Statistics in focus

TRANSPORT

THEME 7 – 2/2000

Contents

Manuscript completed on: 07/04/2000
ISSN 1562-1324
Catalogue number: CA-NZ-00-002-EN-I
Price in Luxembourg per single copy (excl. VAT): EUR 6

Passenger transport by rail 1990 - 1997

Hans Strelow

Total passenger transport by rail remained more or less constant between 1990 and 1997 (1,1 %), reaching a peak in 1992, when the European Union's rail networks carried 5 400 million passengers overall.

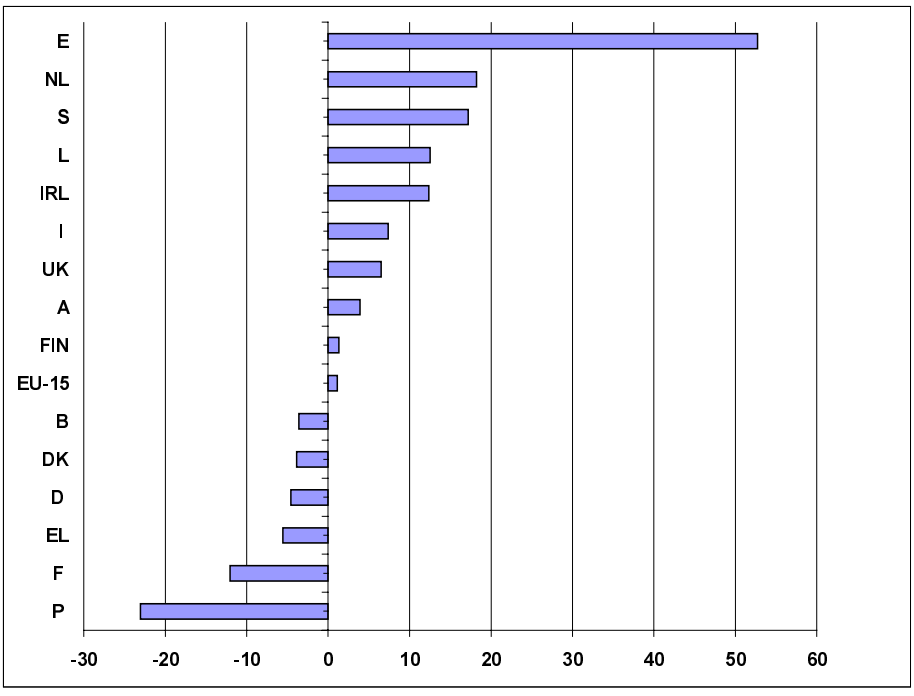
Nine of 15 Member States recorded a rise in the number of rail passengers carried, between 1990 and1997.

The highest increase in the volume of rail passengers was experienced by Spain (+ 52,7 %), by the Netherlands (+ 18,2 %) and by Sweden (+ 17,2 %). However, Portugal experienced the biggest decline (- 23,1 %) in the number of passengers carried, due to Portuguese international transport volume which decreased sharply.

Denmark posted the highest number of journeys per inhabitant (28,2), nearly double the European average (14,2). The lowest rate was recorded in Greece (1,3).

Even if Germany had the densest rail network, the network utilisation rate was highest in the Netherlands (115 300 passengers per kilometre of network). At the other extreme, the lowest network use was registered in Greece (5 500 passengers per kilometre of network).

Graph 1: Evolution of total passenger transport from 1990 to 1997 - in %



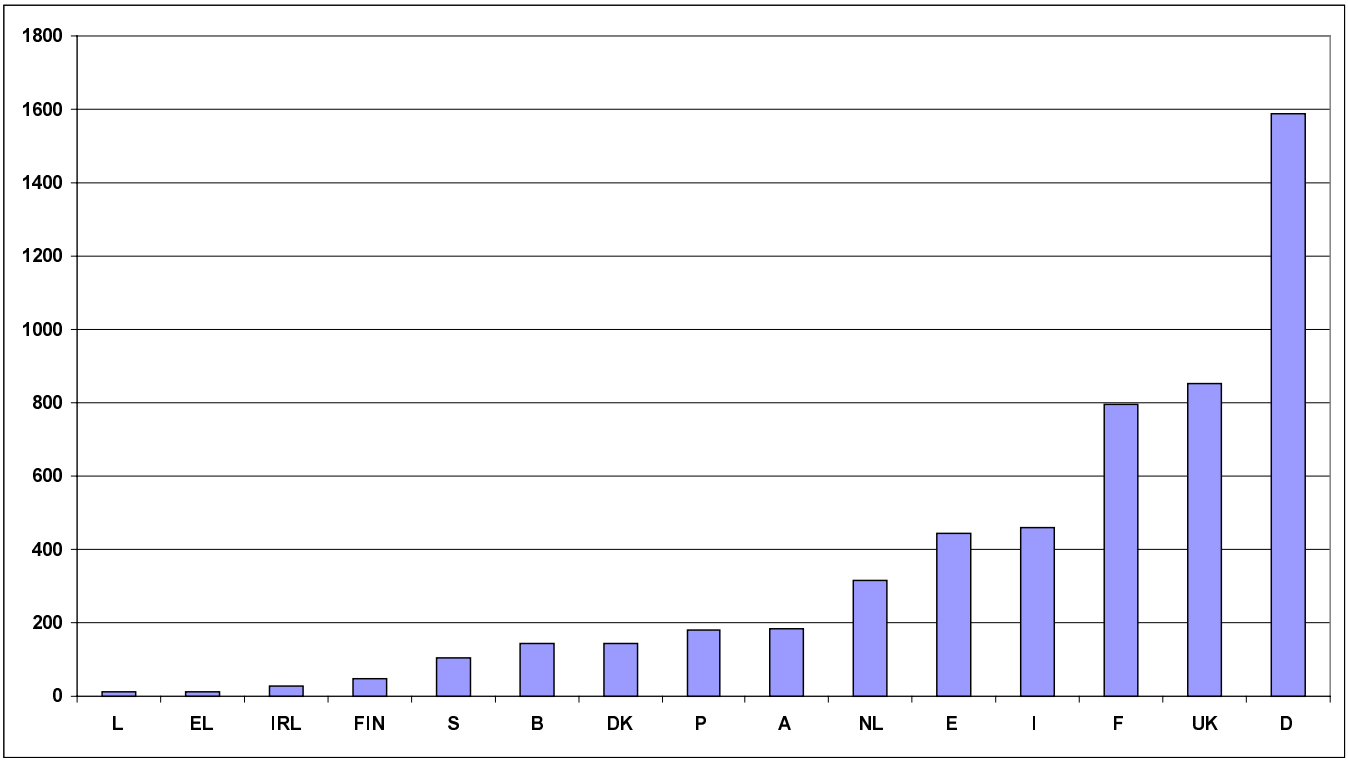
Over the long term, Spain more than doubled its number of passengers (+145% between 1980 and 1997). Ireland and the Netherlands similarly saw ridership increase markedly, whereas Denmark, France, Italy, Luxembourg and the United Kingdom experienced little change. By contrast, Germany, Belgium and Portugal recorded a fall in the volume of passenger transport.

During the nineties, it was Spain, once again, which notched up the biggest rise in passenger transport (+ 53%), with the Netherlands taking second place. Nine of the 15 Member States posted an increase in passenger numbers, while the figures for Germany, Belgium, Denmark, Greece, France and Portugal took a downturn.

The overall change for EU-15 amounted to + 1,1 %. The total rose from 1990 to 1992, when it reached its peak, and went into decline until 1995. It then picked up somewhat through to 1997.

In absolute terms, Germany carried the highest number of passengers (1 590 millions), followed by the United Kingdom (852 millions) and France (797 millions). On the whole, these three countries accounted for more than 60 % of total passenger transport within the European Union. The lowest passenger transport figures were posted by Luxembourg, Greece and Ireland.

Graph 2: Total passenger transport in 1997 – in millions



Over the five-year period under review (1992 to 1996), the volume of national and international passenger transport rose in Finland and Sweden, while the figures for Greece, France and Portugal decreased. Austria recorded a rise in national transport, but a fall on the international side. The reverse was true in Belgium, where a decline in national ridership contrasted with a rising number of international passengers.

The statistics available for Denmark, Germany, Spain, Ireland, Italy and Luxembourg make no distinction between national and international passengers.

National transport

Five Member States (Belgium, Greece, France, the Netherlands and Portugal) posted a negative trend in national passenger transport. It was Portugal which experienced the biggest decrease, of 21%. Austria, Finland, Sweden and the United Kingdom saw their national transport volume rise slightly.

Table 1: National passenger transport – in thousands

	1992	1993	1994	1995	1996	Variation 1992 - 1996 (%)
Belgium	134 850	135 388	133 417	133 215	130 754	-3,0
Greece	13 922	13 021	12 158	11 241	12 610	-9,4
France	830 854	806 421	792 596	724 873	767 678	-7,6
Netherlands	326 000	314 000	306 000	*295 333*	299 736	-8,1
Austria	164 790	170 922	180 918	185 247	185 053	12,3
Portugal	224 135	208 250	201 102	187 357	176 914	-21,1
Finland	45 007	44 256	43 849	44 249	46 815	4,0
Sweden	92 754	96 497	97 976	*96 300*	*98 700*	6,4
United Kingdom	781 896	749 480	737 209	764 469	*820 350*	4,9

International transport

The figures for Portugal plummeted over the period by 63%. Greece and Austria also experienced major falls in the level of international transport. Figures for the Netherlands were available only in millions of passengers and for three years only (for 1992 and 1996, figures have been estimated). Increases in the volume of international transport were recorded only by Belgium, Finland - whose figures almost doubled - and Sweden.

Since the opening of the Channel Tunnel, the number of international rail passengers has grown steadily in the United Kingdom

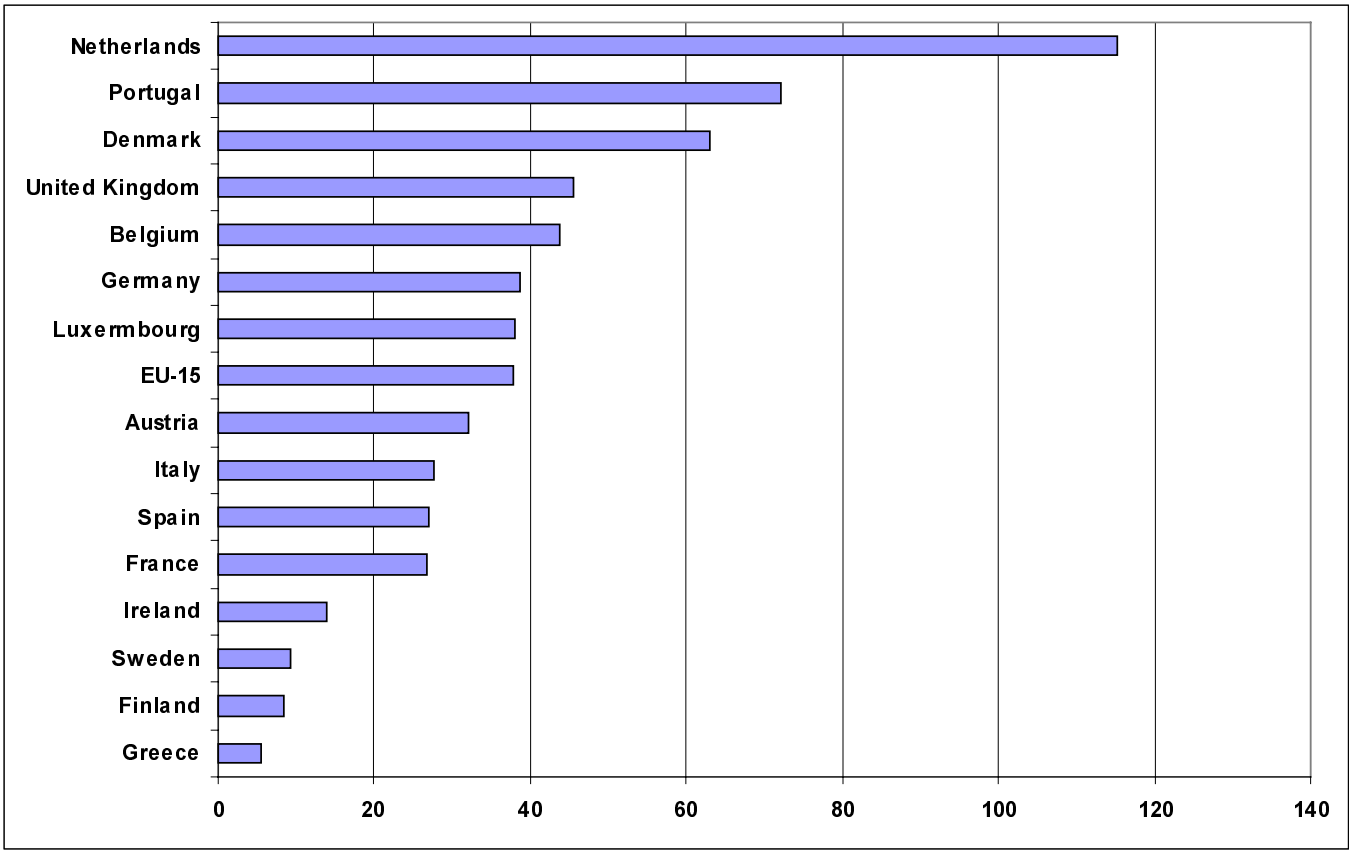
Table 2: International passenger transport – in thousands

	1992	1993	1994	1995	1996	Variation 1992-1996 (%)
Belgium	10 156	9 959	9 185	10 797	10 942	7,7
Greece	258	364	434	237	206	-20,2
France	19 611	15 537	13 769	15 974	18 949	-3,4
netherlands	*7 000*	7 000	6 000	6 000	*6 000*	:
Austria	10 145	10 177	9 494	8 785	8 375	-17,4
Portugal	486	338	254	176	180	-63,0
Finland	94	106	140	171	186	97,9
Sweden	1 890	2 033	2 070	*2 070*	*2 084*	10,3
United Kingdom	0	15	20	24	29	93,3 (1993-1996)

Network utilisation rate

Dividing the number of passengers by the length of the network gives the network utilisation rate. The results show that, by this measure, the Netherlands led the field, carrying 115 300 passengers per kilometre of network, ahead of Portugal (72 000 passengers/km) and Denmark (63 000 passengers/km). Bringing up the rear was Greece, with a rate of 5 500 passengers per km. The average for EU-15 stood at 37 800 passengers/km.

Graph 3: Passengers carried by km of national network – in thousands



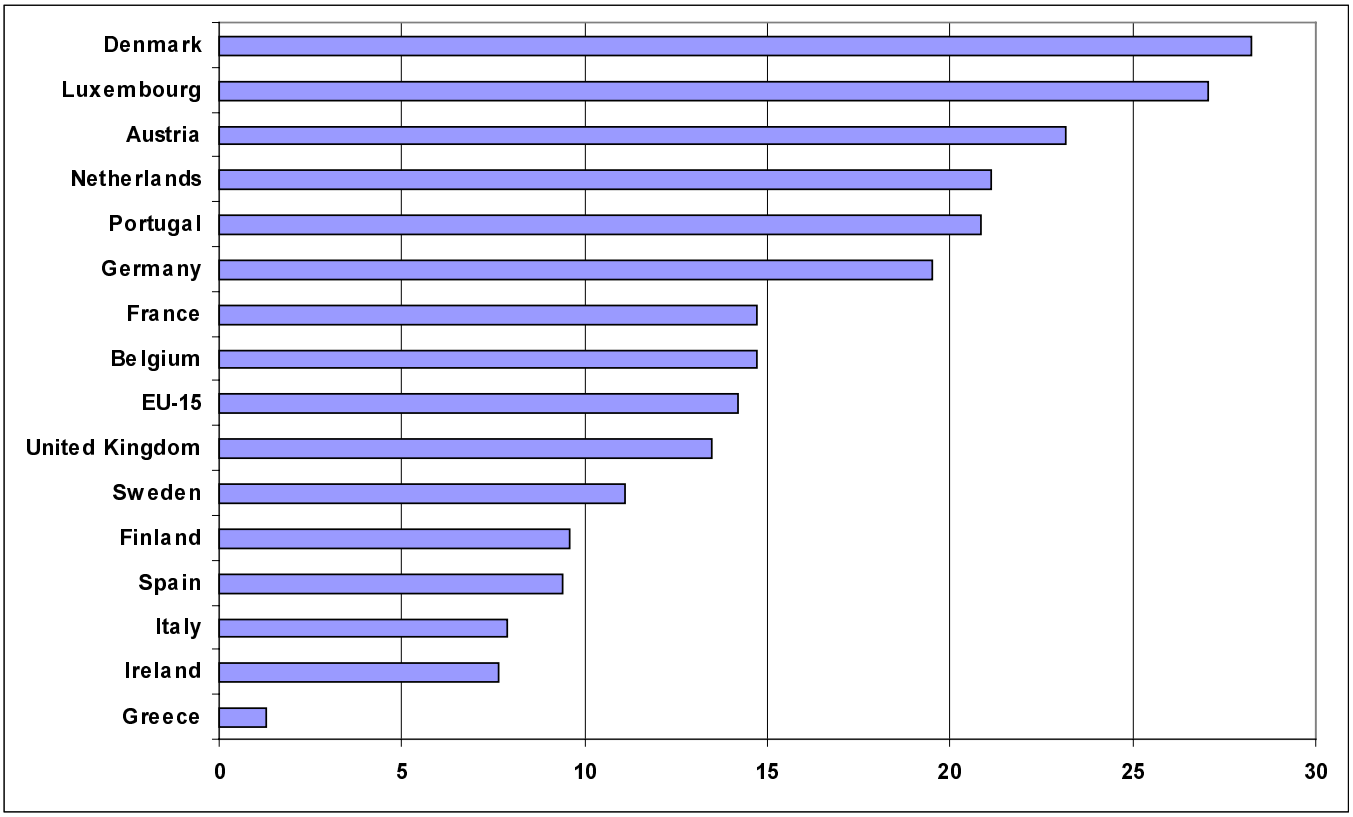
Average number of journeys per inhabitant

On average, it was Denmark which recorded the highest rate of all Member States, at 28,2 journeys per inhabitant. Other countries with a rate of more than 20 journeys per inhabitant were Luxembourg (27,1), Austria (23,2), the Netherlands (21,1) and Portugal (20,9). At the other end of the scale, the inhabitants of Greece made an average of 1,3 train journeys per year.

Luxembourg's figure very much reflects the large number of workers who use the train daily for their journey to and from work.

On average, each inhabitant of the European Union travelled by rail 14,2 times per year.

Graph 4: Average number of journeys per inhabitant



Network density

The network density figure is obtained by dividing the total length of a Member State's railway lines by the country's surface area. Belgium, Germany and Luxembourg thus have the highest densities, Greece, Finland and Sweden the lowest. This reflects the fact that Finland and Sweden have a relatively large surface area but a low population density. Greece, on the other hand, comprises a large number of small islands, most of them with no rail network. The largest Member State, France, has only an average density, while the smallest EU countries, Belgium and Luxembourg, have a high one.

Table 3: network density for 1994 – in m/km²

	Density (m/km^2)	Length (km)	Area (km^2)
Belgium	111,3	3 396	30 518
Denmark	54,5	2 349	43 093
Germany	116,0	41 401	356 970
Greece	18,7	2 474	131 957
Spain	25,1	12 646	504 795
France	58,8	32 275	549 085
Ireland	27,7	1 944	70 285
Italy	53,3	16 066	301 311
Luxembourg	107,1	275	2 568
Netherlands	66,5	2 757	41 480
Austria	67,2	5 636	83 860
Portugal	33,4	3 070	91 910
Finland	17,4	5 880	338 150
Sweden	21,5	9 661	449 960
United Kingdom	70,0	17 091	244 138

Table 4: Total passenger transport – in thousands

	1980	1990	1991	1992	1993	1994	1995	1996	1997
Belgium	170 673	148 911	152 244	151 804	152 041	149 240	144 012	141 696	143 566
Denmark	134 216	150 236	149 436	146 820	144 682	148 073	145 467	144 308	144 414
Germany	1 705 000	1 666 925	1 454 324	1 622 991	1 627 789	1 556 291	1 517 000	1 589 400	1 589 900
Greece	11 600	14 044	14 247	14 279	13 473	12 647	11 478	12 816	13 261
Spain	180 727	289 476	331 022	371 302	354 234	366 853	365 503	422 833	442 064
France	739 908	906 507	899 250	912 722	880 561	865 293	730 835	776 706	797 256
Ireland	17 686	26 230	26 915	27 063	27 417	27 073	27 124	27 930	29 467
Italy	420 999	429 400	438 000	440 000	438 000	455 000	462 500	468 300	461 000
Luxembourg	11 515	10 252	10 371	*10 384*	10 700	11 300	12 000	11 127	11 536
Netherlands	205 762	267 060	345 195	338 229	326 259	317 403	358 619	306 481	315 600
Austria	170 000	176 960	182 826	172 872	178 605	188 575	194 032	193 428	183 897
Portugal	230 268	231 546	229 323	230 315	213 985	206 505	184 343	177 094	178 130
Finland	39 300	49 329	49 025	49 927	49 266	48 916	44 420	47 000	49 980
Sweden	77 100	89 010	87 905	94 644	98 530	100 046	98 371	100 784	104 323
United Kingdom	796 080	800 191	777 458	781 895	749 480	737 209	764 499	820 387	852 053
EU-15	4 910 834	5 256 077	5 147 541	5 365 247	5 265 022	5 190 424	5 060 203	5 240 290	5 316 447

	Variation 1980-1997 (%)	Variation 1990-1997 (%)
Belgium	-15,9	-3,6
Denmark	7,6	-3,9
Germany	-6,8	-4,6
Greece	14,3	-5,6
Spain	144,6	52,7
France	7,8	-12,1
Ireland	66,6	12,3
Italy	9,5	7,4
Luxembourg	0,2	12,5
Netherlands	53,4	18,2
Austria	8,2	3,9
Portugal	-22,6	-23,1
Finland	27,2	1,3
Sweden	35,3	17,2
United Kingdom	7,0	6,5
EU-15	8,3	1,1

➢ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Definitions

The following definitions are taken from the Glossary for Transport Statistics (Eurostat/UN-ECE[1]/ECMT[2]).

Rail passenger

Any person, excluding members of train crew, who makes a journey by railway vehicle.

Passengers making a journey by railway-operated ferry or bus services are excluded.

Railway network

All railways in a given area.

This does not include stretches of road or water even if rolling stock should be conveyed over such routes, e.g. by wagon-carrying trailers or ferries. Lines solely used for tourism purposes during the season are excluded, as are railways constructed solely to serve mines, forests or other industrial or agricultural undertakings and which are not open to public traffic.

National rail transport

Rail transport between two places (a place of loading and place of unloading) located in the same country irrespective of the country in which the railway vehicles were registered. It may involve transit through a second country.
However, it should be noted that figures on national transport are only partially comparable. For some countries, the figures are liable to include passengers carried by secondary railway enterprises, whereas other countries take only the ridership of principal railway enterprises into account. Unfortunately, details about data sources are not always available. Another problem relates to urban journeys: in some countries, these are included in national transport figures, whereas other Member States take no account of them in their statistics.

International rail transport

Rail transport between two places (a place of loading and a place of unloading) in two different countries. It may involve transit through one or more additional countries.

Methodology

Total transport, national and international

The figures were collected using the common questionnaire (Eurostat/UN-ECE/ECMT). For the years 1995 to 1997, the UIC[3]'s figures were used to complete the tables. Where an item of data was unavailable, it was estimated, as far as possible, using the linear regression method. Estimated figures appear in italics in the tables.

Network utilisation rate

The number of passengers carried was divided by the length of the network. Using this rate, network utilisation can be compared between the various Member States.

Number of journeys per inhabitant

To calculate this rate, the number of passengers carried was divided by the population of the Member State concerned. The rate measures annual use of a country's rail network by its inhabitants.

Network density

Network density is determined by dividing the length of the network by the surface area of the country. It is expressed in metres per km^2.

[1]: United Nations - Economic Commission for Europe
[2]: European Conference of Ministers of Transport
[3]: International Union of Railways

Further information:

➢ **Databases**

New Cronos Theme 7
Domain Rail

To obtain information or to order publications, databases and special sets of data, please contact the **Data Shop** network:

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) 23 24 64 27/28
Fax (49-30) 23 24 64 30
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 8844
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 32460
Fax (39-02) 8061 32304
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
2270 JM VOORBURG
Nederland
Tel. (31-70) 337 49 00
Fax (31-70) 337 59 84
E-Mail: datashop@cbs.nl

NORGE

Statistics Norway
Library and Information Centre
Eurostat Data Shop
Kongens gate 6
P. b. 8131, dep.
N-0033 OSLO
Tel. (47-22) 86 46 43
Fax (47-22) 86 45 04
E-Mail: datashop@ssb.no

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

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
Internetadresse:
http://www.zh.ch/statistik

SUOMI/FINLAND

Eurostat Data Shop Helsinki
Tilastokirjasto
Postiosoite: PL 2B
Käyntiosoite: Työpajakatu 13 B, 2 krs
FIN-00022 Tilastokeskus
Tel. (358-9) 17 34 22 21
Fax (358-9) 17 34 22 79
S-posti datashop.tilastokeskus@tilastokeskus.fi
Internetadresse:
http://www.tilastokeskus.fi/tk/kk/datashop.html

SVERIGE

STATISTICS SWEDEN
Information service
Eurostat Data Shop
Karlavägen 100 - Box 24 300
S-104 51 STOCKHOLM
Tel. (46-8) 50 69 48 01
Fax (46-8) 50 69 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 & Electronic Services Unit
1 Drummond Gate - B1/05
UK-LONDON SW1V 2QQ
Tel. (44-171) 533 56 76
Fax (44-1633) 812 762
E-Mail: eurostat.datashop@ons.gov.uk

UNITED KINGDOM

Eurostat Data Shop
Electronic Data Extractions, Enquiries & advice - R.CADE
Unit 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
URL: http://www-rcade.dur.ac.uk

UNITED STATES OF AMERICA

HAVER ANALYTICS
Eurostat Data Shop
60 East 42nd Street
Suite 3310
USA-NEW YORK, NY 10165
Tel. (1-212) 986 93 00
Fax (1-212) 986 58 57
E-Mail: eurodata@haver.com

Media Support Eurostat (for professional journalists only).
Bech Building Office A3/48 • L-2920 Luxembourg • Tel. (352) 4301 33408 • Fax (352) 4301 32649 • e-mail: media.support@cec.eu.int

For information on methodology

Hans Strelow, Eurostat/C 2, L - 2920 Luxembourg, Tel.: (352) 4301 34580, E - Mail: hans.strelow@cec.eu.int,
ORIGINAL: French

Please visit our web site at **www.europa.eu.int/comm/eurostat/** for further information!

A list of worldwide sales outlets is available at the **Office for Official Publications of the European Communities**.

2 rue Mercier – L-2985 Luxembourg
Tel. (352) 2929 42118 Fax (352) 2929 42709
Internet Address **http://eur-op.eu.int/fr/general/s-ad.htm**
e-mail: info.info@cec.eu.int

BELGIQUE/BELGIË – DANMARK – DEUTSCHLAND – GREECE/ELLADA – ESPAÑA – FRANCE – IRELAND – ITALIA – LUXEMBOURG – NEDERLAND – ÖSTERREICH PORTUGAL – SUOMI/FINLAND – SVERIGE – UNITED KINGDOM – ÍSLAND – NORGE – SCHWEIZ/SUISSE/SVIZZERA – BALGARIJA – CESKÁ REPUBLIKA – CYPRUS EESTI – HRVATSKA – MAGYARORSZÁG – MALTA – POLSKA – ROMÂNIA – RUSSIA – SLOVAKIA – SLOVENIA – TÜRKIYE – AUSTRALIA – CANADA – EGYPT – INDIA ISRAËL – JAPAN – MALAYSIA – PHILIPPINES – SOUTH KOREA – THAILAND – UNITED STATES OF AMERICA

Order form

I would like to subscribe to Statistics in focus (from 1.1.2000 to 31.12.2000):
(for the Data Shop and sales office addresses see above)

❒ **Formula 1**: All 9 themes (approximately 140 issues)

- ❒ Paper: EUR 360
- ❒ PDF: EUR 264
- ❒ Paper + PDF: EUR 432

Language required: ❒ DE ❒ EN ❒ FR

❒ **Formula 2:** One or more of the following seven themes:

- ❒ Theme 1 'General statistics'
  ❒ Paper: EUR 42 ❒ PDF: EUR 30 ❒ Combined: EUR 54
- ❒ Theme 2 'Economy and finance'
- ❒ Theme 3 'Population and social conditions'
- ❒ Theme 4 'Industry, trade and services
- ❒ Theme 5 'Agriculture and fisheries'
- ❒ Theme 6 'External trade'
- ❒ Theme 8 'Environment and energy
  ❒ Paper: EUR 84 ❒ PDF: EUR 60 ❒ Combined: EUR 114

Language required: ❒ DE ❒ EN ❒ FR

❒ Please send me a free copy of 'Eurostat Mini-Guide' (catalogue containing a selection of Eurostat products and services)
Language required: ❒ DE ❒ EN ❒ FR

❒ I would like a free subscription to 'Statistical References', the information letter on Eurostat products and services
Language required: ❒ DE ❒ EN ❒ FR

❒ Mr ❒ Mrs ❒ Ms

(Please use block capitals)

Surname: _____ Forename: _____
Company: _____ Department: _____
Function: _____
Address: _____
Post code: _____ Town: _____
Country: _____
Tel.: _____ Fax: _____
E-mail: _____

Payment on receipt of invoice, preferably by:

❒ Bank transfer
❒ Visa ❒ Eurocard

Card No: _____ Expires on: _____/_____

Please confirm your intra-Community VAT number:
If no number is entered, VAT will be automatically applied. Subsequent reimbursement will not be possible.

_____