS 2 regions
FFTA countries: Statistical regions at level 2

Introduction





Only regional statistics give the complete picture

Regional statistics are of the utmost importance for understanding economic and social trends in the European Union. The enormous Structural Funds budget of EUR 347 billion for 2007–13 highlights how much importance the EU attaches to reducing the gaps between regions in terms of their economic and social development.

Should you want to dig deeper into the way the regions of Europe are evolving in a host of very different statistical domains, this is the publication for you! The texts and statistical maps offer a wealth of information on life in the European regions. In its second chapter (on gross domestic product), this edition of the regional year-book also gives for the first time an overview of the European Union's cohesion policy, written by a specialist from the Directorate-General for Regional Policy, one of the main users of statistics at a regional level.

This year we also see the welcome reappearance of statistics on tourism and on education, two very interesting topics we are happy to address again. The chapter on labour productivity, which appeared for the first time last year, focuses this year on productivity in different business areas. And of course, when we analyse regional trends in Europe, we also cover the situation in European cities; hence the chapter on urban statistics, this time concentrating on demographic trends in cities.

The NUTS classification

All statistics at regional level within the EU are based on the nomenclature of territorial units for statistics (NUTS). The NUTS classification has been used for many decades for regional statistics, and was always the base for regional funding policy. It was only in 2003, though, that NUTS acquired a legal basis, when the NUTS regulation was adopted by the Parliament and the Council (1).

Whenever new Member States join the EU, the NUTS regulation is of course amended to include the regional classification in those countries. This was the case in 2004, when the EU took in 10 new Member States. Bulgaria and Romania became members of the European Union on 1 January 2007. Both countries have had statistical regions, similar to NUTS, since 1998. For NUTS purposes, though, they acquired new codes, and these have been valid since 1 January 2007.

The NUTS regulation provides for a review to be conducted every three years whereby the regional classification can be changed and adapted to new administrative boundaries or economic circumstances. In 2006, this exercise took place for the first time, but since the resultant changes to the NUTS classification will only be put into practice at the beginning of 2008, this edition still follows the 2003 version of NUTS. Next year's edition will thus see a number of changes to the regional classification of countries.

With this publication you will find a folding map showing all the regions corresponding to NUTS level 2 in the 27 Member States of the EU (EU-27) and the EFTA countries, and in Annex 1 you will find the full list with the codes and names of these regions.

Coverage

This regional yearbook contains statistics for all 27 Member States of the European Union, including the two new Member States, Bulgaria and Romania. This year coverage has been extended to take in the EFTA countries, so you will now also find commentaries on regional developments in Iceland, Liechtenstein, Norway and Switzerland.

Regions in the EFTA countries are called statistical regions and follow the same rules as the NUTS regions in the EU, except that there is no legal base. Data from the EFTA countries are still unavailable in some policy areas, but the data availability situation is improving, and next year we hope to have even better coverage. It is often interesting to compare regional data from the EFTA countries with the neighbouring Member States, for instance to compare Norway with Sweden or Switzerland with Austria. Of course there are many similarities between neighbouring regions in different countries, but sometimes the disparities can be just as interesting.

Data from the three candidate countries, Croatia, the former Yugoslav Republic of Macedonia and Turkey, have not been included in this year's edition of the regional yearbook, because we still have too little data at regional level.

More regional information

Under the theme 'General and regional statistics' on the Eurostat website you will find tables with statistics on both 'Regions' and the 'Urban Audit' with more detailed time series (some of them going back as far as 1970) and more

(¹) More information on the NUTS classification can be found on the Internet (http://ec.europa. eu/eurostat/ramon/nuts/ splash_regions.html).



detailed statistics than in this yearbook. You will also find a number of indicators at NUTS level 3 (such as area, demography, gross domestic product and labour market data). This is important because there are currently eight Member States (Denmark, Estonia, Cyprus, Latvia, Lithuania, Luxembourg, Malta and Slovenia) that do not have a NUTS level 2 classification. Next year, when the amended NUTS classification comes into use, Denmark too will have NUTS level 2 regions.

For more detailed information on the contents of the regional and urban databases please consult the Eurostat publication *European regional and urban statistics* — *Reference Guide* — 2007 *edition*, which you can download from the Eurostat website.

Previously, a CD-ROM was always attached to this publication. This tradition has now been stopped as all the information that used to be on the CD-ROM can now be found on the Eurostat website. This includes the specific data used for producing the maps in this regional yearbook, which can be found as Excel tables on the website.

Data extraction

The statistical data set out in the *Eurostat regional yearbook* 2007 were extracted during the first few months of 2007; the final closure date was 15 May 2007, so the data represent the latest available information at that time. For the very latest statistics on each subject, please consult the Eurostat website (http://ec.europa.eu/eurostat).

Transport



Introduction

Transport links are often considered to be one of the main factors in regional economic development, and a significant proportion of the Community's regional budgets are used for investment in transport infrastructure, including the transport component of the trans-European networks.

Regional transport statistics aim to describe regions in terms of a set of transport indicators, and also to quantify the flows of goods and passengers between, within and through regions. Such data help both to analyse the role of transport in relation to a region's economy, and to justify new investment in transport infrastructure. They may also help in measuring and ultimately reducing congestion effects and the environmental impact of transport.

The following two sections of this chapter look at transport infrastructure and equipment in the Member States of the European Union, in particular the density of roads (other than motorways) and the number of passenger cars. The following section analyses maritime passenger transport. The subsequent section deals with road freight in terms of the road journeys involved. The final section then examines freight transport by air.

Transport infrastructure

Eurostat's statistical databases have data on road, rail and inland waterway networks at NUTS 2 level. Road infrastructure is grouped into two categories: motorways and other roads. Railway links are classified according to two criteria: two or more tracks, and whether or not they are electrified. Data on inland waterways (navigable canals and navigable rivers and lakes) are of varying quality, because many Member States make no distinction between high-capacity broad canals and lower-capacity narrow canals.

An extensive network of major roads and motor-ways generally gives regions a competitive and developmental advantage. Map 9.1 shows the length of the network of roads other than motor-ways in the NUTS 2 regions in 2005, expressed as kilometres of road per 100 km².

- Road density is closely correlated with urbanisation, as can be seen in Belgium and Noord-Holland and Zuid-Holland (Netherlands) with more than 400 km of road per 100 km².
- Regions comprising major conurbations generally have higher road densities. These are frequently regions with substantial commut-

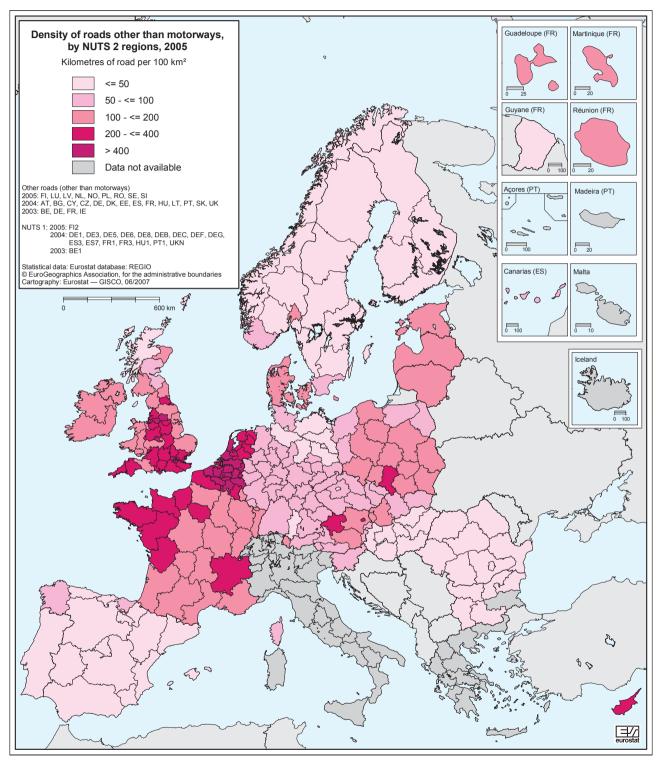
- er activity. Examples include Inner London in the United Kingdom, Wien in Austria and Île-de-France, including Paris (France).
- Some regions with important industrial areas also have a very dense road network. Examples are West Midlands, including Birmingham, Merseyside, including Liverpool, and Greater Manchester, including Manchester (United Kingdom).
- Similarly, regions that include major ports have extensive road networks for the transport of goods to and from the coast. Examples are Nord Pas-de-Calais (France), Antwerpen and West-Vlaanderen (Belgium), and Zuid-Holland and Noord-Holland (Netherlands).
- The regions on the periphery of the European Union, for example some island regions, generally have low road densities (below 30 km of road per 100 km²). Examples are Pohjois-Suomi (Finland), Islands and Highlands (United Kingdom) and Nord-Norge (Norway).
- Some island regions such as Martinique (France) and Cyprus have high road densities, reflecting the importance of a modern transport infrastructure for tourist areas.
- The regions of Bulgaria and Romania for which data are available have a road density comparable to that of the less urbanised regions in the EU, such as most regions in Spain and Portugal (below 50 km of road per 100 km²).
- Looking at motorway density, the same major trends can be observed as for other roads.
 Only Germany has a low density of other roads and a high motorway density. Certain light pink areas in Germany, such as the centre, do have an extensive network of other roads, but road branches and municipality roads are not included in 'other roads'.

Transport equipment

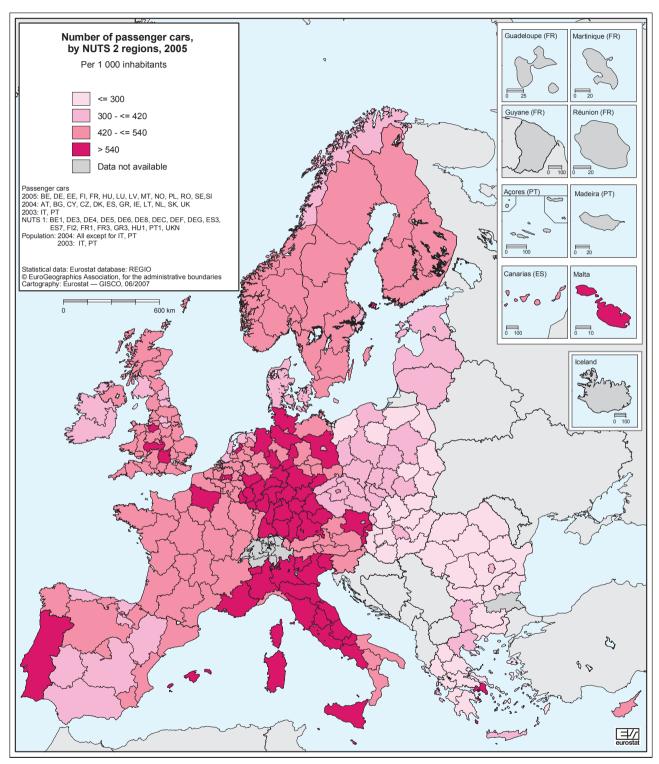
Transport equipment may be defined as all vehicles carrying goods and/or passengers, and hence covers motor vehicles, trains, seagoing and inland waterway vessels and aircraft. The vehicle data at NUTS 2 level are broken down by vehicle category: passenger cars, buses, lorries, tractors and motorcycles. However, this section looks at only one of these indicators, namely passenger cars.

Map 9.2 shows the passenger car fleet by NUTS 2 region, measured in terms of the number of passenger cars per 1 000 inhabitants.

Map 9.1: Density of roads other than motorways, by NUTS 2 regions, 2005 Kilometres of road per 100 km²



Map 9.2: Number of passenger cars, by NUTS 2 regions, 2005 *Per 1 000 inhabitants*



- Regions that comprise major urban centres — for example Wien (Austria), Berlin (Germany) and Inner London (United Kingdom) — have a relatively low car ownership (below 420 cars per 1 000 inhabitants), possibly reflecting factors such as an extensive public transport network, parking difficulties or concentrations of students, immigrants and other low-income groups.
- In some countries, the core urban region may be surrounded by a region with high car ownership, possibly indicating many commuters dependent on cars to get to work in the city. This is the case in Vlaams-Brabant (Belgium) with 570 cars per 1000 inhabitants and Brandenburg (Germany) with 556 cars per 1 000 inhabitants. In contrast, low car ownership around the core may indicate extensive commuter use of public transport, such as in Outer London. In the larger NUTS 2 regions that have a core city and an extensive hinterland, car density tends to be distributed more or less evenly. This is the case in Comunidad de Madrid (Spain) and Île-de-France, including Paris (France), where these factors tend to balance out.
- Since car ownership is often an indicator of economic development in a region (measured by GDP per capita), regions with higher GDP levels would be expected to have a higher car ownership. Indeed, the Grand-Duchy of Luxembourg and numerous regions in Germany display this pattern, whereas most regions in Greece, Romania and Bulgaria have low values for both indicators. However, Map 9.2 shows that there are also a few regions that do not follow this example: Highlands and Islands (United Kingdom) and Molise (Italy) have high car ownership levels but low GDPs.
- In a few thinly populated regions, a car may be essential for travel to and from work. Such regions may include Midi-Pyrénées (France) and the Finnish and Swedish regions away from the capital cities.
- Romania and Bulgaria, the two new Member States, have a level of car ownership of below 300 cars per 1 000 inhabitants, which is found elsewhere in the EU only in Greece, Slovakia, Poland and Hungary (except for the capital city regions in these countries). Apart from the most northerly region, Norway has similar levels to Sweden and Finland (between 400 and 500 cars per 1 000 inhabitants).
- Regions with economies very much dependent on tourism also seem to have high car

densities. The Spanish, French and Italian Mediterranean regions in particular (including the island regions), some of which host large numbers of retired foreign nationals, have a relatively large car fleet.

Maritime transport

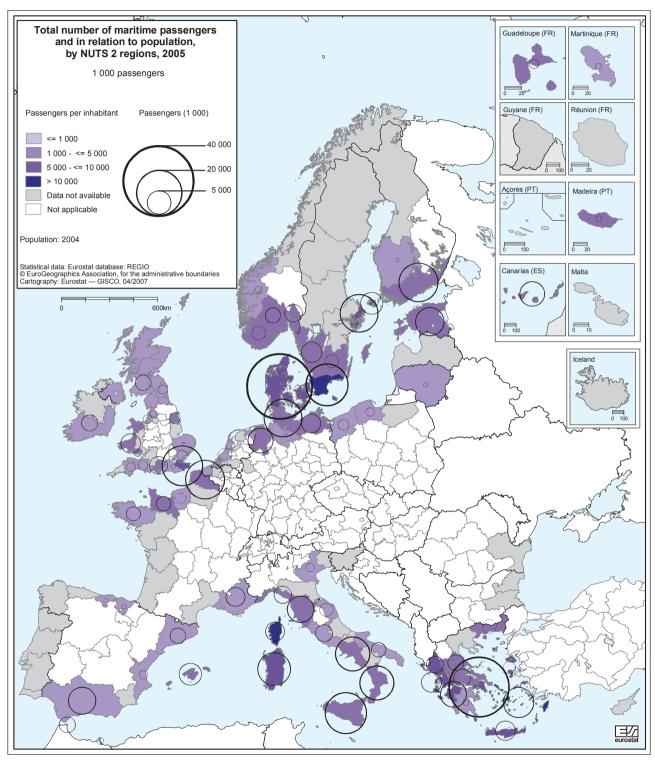
Maritime transport statistics exist at the NUTS 2 regional level for both passengers and freight, showing movements across regions, expressed in thousands of passengers and in thousands of tonnes. There are two time series with these indicators. One goes back to 1978 and ends with the reference year 1998. Since 1999, a new methodology has been used in the Member States to obtain these regional statistics, which are also held in separate tables in the database. The two time series are no longer directly comparable owing to the differences in methodology.

The regional data collected under Council Directive 95/64/EC are obtained only for ports handling passengers and freight over a certain annual threshold, i.e. 200 000 passengers and 1 million tonnes of goods, respectively. This means that the data presented in the following maps may differ from national totals, as traffic at small ports is not taken into account. However, the regional distribution of the volume of traffic can be represented fairly accurately, because the minor ports are considered to make only a small contribution to the total volume of traffic.

The current set of regional indicators for maritime transport comprises freight data divided into tonnes of freight loaded and unloaded and data on embarked and disembarked passengers, both at NUTS 2 level. In this section, just the data on maritime passengers are considered.

Map 9.3 classifies the regions according to the number of passengers in relation to their population, illustrated by the colour of the regions, and the total number of maritime passengers passing through the ports in the regions, indicated by the circles. The maritime passenger figures are expressed as the number of passengers per inhabitant in order to eliminate the variation in absolute numbers due to the differences in regional populations. The figures refer to the national, intra-EU-25 and extra-EU transport of passengers. For national and intra-EU passenger transport, however, it must be noted that passengers are counted twice; once as they embark and again as they disembark. The totals thus overestimate the actual journeys made. The information in Map 9.3 refers only to coastal regions with passenger ports.

Map 9.3: Total number of maritime passengers and in relation to population, by NUTS 2 regions, 2005 1 000 passengers



- One can observe various 'region pairs' with similar passenger figures. These pairs indicate the major ferry connections in Europe: Helsingborg and Helsingør for the crossing between Sydsverige in Sweden and Denmark, Calais-Dover for traffic between Nord -Pas-de-Calais (France) and Kent (United Kingdom), as well as Reggio di Calabria and Messina for the connection between Calabria and Sicilia (Italy).
- Denmark is the most important region for maritime passenger transport with more than 35 million passengers, due to its numerous ferry connections between its various islands and with Germany, Sweden and Norway. The region of Attiki (Greece) has similarly high figures for the total number of maritime passengers - almost twice the number of passengers for Sydsverige (Sweden) and Sicilia (Italy), which are the next most important regions.
- Ingeneral, the regions along the Mediterranean coast of Greece and Italy have high figures in terms of the total number of passengers. However, the double counting of passengers noted above applies especially to the Italian and Greek ports mentioned here, since they all involve national ferry connections.
- Regions with a strong tourist trade, such as some in Greece and the islands of France and Spain, also see high numbers of passengers. Their figures are even more remarkable when compared with the local populations. Examples include Ciudad Autónoma de Ceuta (Spain) with 2 million passengers or 29 819 passengers per inhabitant and Corse (France) with 3 million passengers or 11 138 passengers per inhabitant.

Road freight

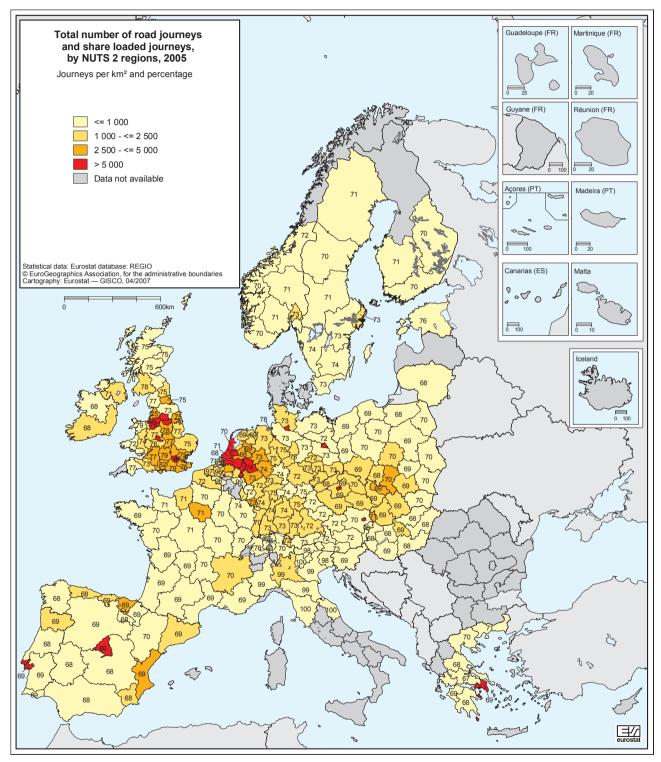
Road freight data are collected under Council Regulation (EC) No 1172/98 on statistical returns in respect of the carriage of goods by road, which replaced the previous directives. The current regulation provides for a larger set of variables to be transmitted to Eurostat in the form of individual data records on vehicles, journeys and goods transport operations. These data are collected via sample surveys of goods vehicles in Member States. Starting from the reference year 1999, micro-data are transmitted on a quarterly basis, five months after the end of the reference period. Each reporting country collects data on the activities of road motor vehicles registered in its country, both inside and outside its national territory, so there is no double counting at European level. Data on transport by non-European hauliers in the territory of the Member States are not collected. The regulation allows vehicles with a load capacity smaller than 3.5 tonnes to be excluded from the survey.

One major added value provided by the Council regulation is information on the regional origin and destination of intra-EU road transport. At present, national transport is reported at NUTS 3 level. For international transport, the regulation provides for a transitional period during which origins and destinations can be declared with country codes. However, the ultimate aim is to have international transport reported at NUTS 3 level as well.

Map 9.4 shows the total number of road journevs by region divided by the area of the region in square kilometres and the share of loaded journeys. Data from all reporting countries are aggregated by region. The total number of road journeys for a region includes empty and loaded journeys, intra- and extra-EU journeys, and loading and unloading journeys. The share of loaded journeys is defined as the proportion of the total number of journeys for the given region. Intra-regional journeys are included once.

- Map 9.4 shows the importance, in terms of road freight journeys, of the regions in the vicinity of the main ports on the North Sea and the Channel coast. Examples include the ports of Rotterdam (in the Dutch region of Zuid-Holland) and Antwerp (in the Belgian region of Antwerpen) (over 2500 road journeys per km²). The map also shows the two main transport axes across Europe: from northern Italy via Germany up to the Netherlands and then over to the United Kingdom, and, running almost parallel, from the Slovak Republic via the Czech Republic and Poland to northern Germany.
- Regions comprising capital cities, for example Inner London (United Kingdom), Praha (Czech Republic) and Lisboa (Portugal), are very busy in terms of road freight journeys. This is probably due to their small size, but on the other hand urban areas with a highly concentrated population may well be more demanding in terms of supplies.
- Regions where there is a strong concentration of industrial activities attract a great deal of freight transport, for example the regions of West and South Yorkshire (United Kingdom),

Map 9.4: Total number of road journeys and share loaded journeys, by NUTS 2 regions, 2005 *Journeys per km² and percentage*



- Moravskoslezsko (Czech Republic) and Śląskie (Poland), where major steel industries are located.
- Looking at the share of loaded journeys in all journeys, the highest proportions are registered in Veneto, Lombardia and Piemonte (the northern regions of Italy) and Hampshire and Isle of Wight (United Kingdom), probably due to their industrial activities. The Belgian regions also have shares above 80 %. The proportions of loaded journeys are fairly low (below 70 %) in Spain, Portugal and southern France. The same can be said for the Czech Republic, Hungary, Poland and Slovenia. The share of loaded journeys in all journeys in the EU is 73.7 %.

Air transport

Eurostat's statistical databases contain air transport statistics at regional level for passengers and freight. These series show passenger and freight movements over NUTS 2 regions measured in thousands of passengers and tonnes, respectively. The passenger data are divided into passengers embarking, disembarking and in transit. The freight statistics data are divided into tonnes of freight loaded and unloaded. Two series are also available here, based on different methodologies. The series going back to 1978 ended with reference year 1998 and was replaced by a new time series with different definitions as from 1999.

Data on air transport are currently collected under Regulation (EC) No 437/2003 of the European Parliament and the Council on statistical returns in respect of the carriage of passengers, freight and mail by air. Data come from national surveys on airports. The regulation provides for the collection of detailed monthly data for airports handling more than 150 000 passengers per year. For airports handling fewer than 150 000 but more than 15 000 passengers, only aggregated annual data are required, while no data need be provided for minor airports. Consequently, the data presented in Map 9.5 may differ from national totals, as the figures for minor airports and airports reporting only aggregated data are not included. Nevertheless, even without data for minor airports the regional distribution can be considered representative.

In this section on air transport, the focus is on freight data. The figures cover all Member States, except Sweden and Bulgaria, and the EFTA countries Iceland, Norway and Switzerland. Note that for Denmark, the Copenhagen airport freight data are not available.

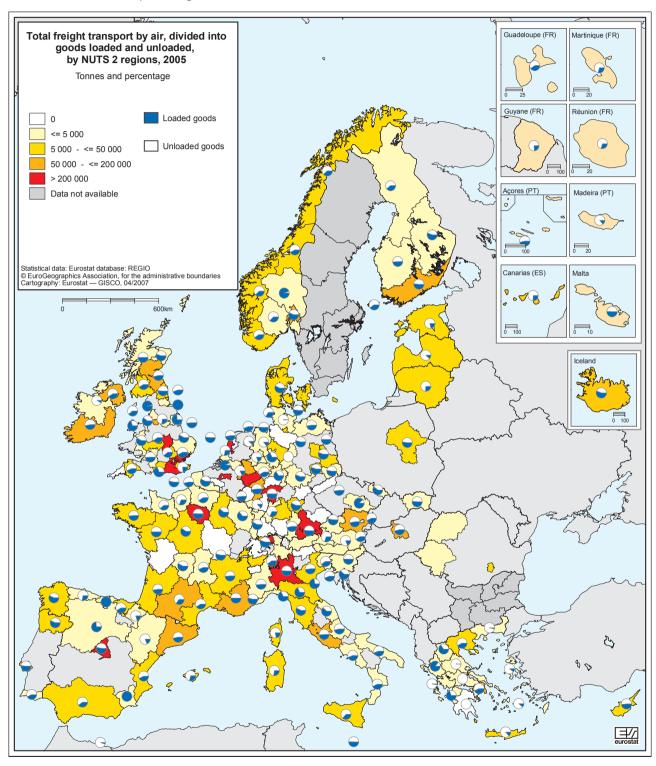
Map 9.5 shows two indicators: the total amount of freight transported by air in each region as expressed in tonnes, illustrated by the colour of the regions, and the share of loaded and unloaded freight for each region, indicated by the

- The top-ranking regions in terms of tonnes of total freight are Darmstadt (Frankfurt), Noord-Holland (Amsterdam), Outer London and Île-de-France (Paris), with more than 1 million tonnes of goods freighted. This confirms the importance of the main national airports in Germany, the Netherlands, the United Kingdom and France. The ability to carry freight on the many passenger routes flown from these airports explains the dominant position of these four airports. For these regions, the volumes of freight loaded and unloaded are roughly equal. Vlaams-Brabant (Belgium), Köln (Germany), the Grand-Duchy of Luxembourg, and Lombardia (Italy) record volumes of about half a million tonnes of goods loaded.
- Unloaded freight exceeds loaded freight in most regions, illustrating the European Union's dependence on imports (44 % loaded and 56 % unloaded for the European Union as a whole). Exceptions where the freight loaded was greater than the freight unloaded are Lancashire and Hampshire and Isle of Wight (United Kingdom) (over 75 % loaded freight), probably due to the presence of industrial activities.
- The ratio of goods unloaded to goods loaded is particularly high, i.e. more goods are unloaded than loaded, in island regions, where tourism is the main economic activity. Examples are Notio Agaio in Greece and Região Autónoma da Madeira (Portugal). The share of loaded goods is low in Latvia and Cyprus as well.
- The volume of freight transported by air in Romania is low in comparison with most of the other EU countries (17 000 tonnes compared with the average of 78 189 tonnes for the EU-26; no data are available for Bulgaria).

Conclusion

The data shown in the five maps in this chapter represent only part of the broader set of regional transport statistics available in Eurostat's statistical databases. Regional transport statistics show patterns of variation across regions where transport-related variables are often closely related

Map 9.5: Total freight transport by air, divided into goods loaded and unloaded, by NUTS 2 regions, 2005 *Tonnes and percentage*





to levels of economic activity. As already mentioned, transport policies are at the very heart of efforts to reduce regional inequality and improve regional cohesion. In an enlarged Europe, economic and infrastructure disparities are now more evident than before. One of Eurostat's long-term objectives is to expand the current regional transport indicators in order to provide a better

understanding of the impact of transport policies on economic growth, transport needs and the environment.

For Bulgaria and Romania, the new Member States, the regional variation seen in transport indicators is quite similar to that seen across the rest of the EU. The volume of traffic is comparable to that of the southern countries in the EU.

Methodological notes

Eurostat collects, compiles and disseminates a variety of regional indicators. Data on road and rail-way infrastructures, inland waterways, vehicle stocks and road accidents are currently collected in Member States and candidate countries on a voluntary basis via annual questionnaires, while data on road, maritime and air transport for passengers and goods are directly derived from the data collections required by legislation. In addition, journeys made by vehicles are derived from a specific study of road transport data.

Regional transport indicators are freely disseminated on Eurostat's website under the 'Transport' theme and are mirrored in 'General and regional statistics'. Data are organised in 18 tables for transport, covering infrastructure, the vehicle fleet, journeys by road, sea and air (with, in each case, separate tables for freight and passengers), and road safety (as reflected in numbers of deaths and injuries in road accidents). All data are annual, with time series going back to the reference year 1978 for transport infrastructures, air and maritime transport, while for road safety data the series start from 1988.

Due to the nature of transport, a spatial breakdown is built into most legislation dealing with the collection of transport flow statistics, which, as mentioned above, allows us to directly derive regional indicators for maritime and air transport. Moreover, other regional transport indicators on transport flows can be found under the separate domains of the 'Transport' theme: 'Road transport', 'Railways transport' and 'Inland waterways transport'. Further information on transport flows between airports and ports can be also obtained under the 'Maritime transport' and 'Air transport' domains.

In order to show the potential of transport statistics for analysing regional patterns, this year's contribution focuses on the data on regional transport flows derived from the maritime, air, and road data collections required by legislation. The data in the maps above have been extracted and aggregated from the databases for these individual modes of transport and cannot be found directly on Eurostat's website. The aim here is to provide an added value over and above the data already available to the public on the website.



Annex

European Union: NUTS 2 regions

Belgium	DE13 Freiburg	Estonia
BE10 Région de Bruxelles-Capitale/	DE14 Tübingen	EE00 Eesti
Brussels Hoofdstedelijk Gewest	DE21 Oberbayern	
BE21 Prov. Antwerpen	DE22 Niederbayern	Ireland
BE22 Prov. Limburg (B)	DE23 Oberpfalz	IFO1 Daviday Midlay day d Masterna
BE23 Prov. Oost-Vlaanderen	DE24 Oberfranken	IE01 Border, Midland and Western
BE24 Prov. Vlaams-Brabant	DE25 Mittelfranken	IE02 Southern and Eastern
BE25 Prov. West-Vlaanderen	DE26 Unterfranken	Grand
BE31 Prov. Brabant Wallon	DE27 Schwaben	Greece
BE32 Prov. Hainaut	DE30 Berlin	GR11 Anatoliki Makedonia,Thraki
BE33 Prov. Liège	DE41 Brandenburg — Nordost	GR12 Kentriki Makedonia
BE34 Prov. Luxembourg (B)	DE42 Brandenburg — Südwest	GR13 Dytiki Makedonia
BE35 Prov. Namur	DE50 Bremen	GR14 Thessalia
	DE60 Hamburg	GR21 Ipeiros
Bulgaria	DE71 Darmstadt	GR22 Ionia Nisia
BG31 Severozapaden	DE72 Gießen	GR23 Dytiki Ellada
BG32 Severen tsentralen	DE73 Kassel	GR24 Sterea Ellada
BG33 Severoiztochen	DE80 Mecklenburg-Vorpommern	GR25 Peloponnisos
BG34 Yugoiztochen	DE91 Braunschweig	GR30 Attiki
BG41 Yugozapaden	DE92 Hannover	GR41 Voreio Aigaio
BG42 Yuzhen tsentralen	DE93 Lüneburg	GR42 Notio Aigaio
	DE94 Weser-Ems	GR43 Kriti
Czech Republic	DEA1 Düsseldorf	
CZ01 Praha	DEA2 Köln	Spain
CZ02 Střední Čechy	DEA3 Münster	ES11 Galicia
CZ03 Jihozápad	DEA4 Detmold	ES12 Principado de Asturias
CZ04 Severozápad	DEA5 Arnsberg	ES13 Cantabria
CZ05 Severovýchod	DEB1 Koblenz	ES21 País Vasco
CZ06 Jihovýchod	DEB2 Trier	ES22 Comunidad Foral de Navarra
CZ07 Střední Morava	DEB3 Rheinhessen-Pfalz	ES23 La Rioja
CZ08 Moravskoslezsko	DEC0 Saarland	ES24 Aragón
	DED1 Chemnitz	ES30 Comunidad de Madrid
Denmark	DED2 Dresden	ES41 Castilla y León
	DED3 Leipzig	ES42 Castilla-La Mancha
DK00 Danmark	DEE1 Dessau	ES43 Extremadura
Commons	DEE2 Halle	ES51 Cataluña
Germany	DEE3 Magdeburg	ES52 Comunidad Valenciana
DE11 Stuttgart	DEF0 Schleswig-Holstein	ES53 Illes Balears

DEG0 Thüringen

DE12 Karlsruhe

ES61 Andalucía



ES62 Región de Murcia ITE1 Toscana NL22 Gelderland NL23 Flevoland ES63 Ciudad Autónoma de Ceuta ITE2 Umbria ES64 Ciudad Autónoma de Melilla ITE3 Marche NL31 Utrecht ES70 Canarias ITE4 Lazio NL32 Noord-Holland ITF1 Abruzzo NL33 Zuid-Holland ITF2 Molise **France** NL34 Zeeland ITF3 Campania NL41 Noord-Brabant FR10 Île-de-France ITF4 Puglia NL42 Limburg (NL) FR21 Champagne-Ardenne ITF5 Basilicata FR22 Picardie ITF6 Calabria **Austria** FR23 Haute-Normandie ITG1 Sicilia FR24 Centre AT11 Burgenland ITG2 Sardegna FR25 Basse-Normandie AT12 Niederösterreich FR26 Bourgogne AT13 Wien **Cyprus** FR30 Nord - Pas-de-Calais AT21 Kärnten FR41 Lorraine CY00 Kypros/Kıbrıs AT22 Steiermark FR42 Alsace AT31 Oberösterreich FR43 Franche-Comté Latvia AT32 Salzburg FR51 Pays de la Loire AT33 Tirol LV00 Latvija FR52 Bretagne AT34 Vorarlberg FR53 Poitou-Charentes Lithuania FR61 Aquitaine **Poland** LT00 Lietuva FR62 Midi-Pyrénées PL11 Łódzkie FR63 Limousin PL12 Mazowieckie Luxembourg FR71 Rhône-Alpes PL21 Małopolskie FR72 Auvergne LU00 Luxembourg (Grand-Duché) PL22 Śląskie FR81 Languedoc-Roussillon PL31 Lubelskie FR82 Provence-Alpes-Côte d'Azur **Hungary** PL32 Podkarpackie FR83 Corse HU10 Közép-Magyarország PL33 Świętokrzyskie FR91 Guadeloupe HU21 Közép-Dunántúl PL34 Podlaskie FR92 Martinique HU22 Nyugat-Dunántúl PL41 Wielkopolskie FR93 Guyane HU23 Dél-Dunántúl PL42 Zachodniopomorskie FR94 Réunion HU31 Észak-Magyarország PL43 Lubuskie HU32 Észak-Alföld PL51 Dolnośląskie Italy HU33 Dél-Alföld PL52 Opolskie ITC1 Piemonte PL61 Kujawsko-Pomorskie ITC2 Valle d'Aosta/Vallée d'Aoste Malta PL62 Warmińsko-Mazurskie ITC3 Liquria PL63 Pomorskie MT00 Malta ITC4 Lombardia ITD1 Provincia Autonoma Bolzano/ **Netherlands Portugal** Rozen PT11 Norte ITD2 Provincia Autonoma Trento NL11 Groningen ITD3 Veneto NL12 Friesland PT15 Algarve ITD4 Friuli-Venezia Giulia NL13 Drenthe PT16 Centro (P)

ITD5 Emilia-Romagna

NL21 Overijssel

PT17 Lisboa



PT18 Alentejo FI1A Pohjois-Suomi UKF2 Leicestershire, Rutland and Northamptonshire FI20 Åland PT20 Região Autónoma dos **Açores** UKF3 Lincolnshire PT30 Região Autónoma da Madeira UKG1 Herefordshire, Worcestershire **Sweden** and Warwickshire SE01 Stockholm **UKG2** Shropshire and Staffordshire Romania SE02 Östra Mellansverige **UKG3 West Midlands** RO11 Nord-Vest SE04 Sydsverige **UKH1** East Anglia RO12 Centru SE06 Norra Mellansverige UKH2 Bedfordshire and RO21 Nord-Est SE07 Mellersta Norrland Hertfordshire RO22 Sud-Est SE08 Övre Norrland **UKH3** Essex RO31 Sud — Muntenia UKI1 Inner London SE09 Småland med öarna RO32 București — Ilfov SEOA Västsverige UKI2 Outer London **RO41 Sud-Vest Oltenia** UKJ1 Berkshire, Buckinghamshire RO42 Vest and Oxfordshire **United Kingdom** UKJ2 Surrey, East and West Sussex UKC1 Tees Valley and Durham Slovenia UKJ3 Hampshire and Isle of Wight UKC2 Northumberland and Tyne UKJ4 Kent SI00 Slovenija and Wear UKK1 Gloucestershire, Wiltshire and UKD1 Cumbria North Somerset **Slovakia UKD2** Cheshire **UKK2** Dorset and Somerset **UKD3** Greater Manchester SK01 Bratislavský kraj UKK3 Cornwall and Isles of Scilly **UKD4** Lancashire SK02 Západné Slovensko UKK4 Devon UKD5 Merseyside SK03 Stredné Slovensko UKL1 West Wales and the Valleys UKE1 East Riding and North SK04 Východné Slovensko **UKL2 East Wales** Lincolnshire **UKM1 North Eastern Scotland UKE2** North Yorkshire **Finland UKM2 Eastern Scotland UKE3 South Yorkshire** FI13 Itä-Suomi **UKM3 South Western Scotland UKE4** West Yorkshire **UKM4** Highlands and Islands FI18 Etelä-Suomi UKF1 Derbyshire and

Nottinghamshire

FI19 Länsi-Suomi

UKNO Northern Ireland



EFTA countries: Statistical regions at level 2

Iceland

IS Ísland

Liechtenstein

LI Liechtenstein

Norway

NO01 Oslo og Akershus

NO02 Hedmark og Oppland

NO03 Sør-Østlandet

NO04 Agder og Rogaland

NO05 Vestlandet

NO06 Trøndelag

NO07 Nord-Norge

Switzerland

CH01 Région lémanique

CH02 Espace Mittelland

CH03 Nordwestschweiz

CH04 Zürich

CH05 Ostschweiz

CH06 Zentralschweiz

CH07 Ticino