#### ......Our mission is to provide the European Union with a high-quality statistical information service

**Eurostat's collections** are adapted to the needs of all users. You will find them in each of the nine themes proposed by Eurostat.



Graphs	Tables	Comments	Maps	Content	Format
Press relea: connection with on the EU, the I They are also a ropa.eu.int/com	ses: Eurostat publishes the release of new data Vember States and their p vailable on the Internet m/eurostat/	around 100 press rele . The press releases inclu partners. They are provi as soon as they are pr	ases every year in ude the key figures ded free of charge. ublished: www.eu-		Paper Html PDF
Statistics in up-to-date sum It covers all then around 150 <i>Stat</i>	focus: This collection is p maries of the main results nes and consists of about f <i>istics in Focus</i> per year. Ava	oublished regularly by Eu of statistical surveys, st four to eight pages per is ilable as single copies or o	rrostat and provides udies and analyses. ssue. Eurostat issues on subscription.		Paper PDF
Key indicat sub-theme in ar or on subscripti	ors: This collection pro n easy-to-carry booklet of on.	vides the main indicat up to 100 pages. Availa	ors on a theme or ble as single copies		Paper Html
Panorama of and trends of consist of arour able as single of	of the European Unit a multi-sectoral theme of ad 200 pages and include opies or on subscription.	<b>on:</b> This collection high or a sectoral sub-theme analysis as well as tables	hlights the features e. The publications and graphs. Avail-		Paper CD-ROM
Methods an consult the met sector. Available	Id nomenclatures a hodologies and nomencle as single copies.	re intended for specia atures used for a theme	lists who want to e, a sub-theme or a	in the second se	Paper CD-ROM
<b>Detailed tal</b> statistical data c or on subscripti	<b>Jles</b> are intended for sp compiled on a theme, sub on.	ecialists. They present -theme or sector. Availa	part, or all, of the ble as single copies		Paper CD-ROM
<b>Studies and</b> research and subscription.	<b>research</b> summarise th are intended for specia	e results of European sta alists. Available as sir	atistical studies and agle copies or on	und an and and and and and and and and and and and and	Paper CD-ROM
<b>Catalogues</b> and services. Th rostat products Eurostat's latest	provide rapid access to concern and services, and <i>Statistic</i> products and services	oncise information on I I include the <i>Mini guide</i> <i>cal references</i> , the quar	Eurostat's products e, a selection of Eu- terly newsletter on		Paper

# Regions: Statistical yearbook 2000





#### .....Immediate access to harmonized statistical data

#### Eurostat Data Shops:

#### A personalised data retrieval service

In order to provide the greatest possible number of people with access to high-quality statistical information, Eurostat has developed an extensive network of Data Shops (1).

Data Shops provide a wide range of tailor-made services:

- ★ immediate information searches undertaken by a team of experts in European statistics;
- ★ rapid and personalised response that takes account of the specified search requirements and intended use;
- $\star$  a choice of data carrier depending on the type of information required.

Information can be requested by phone, mail, fax or e-mail.

#### (') See list of Eurostat Data Shops at the end of the publication.

#### Internet:

#### **Essentials on Community statistical news**

- ★ Euro indicators: more than 100 indicators on the euro-zone; harmonized, comparable, and free of charge;
- ★ About Eurostat: what it does and how it works;
- ★ Products and databases: a detailed description of what Eurostat has to offer;
- ★ Indicators on the European Union: convergence criteria; euro yield curve and further main indicators on the European Union at your disposal;
- ★ Press releases: direct access to all Eurostat press releases.

For further information, visit us on the Internet at: WWW.europa.eu.int/comm/eurostat/

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (http://europa.eu.int).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2000

ISBN 92-828-9763-X

© European Communities, 2000

Printed in France

PRINTED ON WHITE CHLORINE-FREE PAPER



EUROSTAT

Eurostat is the Statistical Office of the European Communities. Its task is to provide the European Union with statistics at a European level, that allow comparisons to be made between countries and regions. Eurostat consolidates and harmonizes the data collected by the Member States.

To ensure that the vast quantity of accessible data is made widely available, and to help each user make proper use of the information, Eurostat has set up a publications and services programme.

This programme makes a clear distinction between general and specialist users and particular collections have been developed for these different groups. The collections *Press releases, Statistics in focus, Panorama of the European Union, Key indicators* and *Catalogues* are aimed at general users. They give immediate key information through analyses, tables, graphs and maps.

The collections *Methods and nomenclatures, Detailed tables* and *Studies and research* suit the needs of the specialist who is prepared to spend more time analysing and using very detailed information and tables.

All Eurostat products are disseminated through the Data Shop network or the sales agents of the Office for Official Publications of the European Communities. Data Shops are available in 12 of the 15 Member States as well as in Switzerland, Norway and the United States. They provide a wide range of services from simple database extracts to tailor-made investigations. The information is provided on paper and/or in electronic form via e-mail, on diskette or CD-ROM.

As part of the new programme Eurostat has developed its website. It includes a broad range of on-line information on Eurostat products and services, newsletters, catalogues, on-line publications as well as indicators on the euro-zone.

> Yves Franchet Director-General

# TABLE OF CONTENTS

INTRODUCTION	5
1. Introduction	7
2. The regions of the European Union	7
3. For further information	7
AGRICULTURAL STATISTICS	9
1. Introduction	11
2. Methodological notes	11
3. Land use	12
4. The structure of farming	15
5. Conclusion	20
POPULATION	21
1. Introduction	23
2. Population density	23
3. Population change	24
4. Dependency ratios	31
REGIONAL GROSS DOMESTIC PRODUCTINTRODUCTION	35
1. Introduction	37
Development of gross domestic product	37
Method of estimating regional GDP	37
2. Regional gross domestic product (GDP)	37
Regional GDP as a measure of prosperity — the current situation	37
Regional GDP and employment — the current situation	40 42
Current trends in regional GDP and employment	44
	47
	49
2 Methodological notes	49
3 Part-time work	50
4 Older people	52
5 Working women	53
6 Employment rate	55
7 Interregional migration	57
8. Conclusion	58
	50
	39
1. Introduction	61
	61

3. Expenditure and personnel	62		
4. R & D and GDP per inhabitant	64		
5. Patent applications	66		
6. Patents by sector	69		
TOURISM	71		
1. Introduction	73		
2. Capacity (infrastructure) statistics	73		
Occupancy data	79		
<b>TRANSPORT</b>	83		
1. Introduction	85		
2. Transport infrastructure and vehicle fleet	85		
Road network	85		
Rail network	87		
Vehicle ownership	88		
3. Air transport	90		
4. Sea transport	92		
5. Road safety	94		
6. Interregional road transport flows	96		
REGIONAL UNEMPLOYMENT	99		
1. Introduction	101		
2. Regional unemployment	101		
Margins of variation within the Member States	101		
Youth unemployment	104		
The gap between the sexes	106		
The problem of long-term unemployment	108		
3. Regional unemployment and economic growth	109		
■ INSTRUCTION OF THE INSTALLATION OF THE CD-ROM			



#### INTRODUCTION



# 1. Introduction

The regions statistical yearbook contains a selection of comparable statistics which best represent the social and economic situation in the regions of the European Union.

The 2000 edition adopts a completely new concept. For each of the fields covered by the REGIO database, a series of detailed colour maps and graphs identify key interrelationships and comment on their impact on individual regions. As in 1999, the tables previously published in paper form are now available on the accompanying CD-ROM, making it easier for the user to extract and manipulate the data to suit his or her particular needs.

# 2. The regions of the European Union

The nomenclature of territorial units for statistics (NUTS) was established by Eurostat to provide a uniform and consistent breakdown of territorial units for the production of regional statistics for the European Union. Although the NUTS classification has no legal value per se, it has been used since 1988 in Community legislation.

Since this is a hierarchical classification, the NUTS subdivides each Member State into a whole number of NUTS 1 regions, each of which is in turn subdivided into a whole number of NUTS 2 regions and so on. The present version of NUTS (NUTS 99) subdivides the economic territory of the European Union into 78 regions at NUTS 1 level, 211 regions at NUTS 2 level and 1 093 regions at NUTS 3 level.

Because of their relatively small area or population, some countries do not have all three regional levels. Ireland and Sweden have no Level 1 regions; accordingly Levels 0 (country) and 1 are identical. Denmark has neither Level 1 nor Level 2 regions; thus the Levels 0, 1 and 2 are identical. Luxembourg, not having regions at Levels 1, 2 or 3, is defined as Levels 0, 1, 2 and 3. In most of the maps and graphs in this yearbook, the statistics are presented at NUTS 2 level.

It should be noted that the French overseas departments (DOM) are not included in the totals for EU-15 and France.

A map giving the names of the regions may be found in the sleeve of this publication. At the end of the publication, there is a list of all the NUTS 2 regions in the European Union. For further information on the NUTS classification, the reader is referred to the booklet *Regions* — *Nomenclature of territorial units for statistics* — *NUTS*, ISBN 92-828-7275-0.

## 3. For further information

The data presented on the CD-ROM represent the most significant regional indicators at NUTS 1 and 2 levels or the latest available year in each case. These are, however, only part of the data obtainable in REGIO, Eurostat's database for regional statistics. Additional methodological notes concerning the data can be found on the CD-ROM.

More extensive time series (which may go back as far as 1970), more detailed statistics than those given in this yearbook (population by single years of age, deaths by single years of age, births by age of the mother, detailed results of the Community labour force survey, economic accounts aggregates for 17 branches, detailed breakdown of agricultural production, data on the structure of agricultural holdings, tourism data, etc.) and statistical indicators at NUTS 3 level (area, population, births and deaths, gross domestic product, unemployment rates) are all available in REGIO. They may be obtained by contacting your nearest datashop.

For more detailed information on the contents of the REGIO database, please consult the Eurostat publication *REGIO-database — User's guide*, ISBN 92-828-8757-X.



#### AGRICULTURAL STATISTICS





# 1. Introduction

Agricultural statistics are one of the cornerstones of European regional statistics. Eurostat has been collecting, processing and publishing data on agriculture in a regional breakdown for more than 20 years.

The REGIO databank now contains information on land use, agricultural production, the structure of farm holdings, agricultural accounts and much more. In all there are eight tables of annual data.

The maps, graphics and commentary in this yearbook give an impression of the wealth of data available in the REGIO databank and the ways in which they can be analysed. They are to be found in two chapters, one on land use (in the wider sense) and the other on the structure of farming.

# 2. Methodological notes

Wherever possible, cartographic representation is at NUTS 2 level, which offers sufficient detail for analytical purposes and generally good data availability. For regional agricultural statistics specifically, however, the NUTS 1 level had to be used for several Member States, above all the United Kingdom, which do not send data at NUTS 2 level to Eurostat.

The changes in NUTS between 1995 and 1999 have meant that there are frequent gaps in the data on parts of Sweden, Finland and the United Kingdom. Such regions are shown in grey on the maps.

Care was taken to use data from the latest year available, which is usually 1997. To keep gaps to a minimum, however, we have nevertheless inserted older data (from 1996 or 1995) on Member States for which no 1997 data were available. In doing so we assumed that no structural changes capable of altering the analysis would be likely to occur in the space of a year or two.

#### 3. Land use

The first map (1.1) shows how much of the total area of the EU regions is utilised agricultural area. It can be seen that more that 60 % of most regions in central and western Europe — above all Ireland, the United Kingdom, France, Belgium, the Netherlands, Denmark and Italy — consists of farmland. Farming is far less widespread in the northernmost Member States (Finland and Sweden) and in Portugal and Greece, where the climate (extreme cold in the north, heat and drought in southern Europe) rules out more intensive agriculture. Poor soil quality also takes its toll in some regions of Europe, of course, and farming intensi-

ty in the Alpine regions of Austria, Italy and France is conspicuously sparse.

The second map (1.2) shows what type of land use dominates in the regions of Europe. Arable farming is evidently practised most widely in most regions of Finland, Sweden, Denmark, northern Germany, northern France and England, but is far less common in southern Europe. Permanent grassland predominates in Ireland, Scotland, Wales, the Alpine regions, northern Spain, Corsica and Sardinia. Permanent crops are to be found above all in Portugal, southern and eastern Spain, southern Italy and central and southern Greece. Permanent crops and arable land can be found side by side in northern Italy and central Spain.



eurostat

 $\sim$ 

~

 $\triangleleft$ 

Ω.





Map 1.2 clearly illustrates the wide variety of agricultural land uses in the EU — a function of highly disparate weather conditions and uneven soil quality.

Map 1.3 shows the dominant type of stockrearing in the EU regions. Sheep farming is most widespread in Spain, Italy, Greece and southern France. Since permanent crops predominate, however, as Map 1.2 demonstrates, stockrearing is secondary. The United Kingdom is another traditional sheep-farming country, as is illustrated by Map 1.3. Pig rearing is most common in Scandinavia, northern Germany (except Schleswig-Holstein and Mecklenburg-Western Pomerania), the Netherlands, Belgium and Austria, but is also frequent in Brittany, Baden-Württemberg, northern Italy and eastern Spain. Cattle predominate in France, Ireland and Bavaria. Northern Sweden and northern Finland should not be overestimated since, as Map 1.1 shows, farming is generally sparse in these regions.



 $\triangleleft$ 

 $\triangleleft$ 

Ω.

£

ഥ

 $\triangleleft$ 



# 4. The structure of farming

Having thrown some light on the type of agricultural land use, we can now turn to its structure.

The next map (1.4) shows value added per employee in agriculture for the regions of the EU.

The highest returns on agriculture are achieved in Denmark, the Netherlands, Belgium, northern and central Italy, central France, England and central Spain. The lowest are to be found in Sweden, Finland, Portugal, Austria and most regions of Greece. Climate and soil quality are the obvious explanations for these results.



S



The following map (1.5), showing subsidies received per unit of utilised agricultural area, is an interesting, not to say astounding, one. Disadvantaged regions such as northern Sweden, Finland and western and southern Greece receive the highest subsidies per hectare. Surprisingly, however, the majority of German and Austrian regions are also to be found in this category. France, Denmark and Ireland are in the middle range, while most regions of Spain, northern Greece and Scotland are subsidised least.





Map 1.6 shows (in ecus) how much fertiliser is applied to each hectare of land in the regions of Europe. Quantities are particularly high in the southern Netherlands, Belgium, northern France and northern Italy, whereas little fertiliser is used in Spain, Austria and northern Sweden. The correlation with farming intensity, as shown in Map 1.1, is clear here.

S

C

S

 $\triangleleft$ 

 $\sim$ 

 $\triangleleft$ 

പ

 $\supset$ 

 $\cup$ 

£

ഥ

 $\triangleleft$ 



In the next map (1.7) we see what sizes of farm holdings predominate in the various regions of the EU. The average holding is particularly small in Italy, Greece, Portugal and southern and northern

Spain, while holdings in eastern Germany (a legacy of the planned economy), Champagne (France), Alentejo (Portugal) and Extremadura (Spain) tend to be of above-average size.





The last map (1.8), showing the average age of farm managers, reveals an ageing farming population above all in Italy, Greece, Portugal and much of Spain — almost certainly a function of

the below-average return on farming in these regions (see Map 1.4). Aragón (Spain) shows a high proportion of young farmers, however.

# 5. Conclusion

The above examples are intended merely to highlight a few of the many possible ways of analysing agriculture in the regions of the EU. They are no substitute for detailed analysis. We hope, however, that they will encourage readers to probe deeper into the REGIO databank and to make many further interesting discoveries.



# P O P U L A T I O N



# 1. Introduction

Population is involved in all human activities. That is why the description of the spatial distribution and changes of population are the backbone of all human-related spatial analyses. Population background data are presented in this yearbook in three sections using NUTS 2 level maps:

Population density

Population change

- crude birth rate
- crude natural increase
- crude rate of net migration
- components of population change

- rate of population increase

Dependency ratio

- young age dependency ratio
- old age dependency ratio

# 2. Population density

The population density table shows the population density of NUTS 2 regions of the European Union as the number of inhabitants per square kilometre. The total population of the Union, 373.7 million in 1997, produced an average population density of 117.2 inhabitants per km<sup>2</sup>.





Z

0

 $\triangleleft$ 

0

The map shows the population density of the NUTS 2 regions, classified into five density groups:

	$\geq$	400
200	_	400
120	_	200
60	_	120
	$\leq$	60

Population density of the NUTS 2 regions of the European Union has an enormous variation ranging from only 3.9 in Övre Norrland in Sweden to 8 000 in the case of Inner London.

The most densely populated regions are usually those containing the capital of the country (especially if the capital forms its own NUTS 2 region). Exceptions are in Italy, where Campania has the highest density at 426, while Lazio, which contains Rome, has only 303.6, and in Portugal, where Madeira has a density of 426 while Lisbon and Vale de Tejo has only 278.

Less densely populated areas are on the southern, western and northern margins of the Union. Of the 20 least densely populated regions, 5 are in Finland and in Sweden, 4 in Spain, 2 in Greece and 1 each in France, Portugal, Italy and the United Kingdom. The population density is greatest in the middle of the Union, running like a belt from the north of Italy through southern and western Germany and the Benelux countries to southern England.

#### 3. Population change

The main features of population change in 1997 are presented in five maps:

- crude birth rate
- crude natural increase
- crude rate of net migration
- components of population change
- rate of population increase

The map shows number of births per 1 000 inhabitants in NUTS 2 regions in 1997 classified into four groups:

$$\geq 12.5$$
  
10.7 - 12.5  
8.5 - 10.7  
 $\leq 8.5$ 

The average of the Union was 10.7.



Z

0

 $\triangleleft$ 

 $\supset$ 

പ

0

There is no clear pattern in the regional distribution of birth rates. Generally, the regions of low birth rates are in the southern parts of the Union, in eastern Germany and in Sweden. The regions of higher birth rates are in northern France, Austria, the Benelux countries, Ireland and the United Kingdom. The five regions with the highest birth rates were Inner London, 16.3, Flevoland in the Netherlands, 15.2, Ceuta y Melilla in Spain, 14.8, Île-de-France, 14.6, and Northern Ireland, 14.5.

Four of the five regions with the lowest birth rates were in eastern Germany and one in Spain: Dessau, 6.1, Principado de Asturias, 6.1, Chemnitz, 6.3, Brandenburg, 6.3 and Leipzig, 6.4.



The map shows the relative difference of births and deaths per 1000 inhabitants in NUTS 2 regions in 1997, grouped into five classes:

$$\geq 3$$
  
 $1 - 3$   
 $0 - 1$   
 $-2 - 0$   
 $\leq -2$ 

The average of the Union was 0.9.

Large parts of the European Union were already experiencing a negative natural population increase (87 NUTS 2 regions out of 205) in 1997. The regions are largely the same as those with low birth rates.

The five areas with the largest natural population increase were northern Finland, 10.2, Flevoland in the Netherlands, 9.8, Ceuta y Melilla in Spain, 8.4, Inner London, 8.0 and Île-de-France at 7.9.

The five areas with the fastest natural population decrease were Liguria, in Italy, at -6.7, Chemnitz, -6.6, Dessau, -5.8 and Leipzig -5.3 in Germany and Alentejo, in southern Portugal, with -5.6.









The map shows the relative difference per 1 000 inhabitants of in- and out-migration for NUTS 2 regions in 1997, classified into five groups:

$$\geq$$
 5  
2.5 - 5  
0 - 2.5  
-2.5 - 0  
 $\leq$  -2.5

In addition, there are some regions with missing data in Germany, Finland and Sweden.

Areas of strong positive net migration are in southernmost Portugal, western and southern France, northern Italy, northern Greece, western and northern Germany, central and southern England and Ireland.

The areas of largest negative net migration (i.e. regions which lose most population due to out-migration) are in southern Portugal, northern Spain, southern Italy, northern France, eastern Germany, eastern Austria, Northern Ireland, northern Sweden and northern Finland.

The map shows the role the basic components (natural increase and net migration) play in the total population increase. If we denote natural increase with N and net migration with M, there are six basic combinations of these components which determine the sign (+, -) of the total population increase.

A positive increase will result from combinations |N - | < |M + | (absolute value of negative natural increase is smaller than absolute value of positive net migration), N +, M + (both natural increase and net migration are positive; in the map this has been further divided into two subclasses showing which of the components has a bigger role in the positive total increase, N + < M + and N + > M +) and, finally, |N + | > |M - | (absolute value of positive natural increase is greater than absolute value of negative net migration). These categories are shown on the map by purple, red, orange and light green colours, respectively.

A negative increase (decrease) will result from combinations |N -| > |M +| (absolute value of negative natural increase is greater than absolute value of positive net migration), N -, M - (both natural increase and net migration are negative) and |N +| < |M -| (absolute value of positive natural increase is smaller than absolute value of negative net migration). These categories are shown on the map by dark blue, blue and dark green colours, respectively.

Because of low fertility levels, migration has become the decisive factor for the still positive, but slow, population increase in the European Union as a whole. It is also important at regional level. According to Map 2.3, there were 87 NUTS 2 regions with negative natural population increase in 1997. Because of positive net migration, the total increase was negative in only 58 NUTS 2 regions.

Regions of 'severe population decrease' (with both negative natural increase and negative net migration) were found in central Finland, central and northern Sweden, eastern Germany, west Wales and the Valleys, eastern Austria (Steiermark), southern Portugal (Alentejo), northern and northeastern Spain and southern Greece (Peloponnesus).

Regions where a positive population increase was maintained only by a big enough positive net migration are found in southernmost Sweden, western and northern Germany, Scotland, south-western England, eastern Austria, south-western France, central and southern Portugal, western and eastern Spain, northern Italy and central and north-eastern Greece.

Regions with a still stable population increase (both natural increase and net migration positive) were found in southern Finland, southern Sweden (and Stockholm region), Denmark, western and southern Germany, western Austria, central England, Ireland, the Benelux countries, central and southern France, central and southern Portugal, southern Spain, northern (Trentino) and southern (Basilicata) Italy, northern Greece and the Greek archipelago in the south.

Z

0

 $\triangleleft$ 

 $\supset$ 

പ

0

Δ\_



The map shows the relative population increase (%) over the four-year period 1993–97 ( = population at 1.1.1997, minus population at 1.1.1993, divided by the population at 1.1.1993 and multiplied by 100), grouped into five classes;

$$\geq$$
 3  
 $1.5 - 3$   
 $0 - -1.5$   
 $-1.5 - 0$   
 $\leq -1.5$ 

In addition, there are some regions with missing data in Germany, Finland and Sweden.

In the four-year period 1993–97, population decline was not yet as evident as it has been more recently. The relative total population increase was negative in only 42 regions. The general pattern of recent population changes, however, can already be seen (see Map 2.5).

The five regions with the strongest relative population increase during the period 1993–97 were:

Flevoland (Netherlands)	15.6 %
Ceuta y Melilla (Spain)	6.7 %
Sterea Ellada (Greece)	6.3 %
Lüneburg (Germany)	6.2 %
Luxembourg	5.8 %

The five regions with fastest relative population decrease during the period 1993–97 were:

Halle (Germany)	-4.8 %
Dessau (Germany)	-4.2 %
Magdeburg (Germany)	-3.5 %
Alentejo (Portugal)	-3.4 %
Thüringen (Germany)	-3.0 %

# 4. Dependency ratios

Dependency ratios are measures in which the inactive population is compared to the economically active population in order to show the extent of the 'care-taking burden', imposed by the inactive population on the active one. In order to calculate the dependency ratio, one can use employment data, which gives the closest picture. Indicators can also be calculated from purely demographic age-structure data. The ratios then only roughly reflect the real inactive/active ratios. Demographic age data has been used in this context.



Z

0

 $\triangleleft$ 

0

The map describes the proportion of young people aged 0–19 years (mostly living at home or in education) to the population aged 20–59 (mostly economically active) in NUTS 2 regions in 1997, classified into four classes:

$$\geq 0.5$$
  
 $0.45 - 0.5$   
 $0.4 - 0.45$   
 $< 0.4$ 

In addition, there are some regions with missing data in Germany, Finland and Sweden, Scotland and Northern Ireland. The young age dependency ratio is an indicator which shows the degree of economic burden the inactive young population imposes upon the population of working age.

The young age dependency ratio is highest in northern Finland, Ireland, western France and southern Spain.

The ratio is lowest in northern Spain, northern Italy and in a major part of Germany.

The regional variation of the young age dependency ratio roughly reflects the variation of fertility. In the areas of high fertility, the ratio is usually high, whereas it is low in areas of low fertility.





The map shows the proportion of elderly people aged 60 and more (mostly retired for old age or health reasons) in relation to the population aged 20–59 (mostly economically active) in NUTS 2 regions in 1997, classified into four groups:

$$\geq 0.45$$
  
0.4 - 0.45  
0.35 - 0.4  
 $\leq 0.35$ 

In addition, there are some regions with missing data in Germany, Finland and Sweden, Scotland and Northern Ireland.

The old age dependency ratio is an indicator which shows the degree of economic burden the

inactive elderly population imposes upon the population of working age.

The old age dependency ratio is often a mirror image of the young age dependency ratio. Low fertility and negative net migration tend to increase the proportion of the elderly in the total population. However, this is not always the case. In central Sweden, south-western England, in parts of central and southern France and in central Spain, a high old age dependency ratio is associated with a rather high young age dependency ratio.





#### REGIONAL GROSS DOMESTIC PRODUCT



# 1. Introduction

#### Development of gross domestic product

A key variable which features in public debate on economic indicators is gross domestic product (GDP). GDP is generally interpreted as a measure of economic strength and production activity and, unlike gross national product, is based on the country rather than on its nationals, which means that foreign residents are taken into account. Moreover, this indicator is usually expressed in per capita terms in order to facilitate comparisons between regions.

Before focusing on the regional aspect, a brief outline is needed of trends in Europe as a whole in recent years. Assuming prices remain constant, i.e. not allowing for inflation, the following graph shows a clear upward trend in economic development in Europe as a whole.



In order to examine this measure in regional terms it will be necessary to make restrictive assumptions and, in some cases, to use estimates. The first step is a description of the method of estimation.

#### Method of estimating regional GDP

The starting point for estimating regional GDP is to use GDP data from the national statistical offices, which are calculated according to the rules of the European system of integrated economic accounts (ESA 95). These national values are divided among the regions in accordance with regional contributions to national gross value added (GVA). Most regional structures are currently still based on ESA 79, the older version of the European system of integrated economic accounts. These inconsistencies will disappear as soon as all Member States can supply regional figures in accordance with ESA 95.

Ideally, GDP estimates should be based on regional GVA patterns for the relevant years. However, these data were not available for all Member States and all regions at the time of calculation. It is therefore assumed that in some cases the patterns have remained unchanged.

# 2. Regional gross domestic product (GDP)

Regional GDP as a measure of prosperity – the current situation

#### (a) Methodological notes

A comparison of the economic situation in the various European regions is of general interest. However, such a comparison first requires a precise definition. What is being compared? Economic strength, competitiveness or prosperity? And how are we to quantify these measures?

Firstly, a comparison of the wealth or prosperity of a region is important. Wealth is determined by the possible consumer choices of the individuals living in a region. Consumer choices are determined by disposable income. Unfortunately, no information is currently available at regional level concerning disposable income. This will of course change with the new ESA 95 data transmission programme; however, this information will not be available until December 2001 at the earliest.



 $\cap$ 

 $\cap$ 

Given these circumstances it is therefore necessary to look for another way to express the wealth of a region and compare it with other regions. A possible method is GDP, which is available for all regions in Europe up to NUTS 3. However, as this is a measure of production, some modifications are required.

As the number of inhabitants varies from region to region, it makes sense to express GDP per capita, using regional population figures. Commuter flows affect comparisons between countries and in particular regions on the basis of per capita GDP. Some well-known examples are Luxembourg, city states such as Hamburg, Bremen and Vienna, and the Dutch region of Flevoland. In the case of city states, surplus commuters ensure that production activity in these regions is higher than it would be with resident workers only. As a result, the productivity of these regions' populations is generally overestimated by the per capita GDP indicator, and that of the regions in which the commuters live is generally underestimated. An example of this is the region of Flevoland, which has a relatively high number of inhabitants working in other regions.

The per capita GDP indicator is also affected by the population structure of the region in question. Other conditions being equal, GDP values in regions which have a relatively high percentage of inhabitants of non-working age, i.e. children, young people of school age, pensioners or the unemployed, are lower than in regions with relatively few inhabitants in these categories.

A further problem lies in the fact that exchange rates do not necessarily lead to a balancing of purchasing power within Europe. This phenomenon is seen even within Member States, i.e. within currency areas which have existed for a long time. The cost of living is often lower in rural areas than in urban conurbations, for example. In order to compensate for this, we use what are known as purchasing power standards (PPS), which take into account precisely those price differences which are not reflected in the exchange rates. The conversion factor from euro to PPS is therefore greater than one for 'poorer' countries (Portugal), which generally have lower prices. Countries with comparatively high prices (Sweden) have a conversion factor of less than one. The conversion of euro to PPS should actually be done on the basis of regional purchasing power parities. However, there are no comparable data available, so conversion is on the basis of national purchasing power parities.

To put it in other words, GDP and therefore also per capita GDP are indicators of the productivity of a country or a region and are therefore suitable for measuring and comparing the level of economic development of countries and regions. It should be taken into account, however, that GDP does not correspond to the income that is ultimately available to the private households in a country or region. It cannot therefore be assumed on the basis of GDP or per capita GDP that the population of region A is richer than the population of region B. It should also be noted that the GDP figures presented will be updated on the basis of further information as soon as Eurostat obtains new data.

#### (b) Major regional differences in per capita GDP in 1997

The modifications described above have been carried out in the following map, i.e. GDP is expressed per capita and in PPS. To further clarify the situation, the European average was taken to be 100.

Regional per capita GDP (in PPS) for 1997 in the 211 NUTS 2 regions observed ranged from 8 225 PPS in the Greek region of Epirus to 45 009 PPS in Inner London in the United Kingdom. The figure in the region with the highest GDP was thus almost 5\_ times higher than in the region with the lowest. These figures were respectively 43 % and 233 % of the EU average of 19 345 PPS.

In the period under review there were 47 regions in which per capita GDP (in PPS) was less than 75 % of the EU average, including 12 of the 13 Greek regions and six of Portugal's seven. The other regions were mainly in Germany (eight regions in the new Bundesländer), Spain (six regions) and Italy (six, all in the south). There was one in Austria (Burgenland) and three in the United Kingdom (Cornwall and Isles of Scilly, west Wales and the Valleys, Merseyside). For France, the relevant regions were the overseas departments and Languedoc-Roussillon.



.

In 1996 there were approximately 68 million inhabitants in these 47 regions, or 18 % of the total population of the European Union.

Per capita GDP was by far the highest in Inner London. Regions such as Hamburg, Darmstadt and Upper Bavaria in Germany, the Grand Duchy of Luxembourg, the Belgian capital Brussels and the Austrian capital Vienna are some way behind, although figures for these regions were still at least 160 % of the EU average. However, commuter flows were a significant factor in all of these regions except the Darmstadt region, which includes the city of Frankfurt am Main.

**(**)

 $\cap$ 

£

 $\cap$ 

111

2 0 0

10

0

m

 $\triangleleft$ 

 $\geq$ 

 $\cap$ 

ய

Ω.

#### (c) Major differences within Member States

In 6 of the 13 Member States with NUTS 2 regions, the highest per capita GDP figure in 1997 was twice as high as the lowest. Examples include Belgium (Brussels: 169 % of the EU average, Hainaut: 79 %), France (Île-de-France: 153 %, Languedoc-Roussillon: 74 %), Italy (Lombardy: 0131 %, Calabria: 59 %) and Austria (Vienna: 164 %, Burgenland: 72 %). There were, however, two countries where regional differences were even more pronounced (Germany and the United Kingdom). In Sweden, the lowest (93 % in east-central Sweden) and highest figures (123 % in Stockholm) did not differ very greatly.

In Germany, the figure for Hamburg (197 %) was three times higher than the figure for Chemnitz (60 %). If we disregard Inner London and take the region with the second highest figure (127 %, in north-eastern Scotland), the United Kingdom is no different from most other Member States. The same does not apply to Germany, where the figure for the district of Darmstadt (165 %) is not much lower than that for Hamburg (197 %).

Graph 3.2. GDP per inhabitant on national level and on regional extremes on NUTS 2 in 1997



#### (d) Averages very different from 1997 figures in some regions

If we compare the averages for the period 1995–97 with the most recent figures for 1997, we see that the three-year averages do not always accurately reflect the latest situation. In no fewer than 55 of the regions under review, the difference between the two figures was two percentage points or more. In 9 of these 55, the average was higher than the figure for 1997, which indicates that economic growth in these regions was lagging behind the EU average. It is striking that all of the regions concerned, apart from two German regions, Berlin (2.6 percentage points) and Saarland (2.1 percentage points), are in France (including the region with the highest figure: Île-de-France with 3.4 percentage points).

In the other 46 regions, the three-year average was lower than the 1997 figure, which suggests that the average underestimates the latest trend. The differences here were more pronounced (up to 7 percentage points). Again, it is interesting to note that these regions are largely concentrated in one Member State. No fewer than 31 of the 46 regions were in the United Kingdom; the two regions in which the figures for 1997 differed most from the three-year UK average were Hampshire and Isle of Wight and Gloucestershire, Wiltshire and North Somerset (differences of 5.9 and 5.8 percentage points respectively).

#### Regional GDP as a measure of productivity — the current situation

GDP can also be used for a different purpose, i.e. to measure productivity. For this purpose GDP is divided by the number of employed persons, and the result is 'gross domestic product' per employed person. This is used to get an impression of various types of productivity. This indicator could also be expressed in PPS. Instead, however, a comparison in euro was carried out. It could be argued that products on the market compete against each other in euro and therefore this comparison is more logical.
Although regional patterns are largely similar to those in the previous chapter, there are certain differences. When calculated in euro, three German regions are at the top of the list: Hamburg, Darmstadt (including Frankfurt am Main) and Upper Bavaria. Next is the French region of Île-de-France. In this comparison, western German regions rank higher than in the previous chapter. This is a reflection of age structures, the education system and retirement regulations. Clearly, the proportion of people who are not economically active is higher than elsewhere in Europe. Inner London, which tops the list in per capita GDP measured in PPS, ranks lower in this comparison. Here the impact of commuters becomes very clear, as there are obviously only relatively few inhabitants in Inner London. Commuters therefore swell the number of workers considerably, with the result that GDP per worker is lower than GDP per capita.





# Regional GDP and employment – the current situation

For a geographical view of the link between regional GDP and employment, in the maps below the 211 NUTS 2 regions are divided into four categories: (1) less than 75 %, (2) 75 to 100 %, (3) 100 to 125 %, and (4) over 125 % of the European average for regional per capita GDP in PPS. The higher the regional GDP, the darker the colour in the map. The lower the regional GDP, the lighter the colour in the map.

For all these regions the employment level in three sectors, agriculture (Map 3.3), industry (Map 3.4)

and services (Map 3.5), was then compared with GDP.

Areas coloured in dark green are therefore 'prosperous' regions with a high percentage of all employed persons working in agriculture. Areas coloured in light blue, on the other hand, indicate 'poor' regions with a low percentage of all employed persons working in agriculture. Maps 3.4 and 3.5 should be interpreted in a similar way. The percentage limits used in the maps were chosen in order to ensure optimum graphic representation.











The results in Map 3.3 are not surprising. At the southern and eastern periphery of the European Union the percentage of people employed in agriculture is high. The same applies to the west of the United Kingdom. High levels of employment in agriculture often coincide with low GDP. There are, however, no 'extreme' combinations, i.e. high (low) percentage of persons employed in agriculture and high (low) GDP.

With regard to levels of employment in industry the picture is much less consistent. The periphery of the European Union is less clear, and there are all sorts of possible combinations of employment in industry and GDP. One reason for this heterogeneity could be that very different industries with different productivity levels exist within Europe, so it is not possible to present a consistent picture. More in-depth analysis is required in this case.

Levels of employment in the service sector are extremely varied across Europe, except in Greece (excluding the tourist centres), central Spain and northern Portugal, which generally have a lower level of employment in the service sector. Otherwise there are once again all sorts of combinations. To sum up the service sector, the link between a high percentage in the service sector and high GDP is much less clear than one might expect. Here, too, more in-depth analysis is required.

# Current trends in regional GDP and employment

It is interesting not only to compare regional GDP and employment levels but also to examine regional GDP and employment trends over time in the individual sectors.

For this purpose the 211 NUTS 2 regions were once again divided into four categories: (1) less than 75 %, (2) 75 to 100 %, (3) 100 to 125 %, and (4) over 125 % of the European average for regional per capita GDP in PPS. The higher the regional GDP, the darker the colour in the map. The lower the regional GDP, the lighter the colour in the map.

For all these regions, employment trends over time in the three sectors agriculture (Map 3.6), industry (Map 3.7) and services (Map 3.8) were compared to GDP. To do this we calculated the geometric average of the available years, which was then split into three categories.











As employment in agriculture has tended to fall in recent years, a distinction was made between regions which experienced a significant decline (more than 5 % per year — blue), those which experienced a moderate decline (0 to 5 % per year - green) and those which experienced an increase (red). The new Bundesländer in Germany are in a special position. A sharp decline in agricultural employment was seen in this area, though this is due to the inefficiency of the former system of work allocation in the GDR. For this reason, this part of Germany should be viewed separately. Apart from this, it is clear from the map that a sharp decline in agricultural employment can go hand in hand with either high or low GDP. One could conclude that the general decline should be viewed as more or less independent of economic trends.

The development of industrial employment over time is distributed much more evenly, and on the whole it has fallen slightly. The boundaries were therefore set slightly differently: a distinction was made between regions which experienced a significant decline (more than 2.5 % per year — blue), those which experienced a moderate decline (0 to 2.5 % per year — green) and those which experienced an increase (red). Once again, if we disregard Germany's new Bundesländer, the picture is the same as above: again there is a great variety, possibly because there are many types of industry in Europe and therefore no real consistency. Here, once again, further analysis is required.

Employment in the service sector has generally increased in recent years. For this reason the following boundaries were chosen: regions which experienced a decline (blue), those which experienced a moderate increase (0 to 2.5 % per year green), and those which experienced a significant increase (more than 2.5 % per year - red). Surprisingly, employment in the service sector is falling only in northern Sweden, northern Finland, the southern tip of Italy and in Liguria. It is increasing significantly on the Iberian Peninsula and above all in Ireland, the United Kingdom and the Netherlands, which are experiencing economic success. In western Germany, northern Italy and Denmark, currently also successful in economic terms, employment in the service sector seems to be stagnating.



### LABOUR FORCE SURVEY



# Ô¢

# 1. Introduction

In 1983, Eurostat began to construct a data bank on the European labour market. This information source, with its thousands of individual results from the labour force survey (LFS) conducted in all Member States of the European Community, has for almost 20 years provided an extraordinarily interesting and revealing basis for analysing regional as well as national issues.

The main statistical goal of the labour force survey is to break down the population of working age (15 or over) into three mutually exclusive and comprehensive groups (persons in employment, unemployed persons and inactive persons) and to compile descriptive and explanatory data on each group. The definitions of the survey characteristics are in line with the recommendations of the International Labour Organisation (ILO).

The labour force survey thus contains information not only on the work situations of interviewees, but also on second jobs, job-seeking, levels of education, temporary work, demographic backgrounds and much more. All data can be allocated to NUTS 2 regions. Moreover, the Member States are legally obliged to comply with certain statistical accuracy criteria for regional unemployment data.

The REGIO data bank contains annual data from the labour force survey on the population of working age, unemployment, activity rates, numbers of households, occupation by branch of the economy and so on, all broken down by age group and gender. From this collection of regional labour market analyses we have extracted a few examples in the form of maps, graphics and commentaries.

# 2. Methodological notes

The results of the labour force survey refer exclusively to private households. The Community survey takes place in the spring, but the period in which the survey is conducted may differ slightly from one Member State to the next.

Since the LFS is a sample survey, results for small numbers of people should be interpreted with caution, as should comparisons with data from earlier surveys.

In the labour force survey, 'the unemployed' are defined as all persons aged 15 or over who were without work during the reference period, were available to work within two weeks and had been actively seeking work for the last four weeks.

The maps in this yearbook are, wherever possible, representations of data at NUTS 2 level. The changes in NUTS between 1995 and 1999 have regrettably meant that there are frequent gaps in the data on parts of Sweden, Finland and the United Kingdom. The regions affected are marked in grey on the maps.

For the maps showing growth rates, missing data ruled out the use of the same reference period for all Member States. For the sake of comparability we have therefore estimated average annual growth rates. The fact that different reference periods are used for different countries does, of course, reduce the validity of the analysis.

 $\succ$ 

ш

>

 $\sim$ 

ш

c )

с

0

ட

 $\supset$ 

### 3. Part-time work

The first map (4.1) shows the share of part-time employment in total employment in the regions of the EU. With a few exceptions (above all Germany) it will be seen that the determining factor for the extent of part-time working is not so much

the region as the nation State with its legal and cultural heritage. Part-time working is most widespread (over 30 %) in the Netherlands; above-average rates are also seen in the United Kingdom, Denmark, Sweden and half the regions of Germany (above all Schleswig-Holstein and Baden-Württemberg).



Part-time working is rarest in southern Europe (Portugal, Spain, Italy and Greece) except in the regions around Lisbon, Athens and Valencia, which offer slightly more part-time jobs.

Map 4.2 illustrates trends (rates of change) in part-time working. Stronger regional differences show up here rather than in the absolute figures for part-time work. Sharp increases in part-time work are noticeable in Ireland, northern Portugal, southern Spain and Greece, where levels had previously been low (see Map 4.1), counterbalanced by a decline in Sweden, Finland, Denmark, southern Italy and several regions of England.

The general impression is that part-time working is levelling out across Europe: its frequency is falling in regions where part-time jobs are commonplace, and rising in those where they are relatively rare.





 $\succ$ 

ш

>

£

 $\sim$ 

ш

c )

с

0

ட

£

 $\supset$ 

0

ш

 $\triangleleft$ 



# 4. Older people

The next map (4.3) shows the ratio of people aged over 65 to those of working age in the EU regions. There is a very high percentage of older people over 45 % — in southern Portugal, central and northern Spain, central Italy, large parts of Greece and also in southern Sweden, suggesting that the working population in these regions bears a particularly heavy financial burden of care for the over-65s. The percentages of older people in Ireland, northern Sweden, northern Finland, Denmark, eastern Germany, the Netherlands and large parts of Austria are relatively low.



# Ô

# 5. Working women

The next two maps show the percentage of women in the working population.

Map 4.4 illustrates absolute female activity rates in the regions of Europe, which are above average

in many areas of England and Scotland, in Denmark, Sweden and the Netherlands and in central and northern Portugal, and particularly low, at 30 %, in Spain and southern Italy.

 $\succ$ 

ш

>

£

 $\sim$ 

ш

 $\mathcal{O}$ 

с

0

ட

£

 $\supset$ 

0

ш

 $\triangleleft$ 

If we now turn to the trend in the female activity rate (Map 4.5), we see that it has fallen very sharply in eastern Germany and is also declining in northern Spain, Austria, parts of England, southern Italy and Greece. This is balanced by a sharp increase in Ireland, central and southern Sweden, the Netherlands and Aragón (Spain).



# 6. Employment rate

This chapter deals with the percentages of people in employment in the population of working age. Figure 4.1 shows the average employment rates in each of the 15 Member States along with the regional maxima and minima. While employment rates in Greece, Spain and Italy are well below the EU average of 50 %, they are markedly high in Denmark, the Netherlands, Portugal, Sweden and the United Kingdom. The variation in figures for the Member States is as a rule 10 percentage points above and below the mean, with sharper deviations in France and in Italy, where Corsica, Calabria and Sicily have very low employment rates.



#### Graph 4.1. Taux d'emploi au niveau national et extrèmes régionaux NUTS 2 en 1998



 $\succ$ 

ш

>

£

 $\sim$ 

ш

c )

с

0

ட

£

 $\supset$ 

0

ш

 $\triangleleft$ 



Map 4.6 shows the trend (rate of change) in the employment rate. The sharpest fall-off is noticeable in eastern Germany. With few exceptions the other regions also show a close correlation with the trend in the female activity rate (Map 4.5). Changes in the employment rate are evidently attributable largely to changes in female activity.

Corsica, where the employment rate is rising while numbers of working women are on the decline, is an exception to this rule. The reverse is happening in northern Sweden, where the percentage of women in the working population is rising while the employment rate sinks.



# ÔÔ

# 7. Interregional migration

The last map (4.7) illustrates the correlation between regional employment and interregional migration. Regions with low employment rates (working people/population of working age) are shown in pastel colours, and those with high employment rates in bright colours. Blue areas are regions experiencing a net decline in population; red areas are those where the population is rising. We can see that the population in northern and eastern France is tending to migrate as employment falls. The same is true of eastern Germany, southern Italy and Alentejo (Portugal). In northern Sweden, northern Finland and large parts of Austria the population is declining even though the employment rate is high. Ireland, England, Denmark, the Netherlands, western Germany and northern Portugal show net in-migration coupled with high employment, while population increases despite low employment are noticeable in southern Spain, southern France, central and northern Italy and Greece.

# 8. Conclusion

The above examples are intended merely to highlight a few of the many possible ways of analysing labour force survey results in the regions of the EU. They are no substitute for detailed analysis. We hope, however, that they will encourage readers to probe deeper into the REGIO data bank and to make many further interesting discoveries.





### **RESEARCH & DEVELOPMENT**



### uch as whose c. Euro-

# 1. Introduction

The level of resources devoted to research and development (R & D) and to innovation is an indicator of the dynamism of a region. It is generally recognised that there is a correlation between the capacity of a region to cope with competition and to adapt rapidly to technological change, on the one hand, and its capacity to innovate, on the other. The data available in REGIO, and shown here in the following maps, reveal a very varied picture across the European Union as far as this field is concerned, as well as the existence of a significant technological gap between the regions which make up the Union.

# Methodological notes

Research and development includes all creative activities undertaken in a systematic manner with the aim of enhancing the overall knowledge base, together with the utilisation of this knowledge base in new applications.

R & D expenditure covers all the resources employed in carrying out R & D, such as labour costs, operational costs and capital expenditure (for example on buildings and equipment).

R & D personnel comprises all persons employed in the R & D sectors, as well as persons such as administrators or administrative personnel whose services have a direct link with R & D work.

Patents data concern all applications for a European patent lodged with the EPO (European Patent Office) and provide an indication of the structure and changing nature of innovative activities within a region.

-

Z

ш

 $\geq$ 

പ

0

ш

>

ш

 $\Box$ 

Ψ

Т

 $\mathcal{O}$ 

പ

 $\triangleleft$ 

ш

 $\mathcal{O}$ 

ш

£

# 3. Expenditure and personnel

An initial indicator of this gap comprises the share of a region's gross domestic product (GDP) that is devoted to R & D expenditure.



Highlighted by this indicator are five groups of innovative regions where this proportion is considerably higher than the Community average (Map 5.1): one axis running from the Netherlands to southern Germany, Île-de-France, the southeast of both the United Kingdom and France, and the extreme north of the Union (national data only for Sweden).



Statistical yearbook 2000

Z

 $\geq$ 

 $\cap$ 

 $\cap$ 

111

111

 $\cap$ 

ш

 $\mathbf{T}$ 

Ω

 $\triangleleft$ 

ш

Ω.

With the exception of Ireland, by contrast, most regions in countries receiving assistance from the Cohesion Fund (Spain, Portugal and Greece) record levels well below the Community average, often less than 0.5 % of GDP. In absolute terms, expenditure is highest in Île-de-France (nearly ECU 12 thousand million).

For the most part, this geographical structure is still in evidence if one takes a different indicator — the proportion of the active population employed in R & D activities (Map 5.2).

# 4. R & D and GDP per inhabitant

Map 5.3 correlates the wealth of a region, as measured by its GDP, with its innovative capacity, as measured by the share of its GDP spent on R & D: the more intense the colour, the greater the wealth of the region; red indicates an innovative capacity above the Community average; blue a capacity below this average. This map shows that it is difficult to identify a correlation between these two variables. There is a whole range of possible situations.

- regions that are both wealthy (per capita GDP above the Community average) and innovative (share of its GDP spent on R & D above the Community average): Île-de-France, Lazio in Italy, south-western Germany, etc.
- regions that are wealthy but less innovative: the north of Italy, Catalonia and the Madrid region in Spain, Belgium and Ireland (national figures only), etc.
- less wealthy regions that are nevertheless innovative: south-eastern France, s outh-western United Kingdom, northern Finland, etc.
- finally, regions that are both poorer and less innovative: Greece, southern Italy, eastern Germany (except for Berlin), Portugal and southern Spain, etc.





⊢

Z

ய

 $\geq$ 

പ

0

ш

>

ш

 $\Box$ 

Ψ

Т

 $\mathcal{O}$ 

പ

 $\triangleleft$ 

ш

S

ш

с

# 5. Patent applications

trates this indicator expressed as the number of applications lodged per million inhabitants.

Data on applications for European patents are also held in the REGIO database. Map 5.4 illus-



In general it is fair to say that the same geographic pattern emerges as was the case with R & D expenditure, albeit with some slight differences: here the axis running from the Netherlands to southern Germany continues on into Austria; the zone in south-eastern France is limited just to the Rhône-Alpes region, whereas it is more evident in northern Italy's Lombardia and Emilia-Romagna regions. The number of patents per 1 000 persons employed in R & D (Map 5.5) and the number of patents per million ecus spent on R & D (Map 5.6) can be considered indicators of the sector's efficiency.





Here, again, considerable regional disparities are found. The best-performing regions in this context are concentrated in the northern Benelux, in western Germany, in Austria, in northern Italy, in central Sweden and, in the case of France, in a zone that, with the notable exception of Île-deFrance, runs all the way from Normandy to the northern flank of the Alps. By contrast, peripheral regions to the west (Ireland, the Atlantic coast) and south (western Spain, southern Italy and Greece) of the Union appear to not work as efficiently in this sector.



# 6. Patents by sector

The final Map (5.7) shows the range of sectors for which patent applications have been lodged. In most countries, the dominant sector varies from one region to another. This demonstrates that very different specialisations have emerged over time. In Europe, innovative capacity is not a separate phenomenon but rather something to be found in all branches of the economy.



# ture)



# 1. Introduction

At the time of the foundation of the European Community, tourism was limited in volume by financial constraints and geographically by transport limitations, frontier formalities and linguistic barriers. In the European Union of the year 2000, the picture is very different. Package holidays provide affordable access to geographically remote parts of the Union, while widespread car ownership (and a network of motorways) has made frequent shorter holidays in nearby regions possible. Border formalities are few or non-existent and language skills are increasingly valued in the tourist trade. These trends have been paralleled by the emergence of many European regions with a pronounced orientation towards tourism, in terms of both the infrastructure provided for visitors and the importance of the tourist industry for the region's economy.

Eurostat has collected statistics on tourism at regional level since 1994. The coverage is twofold: capacity and occupancy. Capacity refers to the accommodation infrastructure that is available to the tourist in the region concerned. Occupancy provides statistics on the number of nights spent in hired accommodation in a particular region.

Although throughout this section, for reasons predominantly of cartographic clarity, the regional level adopted for the analyses is that of the NUTS 2 region, Eurostat's REGIO database in fact contains extensive data at the NUTS 3 level.

# 2. Capacity (infrastructure) statistics

REGIO offers a multidimensional table, which distinguishes, in addition to time and region, three levels of capacity unit (establishments, bedrooms and bedplaces) and four types of accommodation.

Although most regions offer a blend of accommodation types, for various reasons one type may dominate.  $\geq$ 

 $\sim$ 

£

 $\supset$ 

0



Map 6.1 examines three kinds of accommodation:

- hotels (comprising hotels, motels, inns, B & B, etc.);
- holiday dwellings;
- campsites.

In three of the map's six categories of regions, one of these forms of accommodation dominates: the remaining three categories are regions where two types of accommodation are particularly important. Unavailability of data at the NUTS 2 level means that Austria, the Netherlands, Denmark and Luxembourg have only national data.

- Given the small scope for either of the other accommodation types, hotels not surprisingly dominate in urban regions such as Madrid, Hamburg and Brussels.
- The long standing tradition in Sweden of summer houses for rental in lakeside, seaside and forest settings accounts for the dominance of holiday dwellings there; indeed, such houses in Stockholm's archipelago would appear to counterbalance the above urban trend towards hotel accommodation.





 $\geq$ 

 $\sim$ 

m

0

- While coastal regions in Germany (along with Comunidad Valenciana in Spain, Marches in Italy and Surrey and Sussex in the United Kingdom) also predominantly offer holiday dwellings, in most of the rest of Germany hotels are favoured, perhaps because business travel cannot be separated from holiday stays.
- The dominance of campsites right across France is particularly noticeable; as it is in less heavily urbanised areas of Finland, England, Spain, Portugal and Italy. On opposite sides of Germany, Brandenburg and Trier share this trend.

Turning specifically to campsites, Map 6.2 examines the availability of this kind of accommodation but in a form which takes account of the region's permanent population. Unsurprisingly, urban areas, particularly regions around capital cities such as London, Berlin and Vienna, have few campsite places per head of population. Darker shaded areas of the map, by contrast, indicate regions with a much greater per capita prevalence of campsites.

 Although all of France has an excellent supply of sites, they are concentrated particularly on the Atlantic seaboard, from Brittany to Aquitaine, and in Languedoc-Roussillon on the Mediterranean.

- In Belgium, there are two distinct high-density camping zones. West-Vlaanderen on the North Sea coast is similar to neighbouring Zeeland in the Netherlands, while the high number of campsites in the regions of Liège and Luxembourg, in the Ardennes, is a pattern that continues into the Grand Duchy of Luxembourg and on to Trier in Germany.
- Mountainous terrain can also be popular with campers, as is evident from Kärnten in Austria, Valle d'Aosta in Italy and Cumbria in the United Kingdom.
- Although France's Corsica and Italy's Sardinia regions have a relatively good supply of campsites, this is not true of a number of other island holiday destinations such as Crete in Greece, the Balearic Islands in Spain or Sicily in Italy. It is probable that package holidays combining flights with hotel accommodation explain the pattern.





 $\geq$ 

 $\sim$ 

 $\sim$ 

0

Some evidence for the last of the above points may perhaps be found in Map 6.3. In a similar way to the previous map, the number of hotel beds in a particular region is shown as a proportion of the region's population. Some classic destinations for package holiday flights, such as Notio Aigaio in Greece, which includes the Dodecanese islands, the Balearic Islands in Spain and the Algarve in Portugal do indeed have a very high supply of hotel accommodation per head of population.

- That tourism is a year-round phenomenon and that a similar pattern might be observable in regions with a number of ski resorts is suggested by the two parts of the Tirol region in Austria, as well as by other Austrian regions, by Valle d'Aosta in Italy and by the Rhône-Alpes region in France.
- Many holidaymakers do not, of course, fly to their destination, especially on shorter breaks. A number of regions with an extensive hotel infrastructure lie within comfortable driving range of major concentrations of urban population. Examples include west Wales and the Valleys, Dorset and Somerset in the United Kingdom and Trier in Germany. Sweden's Sydsverige region lies just across the narrow sound from the densely populated part of Denmark around Copenhagen.
- Certain very sparsely populated regions attract many tourists over the summer months. Their

extensive use of travellers' inns and bed and breakfast accommodation is in stark contrast to the low permanent population of regions such as the Highlands and Islands in the United Kingdom and Provence-Alpes-Côte d'Azur in France.

- While urban centres generally rank low on hotel beds per head of population, there are in Europe a number of cities, which are of such extreme importance in world as well as European tourism that they defy this trend. London, Brussels and Île-de-France are examples.

Perhaps the most striking aspect of Graph 6.1 concerns the uniformity in the provision of hotel accommodation across Europe. Apart from Greece and Austria, most countries are close to the EU average. Within individual countries, the negligible difference between the national average and the figure for the region scoring lowest on this indicator shows that most regions in these countries are also around this level. Individual regions, however, dramatically break with this pattern. Notio Agaio in Greece, covering many of the Aegean islands, is a typical example of a region with a low permanent population, flooded in summer with holidaymakers. The Algarve in Portugal is similar, whereas Trentino-Alto Adige in Italy and the Tirol in Austria reflect the importance of these areas for winter sports.



Graph 6.1. Number of hotel beds per inhabitant in 1998, regional extremes at NUTS 2 level and national averages

Hotel beds: UK: 1999; F, EL, IRL, I, S: 1997; A: 1996 Population: de3, ded1, ded2, ded3, fi16, fi17, pt2: 1997; F (DOM): 1996

#### Occupancy data

While tourist infrastructure figures, such as those examined in Maps 6.1, 6.2 and 6.3, yield an indication of the accommodation capacity available to visitors in a specific region, it is important to know the extent to which this capacity is actually used. Some measure of occupancy is therefore required. At NUTS 2 level and for the years 1994–98, the REGIO database holds data on arrivals and nights spent. These figures are further broken down into residents and non-residents. Non-residents are persons of a nationality other than that of the country in which the region is located.





 $\geq$ 

S

 $\sim$ 

0

Given that this indicator is measured here on a per capita basis, regions of high population density, such as those that include Paris and Madrid, do of course not rank high in terms of total nights spent.

- The most striking feature of Map 6.4 is an almost continuous belt of higher than average occupancy, probably reflecting summer family holidays, that runs from Brittany along France's Atlantic and Mediterranean coasts to Marches in Italy and Comunidad Valenciana in Spain. Similarly, summer touring brings many visitors to the normally sparsely populated Highland and Islands region of Scotland.
- Within easy travelling distance of the heavily populated regions of Germany, the Benelux and south-eastern and central England, Mecklenburg-Vorpommern and Trier regions in Germany, the Grand Duchy of Luxembourg, the Luxembourg province of Belgium and the British regions of Cumbria and Dorset and Somerset may owe their higher ranking to the accessibility of these regions for short breaks as well as longer holidays.
- Package summer holidays are the likely explanation for the very high ranking of the Algarve, the Balearic Islands and Crete in Portugal, Spain and Greece, respectively.


Winter rather than summer holidays are probably the key factor in explaining the zone of high occupancy in Austria's four westernmost regions, paralleled by the mountainous Italian regions of Valle d'Aosta and Trentino-Alto Adige.

A very different picture emerges if the domestic tourist traffic is excluded. Certain regions of high population density, such as Île-de-France, which includes Paris, Vienna in Austria and Inner London, are clearly key destinations for foreign visitors.

- Although most of the major package holiday destinations apparent in Map 6.4 have such a high proportion of foreign visitors that they also score highly here, this is not always the case. Valle d'Aosta in Italy, for example, is clearly more successful in attracting Italian visitors than non-Italians.
- Other regions with a predominantly national rather than international appeal include Cumbria in the United Kingdom, Mecklenburg-Vorpommern and Trier regions in Germany and many western and southern regions of France.

- Relatively high rankings for Darmstadt in Germany, which contains the banking centre of Frankfurt, and for the industrial regions of Merseyside and West Midlands in the United Kingdom may be due to the fact that business, rather than tourist, traffic cannot be separated from these occupancy figures.
- 1998 was the year of the World Exhibition in Lisbon and indeed Portugal's Lisbon and Vale do Tejo region attracted a great proportion of international visitors.

Although not at regional level, the data presented in Graph 6.1 are a useful complement to Map 6.5. Unsurprisingly, Greece, Austria, Spain and Portugal have a high proportion of inbound tourism. At the opposite extreme, tourism in Finland and Sweden is predominantly domestic, as is largely the case in Germany as well. In France and Italy, there are slightly more nationals among the tourists than foreigners. The United Kingdom's almost even split may reflect the role played by visitors from the United States and the British Commonwealth.









# 1. Introduction

In an increasingly interrelated European economy, transport assumes an ever-greater importance. The movement of goods and persons from one part of the European Union to another is, selfevidently, not at a uniform level across the Union, reflecting differences in supply and demand (these in turn are often a function of differing population densities, urbanisation and industrialisation rates), and in infrastructure capacity. Eurostat's transport statistics at regional level cover a number of aspects of infrastructure and certain flows of goods and passengers.

Within the regional database REGIO, there are seven transport tables covering infrastructure, the vehicle fleet, sea and air transport (with in each case separate tables for freight and passengers) and road safety as reflected in deaths and injuries in road accidents. All tables contain annual data, the first six from 1978 and the last from 1988. Transport flows between regions no longer feature in REGIO but such data have recently become available and their integration in REGIO is planned.

The maps, graphs and tables in this yearbook seek to place these regional transport statistics in the context of other regional data held in REGIO, in order to highlight interrelationships which may go some way towards explaining the regional diversity observed.

# 2. Transport infrastructure and vehicle fleet

The transport networks table examines road, rail and inland waterway networks at the NUTS 2 level. In each case, the unit is kilometres of route length and the series began in 1978.

## Road network

Roads are grouped by category, separating motorways from other roads, while railway links are classified in terms of two criteria — single or double track and whether they are electrified. Coverage of inland waterways is patchy, largely because many Member States have no significant network but also because data from Member States do not distinguish between high capacity broad canals and lower capacity narrow ones.

A breakdown of vehicle data at NUTS 2 level into the categories of cars, buses, trucks, trailers, tractors and motorcycles is available.



m

0

۲

in

Z

 $\triangleleft$ 

£



Regions with a highly developed road infrastructure of major roads and motorways have a competitive and developmental advantage. Map 7.1 shows the length of the motorway network in NUTS 2 regions expressed as kilometres of motorway per 100 km2. Certain white areas, such as Brittany in France and the west and north of the United Kingdom have some dual carriageway roads but these do not qualify as motorways.

- Motorway density is closely correlated with urbanisation, most notably in the Netherlands and in the German regions of Düsseldorf and Köln.
- Regions comprising major conurbations generally have high motorway densities. Examples

include Vienna in Austria, Berlin in Germany and Comunidad de Madrid in Spain.

- Peripheral regions in Greece, Britain, France and Sweden have low motorway densities, as do island regions such as Corsica, Sardinia and Crete in France, Italy and Greece respectively.
- Sweeping around the Mediterranean coast from Comunidad Valencia in Spain through Provence-Alpes-Côte d'Azur to Sicily in Italy, an arc of regions with relatively high motorway densities reflects the importance to tourist regions of having a modern transport infrastructure.

### Rail network

The density of the railway network is a measure of its accessibility as a means of transport. However, a simple calculation of network length per unit area of a region can be misleading in that it ignores differences in population density. Graph 7.1 expresses accessibility to rail transport in terms of the number of inhabitants per kilometre of track in NUTS 2 regions. For each Member State, the regions with the highest and lowest values have been graphed, along with the national average (the purple horizontal line). To place these regional levels in perspective, the EU average was also plotted.

- The greatest extremes appear in Greece, between the peripheral, relatively sparsely populated, northern regions and the Attiki region, which contains Athens.

- Stockholm, Vienna, Île-de-France and Berlin are exceptional regions in their own countries, as is shown by the fact that the lowest-value region lies close to the national average. As the focal point of national rail networks, capital cities will tend to contain many kilometres of lines.
- The most evenly spread rail networks in population terms are to be found in Finland and Italy.
- Where the national average alone is marked but no regional figure, no NUTS 2 level has been defined for the country concerned.

#### Graph 7.1. Regional variation in per capita access to railways NUTS 2 in 1998



DK, A, P, I, FIN : 1997; EUR, EL, NL, S, UK : 1996; B, D : 1994 D : NUTS 1

#### Graph 7.2. Regional disparities in the electrification of railways NUTS 2 in 1998



DK, A, P, I, FIN : 1997; EUR, EL, NL, S, UK : 1996; B, D : 1994 D : NUTS 1

 $\sim$ 

0

۲

10

~

 $\triangleleft$ 

ഹ

The extent of electrification of railway lines is often used as an indicator of the level of development of a region. The graph illustrates the percentage of track in each NUTS 2 region that was electrified in 1998. For each Member State, the regions with the highest and lowest values were graphed and plotted against the national and the EU average. At national level, the extent of electrification differs extremely widely, from virtually none in Ireland to almost complete electrification in Luxembourg.

- Within countries there is also extreme regional variation, affecting both northern and southern Member States.
- Huge disparities in the proportion of electrified lines may, as in the case of Spain's Pais Vasco and Extremadura regions, be associated with major differences between these regions in indicators such as GDP and unemployment.
- The low electrification levels in Corsica and Sardinia may reflect low population densities or difficulty in bringing suitable power supplies to these island regions. By contrast, high rates in Île-de-France and Liguria are possibly explained by the importance of urban and suburban rapid transport systems.

### Vehicle ownership

Here, car ownership is expressed in terms of numbers of 10 inhabitants of NUTS 2 regions. While there is some correlation with GDP levels, in that for example most German regions have high GDP and high car ownership and most Greek regions have low scores for both indicators, there are wide divergences:

- Regions which comprise major urban centres
  for example Vienna in Austria, Berlin and Brussels — have relatively low car ownership, perhaps reflecting factors such as extensive public transport, parking difficulties or concentrations of students, immigrants and other lowincome groups.
- The core urban region may be surrounded by a region with high ownership, possibly indicating many commuters dependent on cars for work in the major city: this is the case in Vlaams Brabant in Belgium. Alternatively, a lower car ownership around this core may indicate extensive commuter use of public transport, such as in Outer London. In NUTS 2 regions drawn more widely around the core city, such as Comunidad de Madrid and Île-de-France, these factors tend to balance out.
- In so far as car ownership is an indicator of relative personal prosperity, regions with higher average income would be expected to show higher ownership. Indeed the Grand Duchy of Luxembourg and Darmstadt in Germany, which includes the city of Frankfurt, display this pattern. Something of an economic divide is apparent between the southern Italian regions of Molise, Puglia, Basilicata and Calabria and the rest of the country.
- In some sparsely populated regions, a car may be more of a necessity for travel to and from work. Such regions may include Limousin in France, Itä Suomi in Finland and Mellersta Norrland in Sweden.





89

# 3. Air transport

REGIO contains tables of air transport statistics at regional level for passengers and freight respectively. These series of annual returns, which go back to 1978, are in thousands of passengers and tonnes respectively. Passenger statistics provide a breakdown into embarking and disembarking passengers and those in transit.



The cross section of the circle represents the total number of passengers using the airports in the NUTS 1 region concerned. It should be noted that the large circle for London's airports is not based on REGIO data, due to non-availability of this figure, but rather on the figures provided by the airports themselves.

For Portugal, Luxembourg, Ireland, Denmark, Sweden and Finland, NUTS 1 is equivalent to the national level. Regions marked in white have no airport.

- The extent of the catchment area is evident in the 'Bassin Parisien'. Although much larger

than the Île-de-France region, which it entirely surrounds, its own air transport needs are almost entirely met by Paris airports within Îlede-France.

- The region containing the capital is not always a country's busiest air-transport region. Exceptions include Este in Spain, probably boosted by tourist traffic, and Hessen in Germany, where Frankfurt has extensive business traffic and acts as a German hub for long-distance flights.
- Regions with a strong tourist vocation, such as Nisia Aigaiou/Crete in Greece and the Balearic Islands in Spain, score high on the number of passengers per inhabitant.
- Business traffic may well account for much of the high passenger/inhabitant levels in Lombardia in Italy, which includes Milan, and the Netherlands' Utrecht, Noord Holland and Zuid Holland regions.



91

# 4. Sea transport

Sea transport statistics exist at the NUTS 2 regional level for passengers and freight respectively. These series of annual returns, which go back to 1978, are in thousands of passengers and in thousands of tonnes, respectively. Passenger statistics provide a breakdown into embarking and



disembarking passengers but it should be noted that for the United Kingdom only international passengers are recorded

Inland regions were excluded from the map coverage, as were coastal regions without a freight harbour. Because of incomplete data returns from Member States for 1997 for cargo loaded, 1996 figures have been used for this indicator (the yellow half circles), whereas it was possible to use 1997 data for the cargo unloaded (pink half circles). Region to region comparisons of each individual indicator are obviously unaffected by this break in data but, despite the relatively small size of year-to-year differences in loading tonnages, care is needed in interpreting the relationship between a particular region's landed and loaded tonnage.

- Cargo landed exceeds cargo loaded in most regions (even allowing for the one-year difference in the data).
- Extreme imbalances in, for example, Crete in Greece and the Balearic Isalnds in Spain may reflect the landing of supplies and materials needed for the tourist industry with no corresponding local freight generation.
- An exception to the trend in northern Sweden (Övre Norrland) is an example of a region with a small population (and thus a low import re-



 $\sim$ 

0

Δ.

in

~

 $\triangleleft$ 

£

quirement) that produces large quantities of primary products.

 The excess of loaded tonnage in the UK region 'Tees Valley and Durham' may reflect the shipment of finished goods manufactured in this and neighbouring regions from raw materials entering the United Kingdom elsewhere.

Loaded and unloaded tonnages were aggregated to provide a total figure for each region. To avoid spuriously large positive or negative growth rates in ports with little traffic, a threshold of 200 000 tonnes was adopted for Map 7.5. Because of gaps in the data series, the years selected for some countries differ (see note on the map) but in each case concern a six-year period. Moreover, in Germany, Ireland and the United Kingdom, NUTS 1 information only was available.

- The Member State suffering the most serious decline (4 out of its 12 maritime NUTS 2 regions) is Greece.
- Several regions with major ports (Antwerp in Belgium, Basse Normandie in France, Lisbon and Vale do Tejo in Portugal and Campania in Italy) registered significant declines in tonnage.
- One region with a noticeable downturn in tonnage, Brittany in France, features on a different map in this yearbook as having no motorways, perhaps reflecting an infrastructural disadvantage.
- Denmark's apparently uniform growth reflects the fact that no NUTS 2 regions are defined for this country so these are effectively national figures.

# 5. Road safety

Containing yearly series since 1988, REGIO holds data at NUTS 2 level on deaths and injuries in road accidents. Care must be taken, especially when dealing with earlier years in the series, to ensure that comparisons reflect mational differences in defining the period after the accident during which a death from traffic injuries is classified as a traffic death. Corrective co-efficients for use in these cases are available in the REGIO user's guide.

The traffic toll expressed as the number of deaths per million inhabitants has been selected for this map in order to eliminate some of the apparent regional variation in absolute numbers due to the greater population of some regions. Population is, however, only an approximate indicator for another relevant factor not taken into account in this map — the number of cars on the road. Readers may accordingly wish to consult REGIO for a full breakdown by type of vehicle, or study the map of car ownership earlier in this section.

- Regions defined around major conurbations (Attiki in Greece, Île-de-France or Vienna in Austria) tend to have fewer traffic deaths, perhaps reflecting wider use of public transport or more available motorways.
- High traffic death rates in Portugal and eastern Germany may reflect an imbalance between rising car ownership and an inadequately modernised road network.
- In some tourism-oriented regions, such as Cumbria in the United Kingdom, Corsica in France, Luxembourg Province in Belgium and many Greek regions, higher rates perhaps reflect seasonal influxes of holidaymakers who may participate extensively in traffic but are not taken into account in the population figures.





95

# 6. Interregional road transport flows

In the past, Eurostat collected road freight transport statistics on interregional flows. Because these data were supplied by national administrations, however, they reflected only movements between the regions of a single country and took no account of cross-border transport.

Recently, Eurostat has developed modelling techniques to derive flows between regions, irrespective of which country they are in, and along specific transport axes. Further information, and published references, may be obtained on request.



eurostat

m

0

۲

i A

Z

 $\triangleleft$ 

£



The information collected from carriers provides information on the origin of individual freighttransport journeys, thus providing an indication of the importance of individual regions for the generation of truck movements. Based on the traffic zones used in the surveys, this map makes use of regions at both NUTS 2 (Portugal, Spain, France, Italy, Greece, Austria, Sweden and Finland) and NUTS 1 level (Belgium, Luxembourg, Netherlands, Germany, Denmark, Ireland and the United Kingdom).

 Regions comprising major conurbations (such as Vienna in Austria, Hamburg, Comunidad de Madrid, Portugal's Lisbon and Vale do Tejo region and Attiki in Greece) generate considerably more traffic than their wider hinterland.

- The regions of Germany, Denmark, Belgium and the Netherlands form a single high-trafficproduction zone focused on Nordrhein-Westfalen.
- A similar zone in England has two regional poles: the London and South-East regions, on the one hand, and North-West region, on the other.
- Separate major traffic-production zones occur in northern Italy and in the Île-de-France and Haute Normandie regions in France as well as in Spain's Pais Vasco region.

97

The data collected through these surveys allow individual regions to be studied in terms of their role as source, destination or transit regions for road freight shipments. As an example, this map examines the destinations of truck movements generated in the highly urbanised and industrialised German Land of Nordrhein-Westfalen, which appears as the focus of road freight movements in Map 7.7. As with that map, the relevant data are currently stored in the ILSE database but their availability in the REGIO environment during 2000 is planned.

 Belgian and Dutch regions are more important destinations than many regions within Germany.

eurostat

 $\sim$ 

0

۲

in

Z

 $\triangleleft$ 

£

- Along with the above regions, northern France and Denmark form part of a single recipient zone for freight movements originating in Nordrhein-Westfalen.
- Rhône-Alpes in France and Lombardia in Italy, which includes Milan, attract significant amounts of long-distance freight. The implications for trans-Alpine road routes are obvious.
- Regions throughout the Union attract some level of road freight originating in Nordrhein-Westfalen.



# **REGIONAL UNEMPLOYMENT**



# 1. Introduction

Unemployment is one of the most pressing problems facing the European Union. What is taxing the Member States is not merely the wasted resources but also, and above all, the distortions in society brought about by the lack of jobs

The situation appears to have become less critical since 1994. Unemployment rates are on the decline, and in some Member States there is already a shortage of qualified labour. The figure below shows the trend during the 1990s.

Various aspects of this complex situation deserve to be looked at in more detail. We will turn first to the regional dimension at NUTS 2 level and then break this down by gender and age. The length of unemployment is also examined, and an attempt is made to correlate unemployment with economic growth. It is not possible to investigate every influence factor, however, and we have therefore had to disregard the effects of training levels and exclude a more detailed analysis of branches of the economy.



# 2. Regional unemployment

# Margins of variation within the Member States

As this publication went to press, unemployment figures for 1998 were available at NUTS 3 level. Since a study at this regional level would be unmanageable we have restricted the analysis to regions at NUTS 2 level, with the proviso that some characteristics of the regional structure may change as a result. The unemployment rate, or the relationship between the number of unemployed people and the number of economic active people, in the European Union was 10.1 % in April 1998. Some national and above all regional figures differed significantly from this average.

Figure 8.2 gives an impression of the regional differences within the Member States. What is remarkable here are the contrasts between the regions with the lowest and highest unemployment rates in Member States such as Germany (Upper Bavaria 4.7 %; Dessau 22.3 %) and Italy (Trentino-Alto Adige 3.3 %; Calabria 27 %). Despite the high unemployment rates in Spain, however, it will be seen that Navarra had a below-average unemployment rate in April 1998.



~

...

 $\geq$ 

 $\geq$ 

Z

 $\triangleleft$ 

 $\geq$ 

ഗ

Ω.

#### Graph 8.2. National unemployment rates in Europe and regional variations NUTS 2 - 1998



The following map shows the regional distribution still more clearly. Finland and Sweden show a clear 'capital-city effect', and the division of Germany into the old Federal territory with low unemployment and the new Länder with high unemployment is equally striking. A similar split, this time north-south, can be seen in Italy. The United Kingdom also has a north-south divide, but a far less pronounced one. Unemployment in France appears to be concentrated in the peripheral regions in both north and south. In Spain, proximity to the French border appears to have a beneficial effect on employment, since the border regions have jobless figures below the national average.

If we look only at the NUTS 2 regions for 1998, the unemployment rate ranges from 2.1 % in the central region of Portugal to 29.9 % in Andalusia in Spain. For every 100 economically active people, therefore, roughly 14 times as many were out of work in Andalusia as in the central region.

Of the 205 regions under consideration, however, 41 had an unemployment rate of 5.0 % or less in

April 1998 and 50 % were below the EU average. These 41 NUTS 2 regions were spread across 10 Member States. Only Spain, France and Sweden had no NUTS 2 region with an unemployment rate of 5.0 % or less. At the other extreme, 12 regions in Spain, Italy and Germany had unemployment rates of over 20.5 % — at least double the value for the European Union as a whole.

The change in the unemployment rate from April 1997 to April 1998 in the regions concerned ranged from a fall of 4.1 percentage points in the Spanish region of Valencia to a rise of 3.5 percentage points in the North Aegean region of Greece. In all, 160 of the 205 regions showed a drop in unemployment and only 41 an increase (4 remained unchanged). Most of the regions with the sharpest reductions in unemployment rates were in Spain; those with the steepest increases tended to be in Greece.





### Youth unemployment

The regional discrepancies in the youth unemployment rate, i.e. the unemployment rate amongst economically active people aged under 25, are appreciably greater than for the general unemployment rate. In April 1998 they ranged from 4.6 % in Lower Austria to 72.3 % in Calabria in Italy.

In many regions, youth unemployment rates also deviate widely from the EU average of 19.2 %. In April 1998, 58 regions recorded youth unemployment rates of under 10 % and 17 rates of over 40 %.

Most of the 58 regions with a relatively low youth unemployment rate were in northern and central Europe: 21 in Germany, 9 each in Austria and the Netherlands, 11 in the United Kingdom, 4 in Portugal and 1 each in Belgium, Italy, Denmark and Luxembourg. The 17 regions with the highest rates were all in the Mediterranean area or in Finland: 8 in Italy, 5 in Spain, 2 in Greece and 2 in Finland.

Figure 8.3 shows the regions with the highest or lowest youth unemployment rates in April 1998.

#### Graph 8.3. National unemployment rates for people under 25 years old in Europe and regional variations NUTS 2 – 1998



The map of youth unemployment highlights the regional disparities within Europe: once again there were wide gaps in Italy, with values ranging from 7.3 % in Trentino-Alto Adige and 72.3 % in Calabria, but the difference between the highest and lowest values was also 20 percentage points or more in Belgium, Greece, Spain, France, Finland and Sweden.

The map shows a regional structure which is similar to that of general unemployment except in Germany, where the effects of government measures are evident: youth unemployment in the new German Länder is no different from youth unemployment in Germany as a whole. Otherwise the structure is basically the same, except that regions with high youth unemployment are more widely distributed: in Italy, for example, they are found further north than those with high general unemployment.

In 162 of the 205 regions under consideration, unemployment rates fell between April 1997 and April 1998. The most striking improvements were in the Greek region of East Macedonia, Thrace at 11.8 %, Auvergne in France at 11.4 % and the Ionian Islands of Greece at 9.7 %.

At the other end of the scale were five regions with increases in youth unemployment of more than 5 percentage points, all of them in Greece (3) or Italy (2).





~

. . .

 $\geq$ 

 $\geq$ 

ш

Z

 $\triangleleft$ 

Z

ഗ

111

Ω.

### The gap between the sexes

In April 1998, the female unemployment rate in the regions of the European Union ranged from 2.5 to 40.3 %. The lowest value of 2.5 % for the central region of Portugal was just under the second lowest of 2.7 % for Åland in Finland. The highest figures were recorded by the Spanish regions of Extremadura (40.3 %), Andalusia (39.6 %) and Ceuta-Melilla (38.1 %) and by Calabria in Italy (39.7 %). Figure 8.4 also gives an idea of the regional disparities within the Member States in April 1998.

#### Graph 8.4. National unemployment rates of women in Europe and regional variations NUTS 2 - 1998



The female unemployment rate, like the rate for young people, fell in most regions between April 1997 and April 1998. In a total of 147 regions the drop was between 0.1 and 4.9 percentage points, whereas 53 showed increases of 0.1 to 7.0 percentage points. In other regions the unemployment rate for women remained unchanged. Those in which the rate fell most sharply were all in the Mediterranean area.

Also in April 1998, the female unemployment rate was lower than the general unemployment rate,

and hence also lower than the rate for men, in 65 of the 205 regions under consideration. Of these 65 regions, 35 were in the United Kingdom, 17 in Germany, 3 in Finland, 8 in Sweden and 2 in Ireland.

If we compare these figures for women with the total figures for the regions of Europe, we see that the unemployment rate for women was less than that for men in all 8 Swedish regions, in Ireland, in 35 of the 37 regions in the United Kingdom and in half of the Finnish regions under consideration.





~

ш

 $\geq$ 

 $\cap$ 

Δ\_

 $\geq$ 

LЦ

Z

 $\triangleleft$ 

Z

C

ഗ

ш

Ω.

### The problem of long-term unemployment

The percentage of unemployed people who have been out of work for more than a year adds a further dimension to the unemployment problem. A high proportion of long-term unemployed people goes hand in hand with severe structural problems. Usually such workers cannot be taken on by other branches or regions because they lack either the necessary qualifications or the will to move. National measures such as early retirement may boost the numbers of long-term unemployed still further. Some Member States, on the other hand, have programmes aimed at reintegrating the long-term unemployed into the labour market by offering retraining opportunities.

In all Member States except Denmark, Austria, Finland, Sweden and the United Kingdom, more than half of the total jobless population has been out of work for more than a year. The higher the long-term unemployment rate, the more likely it is that the lack of jobs is structural in origin and hence more lasting than unemployment linked to short-term fluctuations in the economy. This is a problem which will continue to tax the European Union for a long time to come.



# 3. Regional unemployment and economic growth

The following map illustrates two variables at once. Of the many possible combinations we chose first of all to divide Europe into two groups of regions: those which grew more slowly and more quickly than the annual average for the EU between 1995 and 1997 in terms of per capita gross domestic product expressed in purchasing power standards.

Regions whose economies grew faster per capita than the EU average are shown in red, and those with a below-average growth rate in blue. This is a very crude distinction, of course, but a more detailed breakdown would make the map impenetrable. Next we added the 1998 unemployment rate: the darker the colour, the greater the unemployment; conversely, the lighter the colour, the smaller the proportion out of work. This produces an interesting pattern. Regions in light blue are those which had below-average economic growth but nevertheless recorded low unemployment rates. Those shown in dark red had above-average growth coupled with high unemployment.

Denmark, the Netherlands, Portugal, Ireland and the United Kingdom stand out in terms of their high economic growth and low unemployment. Unlike Finland and Sweden, where economic activity appears to be moving south, these five countries show only slight regional disparities, however. Germany has a clear east-west divide. Economic growth in Italy and France is below average, but Spain is in the extraordinary position of having a good rate of growth while having to contend with high rates of unemployment.

The map must be interpreted with care, since this representation is just one of the many ways of presenting the figures. In some respects it is merely a snapshot, and disparate price trends ought also to be taken into account. Causal relationships cannot be illustrated either. Despite these drawbacks, however, a map of this kind can offer some interesting insights.



⇒

eurostat

⊢

Z

ш

Σ

 $\succ$ 

0

പ

 $\geq$ 

ш

Z

 $\supset$ 

 $\triangleleft$ 

Z

0

G

ш

പ



# Instructions for installation and use of the CD-ROM

- 1. Insert CD in CD drive.
- 2. Open 'Windows Explorer'.
- 3. Double click on the symbol for the CD-ROM drive.
- 4. Double click on (or RUN) setup.exe.
- 5. Follow installation instructions.

As part of the installation, you will be asked to select a language (Deutsch/English/ Français).

The installation program will create a shortcut, placing an icon on your desktop marked nc97 cd-rv.

- 6. To start the browser, double click on the icon nc97 cd-rv.
- 7. Click on theme 1.
- 8. Click on regio.
- 9. Click on reg\_ybk. At this point you have access to the information.
- 10. To consult one of the tables, click on the relevant table name, e.g. yb en for 'Energy'.

You will be asked to select a consultation method (for example, HTML).

You can select a geographical dimension (regions) and one or more indicator dimensions (for example *refinery capacity*).

You will be asked to choose an output format. Now you can perform your data extraction.

To consult methodological notes on the data, click on the 'i' information beside the name of the table and then on 'Explanatory notes'.

11. To consult an electronic version of the Yearbook itself (commentaries, maps, graphs), click on the 'i' information icon at REGIO level, on 'Explanatory notes' and finally on the language version you require: 'Deutsch', 'English' or 'Français'.



# Statistics in focus

To get straight to the heart of the matter and obtain an effective insight into the reality of the EU Member States, the series of documents entitled *Statistics in focus* offers you rapid and easy access to information on all current trends in Europe.

# Statistics in focus: find out, understand and decide in confidence with:

- ★ harmonized, reliable and comparable data on each Member State of the European Union;
- ★ clear and concise comments and analyses;
- ★ charts and maps easy to understand;
- $\star$  the latest available data.

*Statistics in focus* is available as single copy or by subscription. Subscriptions are available for one single theme (except themes 7 and 9) or for the whole collection. *Statistics in focus* is available as printed version or as PDF-file sent by e-mail.

Prices on request from the Data Shop network (see end of the publication).

# Eurostat essentials...... Understand today's Europe to anticipate the future better

- **★ Eurostat Yearbook:** a comprehensive statistical presentation supplemented by comparative data for the EU's main trading partners (CD-ROM version available).
- ★ Money, finance and the euro: Statistics: This monthly statistical document provides short-term series for a wide range of financial indicators such as interest rates, exchange rates, money supply and official reserves (quarterly CD-ROM version available).
- ★ **Europroms CD-ROM:** the only source of information in Europe to propose detailed and comparable data on output, external trade and the markets of several thousand industrial products.
- ★ Services in Europe: an overview of the companies active in the service sector including detailed sectoral, thematic and country analysis.
- ★ Agriculture and fisheries: Statistical yearbook 1998: the most important elements of Eurostat's publications on agriculture, forestry and fisheries in abbreviated form.
- ★ **Comext CD-ROM:** provides data on external trade on all goods imported into or exported from the statistical territory of the European Union or traded between the statistical territories of the Member States.
- ★ Transport development in the central European countries (analysis of the trends for the years 1994 and 1995): a statistical overview of transport in 11 central European countries, together with a review of data availability.
- ★ Energy monthly statistics: With the help of graphs, these statistics cover updates of the principal statistical series characterising short-term trends in the energy sectors (coal, oil, gas, electrical energy).

### New Cronos:

More than 160 million items of data in this macroeconomic and social database are available to all those who need high-quality statistical information for decision-making.

### Regio:

Eurostat's database for regional statistics. Covers the main aspects of economic and social life in the Community; demography, economic accounts, employment, etc.

### Comext:

The database for statistics on the European Union's external trade and trade between Member States. 11 000 products by year are covered with all partner countries (more or less 250).

### Europroms:

The only source of information in Europe that supplies detailed and comparable data on output, external trade and markets of several thousand industrial products. It makes it possible to calculate in precise terms the domestic market for some 5 000 products for most EU countries.

For further information, contact the Eurostat Data Shop network or visit us on the Internet at: www.europa.eu.int/comm/eurostat/

# Order Form .....

In each column, tick the appropriate box.

Title	Catalogue No	Languages	Support	Price in EUR (except VAT and carriage)
Eurostat Yearbook 1998-99	CA-17-98-192-**-C CA-17-98-192-1A-Z	DA DE EN FR Es/DA/DE/GR/EN/FR/ IT/NL/PT/FI/SV	Paper CD-ROM	□ 34.00 □ 45.00
Money, finance and the euro: Statistics (quarterly CD-ROM version available)	CA-DQ-99-000-3A-C	Multilingual: DE/EN/FR	Paper	☐ 15.00 per copy ☐ Annual subscription: 150.00
Services in Europe	CA-17-98-742-**-C	⊡de ⊡en ⊡fr	Paper	□ 20.00
Europroms CD-ROM	CA-16-98-796-5J-Z	Multilingual: ES/DE/EN/FR	CD-ROM	□ 2 000.00
Agriculture and fisheries: Sta- tistical yearbook 1998	CA-13-98-483-3A-C	Multilingual: DE/EN/FR	Paper	□ 15.00
Comext CD-ROM	CA-CK-99-0**-3A-Z	Multilingual: DE/EN/FR	CD-ROM	DOB OF THE DATE OF THE OF THE DATE OF THE DATE OF THE
Transport development in the central European countries	CA-12-98-102-EN-C	EN	Paper	22.00
Energy — monthly statistics	СА-ВХ-99-000-ЗА-С	Multilingual: DE/EN/FR	Paper	☐ 11.00 ☐ Annual subscription: 102.00

. . . . . . . . . . . . . . .

# Free information sources

- ★ Statistical references the information letter on Eurostat products and services (yearly subscription/4 issues).
  I would like to receive this free product in:
  □ DE □ EN □ FR
- ★ Eurostat *mini-guide* Eurostat's reference catalogue.
  I would like to receive this free product in:
  □ DE □ EN □ FR
- ★ Facts through figures A summary of the Eurostat Yearbook. I would like to receive this free product in: ES □ DA □ DE □ GR □ FI □ EN □ FR □ IT NL □ PT □ FI □ SV □ IS □ NO (A s long as stock lasts)

□ MR □ MRS □ MS (Please use block capitals)

Name:	Forename:	
Firm:	Department:	
Position:		
Address:		
Postcode:	<i>Town:</i>	
Country:		
Tel.:	Fax:	
E-mail:		

Please indicate your market sector:

- □ Education/Training
- □ European institution
- □ Politics (embassy, ministry, administration)
- $\hfill\square$  Non-European statistics service
- □ Private user □ Enterprise
- □ Information brokerage (information service, media, consultancy, bookshop, library, etc.)
- $\hfill\square$  European statistics service
- □ Other (please specify):\_\_\_\_
- Payment on receipt of invoice, preferably by:
- ☐ Bank transfer ☐ Visa ☐ Euro Card
  - Card No: \_\_\_\_\_\_ Expiry date : 🗌 🗌 🗌

If no number is entered, VAT will be automatically applied. Credit notes will not be drawn up subsequently.

\_ DATE :\_\_

#### PLACE:\_\_

#### SIGNATURE:

To be returned to the Data Shop or sales office of your choice. **Please do not hesitate to visit our Internet site at:** www.europa.eu.int/comm/eurostat/ should you require further information.

<sup>□</sup> *Other* Please confirm your intra-Community VAT number:

**European Commission** 

### Regions: Statistical yearbook 2000

Luxembourg: Office for Official Publications of the European Communities

2000 – 111 p. – 21 x 29.7 cm

Theme 1: General statistics Collection: Panorama of the European Union

ISBN 92-828-9763-X

Price (excluding VAT) in Luxembourg: EUR 60

# ..... Eurostat Data Shops

#### BELGIQUE/BELGIË

Eurostat Data Shop Bruxelles / Brussel Planistat Belgique 124 Rue du Commerce Handelsstraat 124 B-1000 Bruxelles/Brussel Tel. (32-2)-234 67 50 Fax (32-2)-234 67 51 E-mail: datashop@planistat.be

#### DANMARK

Danmarks Statistik Bibliotek og Information Eurostat Data Shop Sejrøgade 11 DK - 2100 KØBENHAVN Ø Tel. (45-39) 17 30 30 Fax (45-39) 17 30 03 E-mail : bib@dst.dk

#### DEUTSCHLAND

Statistisches Bundesamt Eurostat Data Shop Berlin Otto-Braun-Straße 70-72 D - 10178 BERLIN Tel. (49-30)-2324 6427/28 Fax (49-30)-2324 6430 E-mail: datashop@statistik-bund.de

#### ESPAÑA

INE

Eurostat Data Shop Paseo de la Castellana 183 Oficina 009 Entrada por Estébanez Calderón E - 28046 MADRID Tel. (34-91)-583 91 67 Fax (34-91)-579 71 20 E-mail: datashop.eurostat@ine.es

#### FRANCE

INSEE Info Service Eurostat Data Shop 195, rue de Bercy Tour Gamma A F - 75582 PARIS CEDEX 12 Tel. (33-1)-53 17 88 44 Fax (33-1)-53 17 88 22 E-mail : datashop@insee.fr

#### ITALIA – ROMA

ISTAT — Centro di Informazione Statistica — Sede di Roma Eurostat Data Shop Via Cesare Balbo 11a I - 00184 ROMA Tel. (39-06)-46 73 31 02/06 Fax (39-06)-46 73 31 01/07 E-mail: dipdiff@istat.it

#### ITALIA — MILANO

ISTAT — Ufficio Regionale per la Lombardia Eurostat Data Shop Via Fieno 3 I - 20123 MILANO Tel. (39-02)-8061 32 460 Fax (39-02)-8061 32 304 E-mail: Mileuro@tin.it

### LUXEMBOURG

Eurostat Data Shop Luxembourg BP 453 L - 2014 LUXEMBOURG 4, rue A. Weicker L - 2721 LUXEMBOURG Tel. (352) 43 35 22-51 Fax (352)-43 35 22 221 E-mail: dslux@eurostat.datashop.lu

#### NEDERLAND

Statistics Netherlands Eurostat Data Shop - Voorburg po box 4000 NL - 2270 JM VOORBURG Tel. (31-70)-337 49 00 Fax (31-70)-337 59 84 E-mail: datashop@cbs.nl

#### PORTUGAL

Eurostat Data Shop Lisboa INE / Serviço de Difusão Av. António José de Almeida, 2 P - 1000-043 LISBOA Tel. (351 21) 842 61 00 Fax (351 21) 842 63 64 E-mail: data.shop@ine.pt

#### SUOMI/FINLAND

Statistics Finland Eurostat Data Shop Helsinki Tilastokirjasto PL 2B 00022 Tilastokeskus Työpajakatu 13 B, 2 krs, Helsinki Tel. (358 9)-1734 22 21 Fax (358 9)-1734 22 79 E-mail: datashop.tilastokeskus@ tilastokeskus.fi Internet: http://www.tilastokeskus.fi/tk/k k/datashop.html

#### SVERIGE

Statistics Sweden Information service Eurostat Data Shop Karlavägen 100 Box 24 300 S - 104 51 STOCKHOLM Tel. (46-8)-5069 48 01 Fax (46-8)-5069 48 99 E-mail : infoservice@scb.se URL: http://www.scb.se/info/ datashop/eudatashop.asp

#### UNITED KINGDOM

Eurostat Data Shop Enquiries & advice and publications Office for National Statistics Customers and Electronic Services Unit B1/05 1 Drummond Gate UK - LONDON SW1V 2QQ Tel. (44-171)-533 56 76 Fax (44-1633)-81 27 62 E-mail:

eurostat.datashop@ons.gov.uk

Electronic Data Extractions, enquiries & advice r.cade 1L Mountjoy Research Centre University of Durham UK-Durham DH1 3SW Tel. (44-191) 374 7350 Fax (44-191) 384 4971 E-mail: r-cade@dur.ac.uk Internet: http://wwwrcade.dur.ac.uk

#### NORGE

Statistics Norway Library and Information Centre Eurostat Data Shop Kongens gate 6 P.O.Box 8131 Dep. N-0033 OSLO Tel: (47-22) 86 46 43 Fax: (47-22) 86 45 04 E-mail: Datashop@ssb.no

#### SCHWEIZ/SUISSE/SVIZZERA

Statistisches Amt des Kantons Zürich Eurostat Data Shop Bleicherweg 5 CH-8090 Zürich Tel. (41 1) 225 12 12 Fax (41 1) 225 12 99 E-mail: datashop@zh.ch Internet: http://www.zh.ch/statistik

#### **UNITED STATES OF AMERICA**

Haver Analytics Eurostat Data Shop 60 East 42nd Street Suite 3310 NEW YORK, NY 10165 Tel. (1-212)-986 9300 Fax (1-212)-986 5857 E-mail: eurodata@haver.com

#### EUROSTAT HOMEPAGE

www.europa.eu.int/comm/eurostat/

#### MEDIA SUPPORT EUROSTAT

(only for professional journalists) Postal address: Jean Monnet building L-2920 LUXEMBOURG Office: Bech Building — A3/48 5, rue Alphonse Weicker L-2721 Luxembourg Tel. (352) 43 01-33408 Fax (352) 43 01-32649 E-Mail: media.support@cec.eu.int

#### Venta • Salg • Verkauf • Πωλήσεις • Sales • Vente • Vendita • Verkoop • Venda • Myynti • Försäljning

BELGIQUE/BELGIË

Jean De Lannoy Avenue du Roi 202/Koningslaan 202 B-1190 Bruxelles/Brussel Tél. (32-2) 538 43 08 Fax (32-2) 538 08 41 E-mail: jean.de.lannoy@infoboard.be URL: http://www.jean-de-lannoy.be

La librairie européenne/ De Europese Boekhandel Rue de la Loi 244/Wetstraat 244 B-1040 Bruxelles/Brussel Tél. (32-2) 295 26 39 Fax (32-2) 735 08 60 E-mai: mail@libeurop.be URL: http://www.libeurop.be

Moniteur belge/Belgisch Staatsblad Rue de Louvain 40-42/Leuvenseweg 40-42 B-1000 Bruxelles/Brussel Tél. (32-2) 552 22 11 Fax (32-2) 511 01 84

#### DANMARK

J. H. Schultz Information A/S Herstedvang 12 DK-2620 Albertslund Tlf. (45) 43 63 23 00 Fax (45) 43 63 19 69 E-mail: schultz@schultz.dk URL: http://www.schultz.dk

#### DEUTSCHLAND

Bundesanzeiger Verlag GmbH Bundesanzeiger Verlag GmbH Vertriebsabteilung Amsterdamer Straße 192 D-50735 Köln Tel. (49-221) 97 66 80 Fax (49-221) 97 66 82 78 E-Mail: vertrieb@bundesanzeiger.de URL: http://www.bundesanzeiger.de

#### ΕΛΛΑΔΑ/GREECE

G. C. Eleftheroudakis SA International Bookstore Panepistimiou 17 GR-10564 Athina Tel. (30-1) 331 41 80/1/2/3/4/5 Fax (30-1) 323 98 21 E-mail: elebooks@netor.gr

#### ESPAÑA

Boletín Oficial del Estado Trafalgar, 27 E-28071 Madrid Tel. (34) 915 38 21 11 (Libros), 913 84 17 15 (Suscrip.) Fax (34) 915 38 21 21 (Libros), 913 84 17 14 (Suscrip.) E-mail: clientes@com.boe.es URL: http://www.boe.es

Mundi Prensa Libros, SA

Castelló, 37 E-28001 Madrid Tel. (34) 914 36 37 00 Fax (34) 915 75 39 98 E-mail: libreria@mundiprensa.es URL: http://www.mundiprensa.com

#### FRANCE

Journal officiel Sournal officient Service des publications des CE 26, rue Desaix F-75727 Paris Cedex 15 Tél. (33) 140 58 77 31 Fax (33) 140 58 77 30 E-mail: europublications@journal-officiel.gouv.fr URL: http://www.journal-officiel.gouv.fr

#### IRELAND

**Government Supplies Agency** Publications Section 4-5 Harcourt Road Dublin 2 Tel. (353-1) 661 31 11 Fax (353-1) 475 27 60 E-mail: opw@iol.ie

#### ITALIA

Licosa SpA Licosa SpA Via Duca di Calabria, 1/1 Casella postale 552 I-50125 Firenze Tel. (39) 055 64 83 1 Fax (39) 055 64 12 57 E-mail: licosa@licosa.com URL: http://www.licosa.com

#### LUXEMBOURG

Messageries du livre SARL 5, rue Raiffeisen L-2411 Luxembourg Tél. (352) 40 10 20 Fax (352) 49 06 61 E-mail: mail@mdl.lu URL: http://www.mdl.lu

#### NEDERLAND

SDU Servicecentrum Uitgevers Christoffel Plantijnstraat 2 Postbus 20014 2500 EA Den Haag Tel. (31-70) 378 98 80 Fax (31-70) 378 97 83 E-mail: sdu@sdu.nl URL: http://www.sdu.nl

ÖSTERREICH Manz'sche Verlags- und Universitätsbuchhandlung GmbH Kohlmarkt 16 A-1014 Wien Tel. (43-1) 53 16 11 00 Fax (43-1) 53 16 11 67 E-Mail: bestellen@manz.co.at URL: http://www.manz.at

#### PORTUGAL

Distribuidora de Livros Bertrand Ld.ª Grupo Bertrand, SA Grupo Bertrand, SA Rua das Terras dos Vales, 4-A Apartado 60037 P-2700 Amadora Tel. (351) 214 95 87 87 Fax (351) 214 96 02 55 E-mail: dlb@ip.pt

#### Imprensa Nacional-Casa da Moeda, SA

Rua da Escola Politécnica nº 135 P-1250 -100 Lisboa Codex Tel. (351) 213 94 57 00 Fax (351) 213 94 57 50 E-mail: spoce@incm.pt URL: http://www.incm.pt

### SUOMI/FINLAND

Akateeminen Kirjakauppa/ Akademiska Bokhandeln

#### Keskuskatu 1/Centralgatan 1

Keskuskatu 1/Centralgatan 1 PL/PB 128 FIN-00101 Helsinki/Helsingfors P./ftn (358-9) 121 44 18 F./fax (358-9) 121 44 35 Sähköposti: sps@akateeminen.com URL: http://www.akateeminen.com

#### SVERIGE

BTJ AB Traktorvägen 11 S-221 82 Lund Tlf. (46-46) 18 00 00 Fax (46-46) 30 79 47 E-post: btjeu-pub@btj.se URL: http://www.btj.se

#### UNITED KINGDOM The Stationery Office Ltd

Orders Department PO Box 276 London SW8 5DT Tel. (44-171) 870 60 05-522 Fax (44-171) 870 60 05-533 E-mail: book.orders@theso.co.uk URL: http://www.tsonline.co.uk

#### ÍSLAND Bokabud Larusar Blöndal

Skólavördustig, 2 IS-101 Reykjavik Tel. (354) 552 55 40 Fax (354) 552 55 60 E-mail bokabud@simnet.is

### NORGE

Swets Norge AS Østenjoveien 18 Boks 6512 Etterstad N-0606 Oslo Tel. (47-22) 97 45 00 Fax (47-22) 97 45 45 E-mail: kytterlid@swets.nl

#### SCHWEIZ/SUISSE/SVIZZERA

Euro Info Center Schweiz c/o OSEC Stampfenbachstraße 85 PF 492 PF 492 CH-8035 Zürich Tel. (41-1) 365 53 15 Fax (41-1) 365 54 11 E-mail: eics@osec.ch URL: http://www.osec.ch/eics

# BÅLGARIJA Europress Euromedia Ltd 59, blvd Vitosha BG-1000 Sofia Tel. (359-2) 980 37 66 Fax (359-2) 980 42 30 E-mail: Milena@mbox.cit.bg

ČESKÁ REPUBLIKA

### ÚSIS

NIS-prodejna NIS-prodejna Havelkova 22 CZ-130 00 Praha 3 Tel. (420-2) 24 23 14 86 Fax (420-2) 24 23 11 14 E-mail: voldanovaj@usiscr.cz URL: http://usiscr.cz

#### CYPRUS

Cyprus Chamber of Commerce and Industry PO Box 1455 CY-1509 Nicosia Tel. (357-2) 66 95 00 Fax (357-2) 66 10 44 E-mail: demetrap@ccci.org.cy

#### EESTI

Eesti Kaubandus-Tööstuskoda (Estonian Chamber of Commerce and Industry) Toom-Kooli 17 EE-0001 Tallinn Tel. (372) 646 02 44 Fax (372) 646 02 45 E-mail: einfo@koda.ee URL: http://www.koda.ee

### HRVATSKA

Mediatrade Ltd Pavla Hatza 1 HR-10000 Zagreb Tel. (385-1) 481 94 11 Fax (385-1) 481 94 11

MAGYARORSZÁG Euro Info Service Hungexpo Európa Ház PO Box 44 H-1441 Budapest Tel. (36-1) 264 82 70 Fax (36-1) 264 82 75 E-mail: euroinfo@euroinfo.hu URL: http://www.euroinfo.hu

MALTA

# Miller Distributors Ltd Malta International Airport PO Box 25 Luqa LQA 05 Tel. (356) 66 44 88 Fax (356) 67 67 99 E-mail: gwirth@usa.net

POLSKA

#### Ars Polona

Krakowskie Przedmiescie 7 Skr. pocztowa 1001 PL-00-950 Warszawa Tel. (48-22) 826 12 01 Fax (48-22) 826 62 40 E-mail: books119@arspolona.com.pl

ROMÂNIA Euromedia Strada Franceza Nr 44 sector 3 RO-70749 Bucuresti Tel. (40-1) 315 44 03 Fax (40-1) 315 44 03 E-mail: mnedelciu@pcnet.pcnet.ro

#### ROSSIYA CCEC

60-letiya Oktyabrya Av. 9 117312 Moscow Tel. (7-095) 135 52 27 Fax (7-095) 135 52 27

SLOVAKIA Centrum VTI SR Kan. Slobody, 19 SK-81223 Bratislava Tel. (421-7) 54 41 83 64 Fax (421-7) 54 41 83 64 E-mail: europ@tbb1.sitk.stuba.sk URL: http://www.sltk.stuba.sk

#### SLOVENIJA

Gospodarski Vestnik Dunajska cesta 5 SLO-1000 Ljubljana Tel. (386) 613 09 16 40 Fax (386) 613 09 16 45 E-mail: europ@gvestnik.si URL: http://www.gvestnik.si

#### TÜRKIYE Dünya Infotel AS

100, Yil Mahallessi 34440 TR-80050 Bagcilar-Istanbul Tel. (90-212) 629 46 89 Fax (90-212) 629 46 27 E-mail: infotel@dunya-gazete.com.tr

#### AUSTRALIA Hunter Publications PO Box 404

3067 Abbotsford, Victoria Tel. (61-3) 94 17 53 61 Fax (61-3) 94 19 71 54 E-mail: jpdavies@ozemail.com.au

#### CANADA

Les éditions La Liberté Inc. 3020, chemin Sainte-Foy G1X 3V6 Sainte-Foy, Québec Tel. (1-418) 658 37 63 Fax (1-800) 567 54 49 E-mail: liberte@mediom.qc.ca

# Renouf Publishing Co. Ltd Sige Chemin Canotek Road Unit 1 Sige Chemin Canotek Road Unit 1 K1J 9J3 Ottawa, Ontario Tel. (1-613) 745 26 65 Fax (1-613) 745 76 60 E-mail: order.dept@renoufbooks.com

URL: http://www.renoufbooks.com EGYPT

### The Middle East Observer 41 Sherif Street Cairo Tel. (20-2) 392 69 19 Fax (20-2) 393 97 32

E-mail: inquiry@meobserver.com URL: http://www.meobserver.com.eg

#### INDIA

EBIC India ard Floor, Y. B. Chavan Centre Gen. J. Bhosale Marg. 400 021 Mumbai Tel. (91-22) 282 60 64 Fax (91-22) 285 45 64 E-mail: ebic@giasbm01.vsnl.net.in URL: http://www.ebicindia.com

#### JAPAN

PSI-Japan Asahi Sanbancho Plaza #206 Asahi Sanbancho Plaza #206 7-1 Sanbancho, Chiyoda-ku Tokyo 102 Tel. (81-3) 32 34 69 21 Fax (81-3) 32 34 69 15 E-mail: books@psi-japan.co.jp URL: http://www.psi-japan.co.jp

#### MALAYSIA

EBIC Malaysia Ebic Malaysia Level 7, Wisma Hong Leong 18 Jalan Perak 50450 Kuala Lumpur Tel. (60-3) 21 62 62 98 Fax (60-3) 21 62 61 98 E-mail: ebic-kl@mol.net.my

#### MÉXICO

Mundi Prensa Mexico, SA de CV Río Pánuco No 141 Rio Panuco No 141 Colonia Cuauhtémoc MX-06500 Mexico, DF Tel. (52-5) 533 56 58 Fax (52-5) 514 67 99 E-mail: 101545.2361@compuserve.com

#### PHILIPPINES

EBIC Philippines 19th Floor, PS Bank Tower Sen. Gil J. Puyat Ave. cor. Tindalo St. Makati City Metro Manilla Tod. (62.2) 756 65 90 Tel. (63-2) 759 66 80 Fax (63-2) 759 66 90 E-mail: eccpcom@globe.com.ph URL: http://www.eccp.com

#### SOUTH AFRICA

Eurochamber of Commerce in South Africa PO Box 781738 2146 Sandton Tel. (27-11) 884 39 52 Fax (27-11) 883 55 73 E-mail: info@eurochamber.co.za

#### SOUTH KOREA

#### The European Union Chamber of Commerce in Korea

5th FI, The Shilla Hotel om FI, The Shilla Hotel 202, Jangchung-dong 2 Ga, Chung-ku 100-392 Seoul Tel. (82-2) 22 53-5631/4 Fax (82-2) 22 53-5635/6 E-mail: eucck@eucck.org URL: http://www.eucck.org

#### SRI LANKA

EBIC Sri Lanka Trans Asia Hotel 115 Sir chittampalam A. Gardiner Mawatha Colombo 2 Tel. (94-1) 074 71 50 78 Fax (94-1) 44 87 79 E-mail: ebicsl@itmin.com

#### THAILAND

**EBIC** Thailand 29 Vanissa Building, 8th Floor 29 Vahissa Bullong, 8th Floor Soi Chidlom Ploenchit 10330 Bangkok Tel. (66-2) 655 06 27 Fax (66-2) 655 06 28 E-mail: ebickk@ksc15.th.com URL: http://www.ebicbkk.org

#### UNITED STATES OF AMERICA

#### Bernan Associates

4611-F Assembly Drive Lanham MD20706 Tel. (1-800) 274 44 47 (toll free telephone) Fax (1-800) 865 34 50 (toll free fax) E-mail: query@bernan.com URL: http://www.bernan.com

ANDERE LÄNDER/OTHER COUNTRIES/ AUTRES PAYS

Bitte wenden Sie sich an ein Büro Ihrer Wahl/ Please contact the sales office of your choice/ Veuillez vous adresser au bureau de vente de votre choix

1/2000

Office for Official Publications of the European Communities

2, rue Mercier 2-2985 Luxembourg Tel. (352) 29 29-42455 Fax (352) 29 29-42758 E-mail: info.info@cec.eu.int URL: http://eur-op.eu.int