

EU TRANSPORT IN FIGURES

STATISTICAL POCKETBOOK

EUROPEAN
COMMISSION



1998

DG VII 
eurostat

EU
TRANSPORT IN FIGURES

STATISTICAL POCKETBOOK

1998

DG VII

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, 1998

ISBN 92-828-3670-3

© European Communities, 1998

Reproduction is authorised provided the source is acknowledged.

Printed in Luxembourg

PRINTED ON WHITE CHLORINE-FREE PAPER

Preface

The main aim of this pocketbook is to provide transport statistics for the EU Member States in a user-friendly way. Most of the data cover the period 1970-96.

The pocketbook was based mainly on Eurostat statistics enhanced with data from other international organisations, national statistics, studies and, where no data was available, estimates.

The tables of this book may also be found on the Europa internet site at : <<http://europa.eu.int/en/comm/dg07/TIF>> or <<http://europa.eu.int/eurostat.html>>.

Comments and suggestions on the contents of this publication are appreciated and should be sent to the following address :

European Commission
Directorate General for Transport
Unit VII/E/1
Beaulieu 31, office 5/30
B-1160 Brussels
e-mail: figures-transport@dg7.cec.be

or:

Eurostat
Unit C2 (Transport statistics)
Jean Monnet Building
L-2920 Luxembourg
e-mail: transport-unit@eurostat.cec.be

CONTENTS

	page
General Data	
1.1 Transport Growth EU 15	10
1.2 Statistical Overview EU Transport	11
1.3 General Economic Data	12
1.4 External Trade EU 15	13
1.5 Population	14
1.6 Transport Infrastructure Investment	15
1.7 Employment by Mode of Transport	16
1.8 Number of Enterprises by Mode of Transport	18
1.9 Turnover by Mode of Transport	19
1.10 Internet Hosts	20
Infrastructure	
2.1 Railways : Length of Lines	22
2.2 Motorways : Length at End of Year	24
2.3 Pipelines (Oil) : Length of Lines	25
2.4 Inland Waterways : Length in Use	26
Means of Transport	
3.1 Road Motorization	28
3.2 Road Passenger Cars	30
3.3 Road Vehicle Production	31
3.4 Road Buses and Coaches	32
3.5 Road Goods Vehicles	33
3.6 Rail Passenger Transport Vehicles	34
3.7 Rail Goods Transport Wagons	35
3.8 Sea EU Merchant Fleet	36
Goods Transport	
4.1 Evolution 1970-96	38
4.2 Transport Distances and Groups of Goods	40
4.3 Modal Split by Country	41
4.4 Road (tkm)	42
4.5 Railways (tkm)	43
4.6 Inland Waterways (tkm)	44
4.7 Pipelines (Oil) (tkm)	45
4.8 Sea : Port Traffic (Major Seaports)	46
4.9 Inland Ports	47
4.10 Air : Airport Traffic (Major Airports)	48
4.11 Combined Transport	49
4.12 Alpine Transport	50

	page
Passenger Transport	
5.1 Evolution 1970-96	52
5.2 Passenger Cars	56
5.3 Powered Two-wheelers	57
5.4 Buses & Coaches	58
5.5 Urban Rail (Tram & Metro)	59
5.6 Railways	60
5.7 Waterborne Transport	61
5.8 Bicycle Transport	62
5.9 Air Traffic Between Countries	64
5.10 Airborne Transport	65
Safety	
6.1 Road Fatalities	68
6.2 Railway Fatalities	69
6.3 Traffic Safety EU 15	70
Environment	
7.1 Emission Standards	72
7.2 Emissions by Type of Pollutant	73
7.3 Road Vehicles : lead emissions	74
7.4 Energy Consumption	75
7.5 CO ₂ Emissions	76
7.6 Noise Emission Limits	78
Central and Eastern European Countries	
8.1 Railway Transport	80
8.2 CEC : Evolution 1970-96	81
8.3 Goods Transport Road	82
8.4 Goods Transport Railways	83
8.5 Goods Transport Inland Waterways	84
8.6 Goods Transport Pipelines(Oil)	85
8.7 Passenger Transport Railways	86
8.8 Passenger Cars	87
8.9 Airports and Seaports	88
8.10 External Trade EU 15 - CEC	89
8.11 CEC-MED Countries	90
Comparison EU with USA and Japan	
9.1 Goods Transport USA : Evolution 1970-95	92
9.2 Passenger Transport USA : Evolution 1970-95	93
9.3 Comparison EU 15 - USA - Japan - World	94
Statistical Sources	
1. Legal Acts	95
2. Eurostat	96
3. International Statistical Sources	96
4. National Statistical Sources	98

SYMBOLS AND ABBREVIATIONS

12	<i>Estimates are printed in italic</i> break in time series
<hr/>	
%	per cent
-	nil
:	data not available
0	figure less than half of unit used
1970=100	reference year for an index
BECU	1 000 million European Currency Units
ca.	circa = approximately
dwt	deadweight ton
ECU	European Currency Units
GDP	Gross Domestic Product
grt	gross registered tonnage
MECU	1 million European Currency Units
mio p	1 million persons
pkm	passenger-kilometre : unit of measure
PPS	Purchasing Power Standard
tkm	tonne-kilometre : unit of measure
VOCs	Volatile Organic Compounds
ACEA	European Automobile Manufacturer's Association
ACI	Airports Council International
AEA	Association of European Airlines
CEC	Central and Eastern European Countries
ECF	European Cyclists' Federation
ECIS	European Centre for Infrastructure Studies
ECMT	European Conference of Ministers of Transport
EFIP	European Federation of Inland Ports
EU	European Union
EU15	European Union of 15 Member States
EUROSTAT	Statistical Office of the European Communities
GVF	Dienst für Gesamtverkehrsfragen (Switzerland)
IACA	International Air Charter Association
IATA	International Air Transport Association
IMF	International Monetary Fund
IRF	International Road Federation
ISL	Institute of Shipping Economics and Logistics
MS	Member States
UIC	Union Internationale des Chemins de fer
UN	United Nations
UIRR	Union Internationale des Societes de Transport Combiné Rail-Route
UITP	International Union of Public Transport

ABBREVIATIONS

Countries

A	Austria
B	Belgium
D	Germany
D-W	Germany-West
D-E	Germany-East
DK	Denmark
E	Spain
EL	Greece
F	France
FIN	Finland
I	Italy
IRL	Ireland
L	Luxembourg
NL	The Netherlands
P	Portugal
S	Sweden
UK	United Kingdom
CH	Switzerland
ISL	Iceland
N	Norway
BG	Bulgaria
CS	Czechoslovakia
CZ	Czech Republic
EST	Estonia
H	Hungary
LT	Lithuania
LV	Latvia
PL	Poland
RO	Romania
SLO	Slovenia
SK	Slovak Republic
USA	United States of America

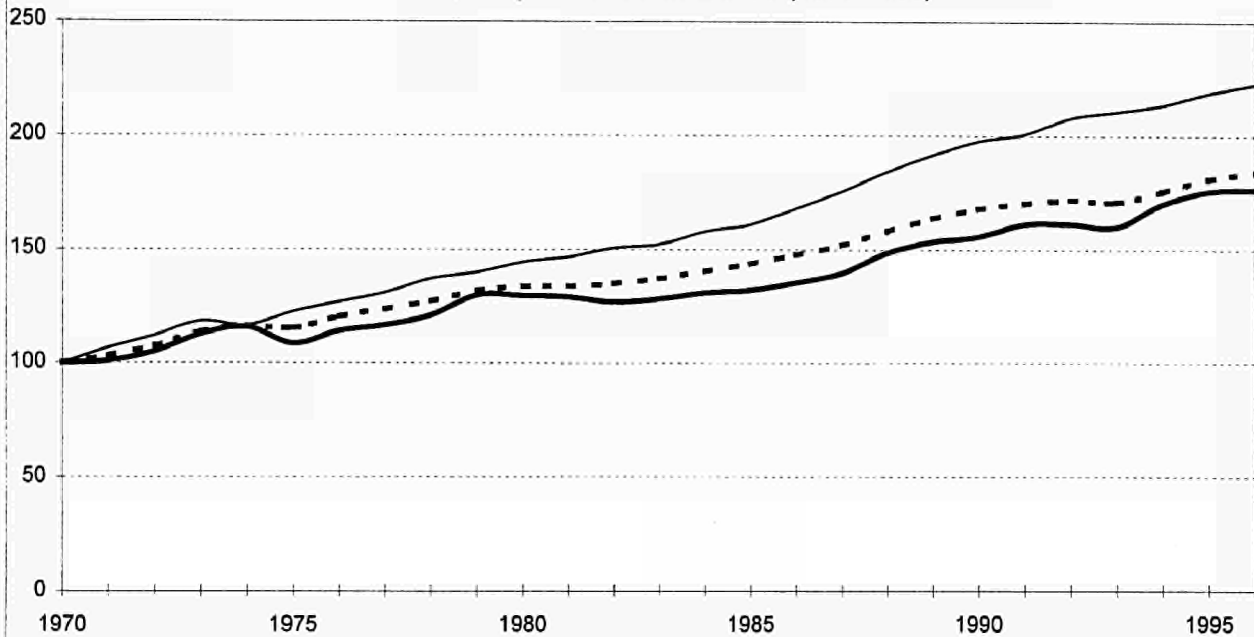
Chapter 1

General Data

Transport Growth EU 15 (1970= 100)

1.1

10



— passengers (1) (pkm)

— goods (tkm)

- - - GDP

data for 1996, otherwise indicated

Value created	Total GDP is 6770 BECU or 18 100 ECU per person of which transport 4% = 270 BECU incl. private/ own account 7% = 470 BECU = 1 300 ECU per person
Employment	6 million persons are employed in the transport services sector, = 4 % of all persons employed In addition, 2 million persons are employed in the transport equipment industry, and over 6 million in transport related industries
Investment in transport infrastructure	Investment in transport infrastructure is ca. 70 BECU (of which 65% road, 25% rail and 10% other modes) or 1% of GDP
Goods transport (4 modes : road, rail, pipelines, intl. waterways)	Transport demand is 1570 billion tkm or 4200 tkm per person (12 tkm per person and day) - of which road 74%, rail 14%
Passenger transport (4 modes : car, bus, rail, air)	Transport demand is ca. 4 700 billion pkm or 12 500 pkm per person (35 pkm per person and day) - of which road: 87 %, passenger car: 80 %
Transport Growth	<u>Goods transport</u> : ca. 2 % per year (over 75 % growth since 1970) <u>Passenger transport</u> : ca. 2% per year (over 110 % growth since 1970)
External Costs	External costs of transport (estimate , in % of GDP): air pollution: 0.4% noise: 0.2% accidents: 1.5% congestion: 2% total: 4% = 270 BECU or 700 ECU per person
Safety	<u>Road</u> : ca. 42 000 persons killed (fatalities decreasing by 2- 3% per year) <u>Rail</u> : ca. 900 persons killed (fatalities slightly decreasing)
Environment	Share of emissions (man made) originating from transport : CO ₂ : 26% NO _x : 63%

General Economic Data

1.3

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15
GDP (nominal) 1996, BECU	211	138	1855	97	458	1211	56	956	14	312	180	82	99	197	908	6773
GDP per head in PPS (EU=100),1981-90	104	109	116	61	71	111	66	103	140	102	106	56	102	112	100	100
GDP per head in PPS (EU=100), 1991	107	109	106	61	79	113	76	107	151	102	108	63	94	104	97	100
GDP per head in PPS (EU=100), 1996	112	116	110	66	77	107	98	104	166	107	110	68	98	100	96	100
GDP growth 1995, %	1.9	2.8	1.9	2.4	2.8	2.2	10.7	3.0	3.4	2.1	1.8	2.3	4.5	3.0	2.5	2.5
GDP growth 1996, %	1.4	2.1	1.4	2.4	2.1	1.1	7.8	0.8	2.3	2.5	1.0	2.5	2.3	1.7	2.3	1.6
Indust. production growth 1995, %	4.2	4.3	0.2	2.3	4.7	1.5	18.8	5.5	0.8	2.3	5.4	4.6	7.5	10.6	2.5	3.0
Indust. production growth 1996, %	0.3	1.7	0.1	1.7	-1.0	0.7	10.0	0.9	-1.4	2.5	2.0	2.0	3.2	2.5	1.3	0.9
Unemployment rate 1996	9.8	6.9	8.8	9.6	22.1	12.4	11.8	12.0	3.3	6.3	4.4	6.8	15.4	10.0	8.2	10.9
Unemployment rate 1997	9.7	6.0	9.0	9.5	22.0	12.5	10.8	12.1	3.6	7.0	4.5	6.7	13.7	10.4	6.4	10.7

Source : DG II, Eurostat

PPS= Purchasing Power Standard

External Trade EU 15 in BECU

1996

1.4

	EXPORTS to										IMPORTS from									
	Total Exports	EU 15		PECO		Mediterr. Countries		USA		Total Imports	EU 15		PECO		Mediterr. Countries		USA			
B+L	138.9	106.4	77%	2.7	2%	5.3	4%	5.8	4%	130.8	95.2	73%	1.6	1%	2.9	2%	8.9	7%		
DK	40.1	27.0	67%	1.4	3%	0.7	2%	1.6	4%	35.5	25.2	71%	1.0	3%	0.3	1%	1.6	5%		
D	410.7	234.6	57%	29.1	7%	16.7	4%	31.5	8%	359.1	215.6	60%	23.3	6%	12.5	3%	20.5	6%		
EL	8.9	4.6	52%	1.1	13%	1.9	21%	0.4	4%	21.3	13.3	63%	0.8	4%	1.3	6%	0.7	3%		
E	80.8	54.0	67%	1.4	2%	4.3	5%	3.3	4%	89.7	60.9	68%	0.9	1%	3.5	4%	5.0	6%		
F	240.3	149.7	62%	5.3	2%	13.2	5%	14.6	6%	231.0	156.7	68%	3.4	1%	8.6	4%	15.2	7%		
IRL	37.8	26.9	71%	0.4	1%	0.6	1%	3.5	9%	27.4	18.3	67%	0.2	1%	0.2	1%	3.9	14%		
I	197.8	109.2	55%	11.5	6%	15.6	8%	14.4	7%	163.1	99.3	61%	6.7	4%	11.0	7%	8.0	5%		
NL	160.3	129.3	81%	3.2	2%	3.4	2%	5.0	3%	150.2	92.0	61%	2.6	2%	2.7	2%	12.6	8%		
A	45.9	29.4	64%	6.2	14%	2.2	5%	1.5	3%	54.0	40.1	74%	4.4	8%	1.5	3%	1.8	3%		
P	18.8	15.0	80%	0.1	1%	0.3	2%	0.9	5%	26.9	20.3	76%	0.1	1%	0.6	2%	0.9	3%		
FIN	32.4	17.7	54%	2.2	7%	0.6	2%	2.6	8%	24.7	16.2	65%	0.8	3%	0.1	0%	1.4	6%		
S	66.8	38.1	57%	2.2	3%	1.6	2%	5.5	8%	52.6	36.1	69%	1.3	3%	0.3	1%	3.4	6%		
UK	203.7	117.4	58%	3.9	2%	6.3	3%	23.8	12%	227.7	124.1	55%	2.8	1%	4.0	2%	28.8	13%		
EU15	1 683.1	1 059.2	63%	70.7	4%	72.7	4%	114.3	7%	1 594.0	1 013.2	64%	50.0	3%	49.5	3%	112.6	7%		

PECO = Central and Eastern European Countries

Mediterranean Countries = Gibraltar, Malta, ex Yugoslavia, Turkey, Albania, Ceuta and Melilla, Morocco, Algeria, Tunisia, Libya, Egypt, Cyprus, Lebanon, Syria, Israel and Jordan

Population

1.5

	million																average for the year
	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15
1970	9.6	4.9	60.7	17.1	8.8	33.8	50.8	3.0	53.8	0.3	13.0	7.5	8.7	4.6	8.0	55.6	340.2
1980	9.8	5.1	61.5	16.7	9.6	37.4	53.9	3.4	56.4	0.4	14.2	7.5	9.8	4.8	8.3	56.3	355.2
1990	10.0	5.1	63.3	16.1	10.1	39.0	56.7	3.5	56.7	0.4	15.0	7.7	9.9	5.0	8.6	57.4	364.4
1991	10.0	5.2	80.0	D	10.3	39.0	57.1	3.5	56.8	0.4	15.1	7.8	9.9	5.0	8.6	57.8	366.4
1992	10.0	5.2	80.6	D	10.3	39.1	57.4	3.5	56.9	0.4	15.2	7.9	9.9	5.0	8.7	58.0	368.0
1993	10.1	5.2	81.1	D	10.4	39.1	57.7	3.6	57.1	0.4	15.3	8.0	9.9	5.1	8.7	58.0	369.6
1994	10.1	5.2	81.4	D	10.4	39.1	57.9	3.6	57.2	0.4	15.4	8.0	9.9	5.1	8.8	58.4	371.0
1995	10.1	5.2	81.7	D	10.5	39.2	58.1	3.6	57.3	0.4	15.5	8.0	9.9	5.1	8.8	58.6	372.1
1996	10.2	5.3	81.9	D	10.5	39.3	58.4	3.6	57.4	0.4	15.5	8.1	9.9	5.1	8.8	58.8	373.2

Area

1000 km²

1996	30.5	43.1	357.0	D	132.0	506.0	544.0	70.3	301.3	2.6	41.5	83.9	91.9	338.1	450.0	244.1	3236.2
-------------	------	------	-------	---	-------	-------	-------	------	-------	-----	------	------	------	-------	-------	-------	---------------

Density

persons/km²

1996	333	122	229	D	79	78	107	52	191	160	374	96	108	15	20	241	115
-------------	-----	-----	-----	---	----	----	-----	----	-----	-----	-----	----	-----	----	----	-----	------------

Transport Infrastructure Investment

million ECU

1994 prices

1.6

	B	DK	D(-W)	EL*	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	1985 =100
1985	2 195	571	13 772		2 141	9 519	246	7 210	88	1 876	1 941	304	806	941	4 727	46 337	100
1986	2 085	534	14 293		2 091	9 835	240	7 475	87	1 693	1 926	373	851	889	4 704	47 076	102
1987	1 718	538	14 079		2 532	9 956	200	9 115	108	1 849	1 588	437	923	961	5 308	49 312	106
1988	1 807	657	13 755		3 709	10 903	201	9 873	114	1 796	1 638	538	879	1 068	6 175	53 113	115
1989	1 427	790	13 819		4 517	10 972	249	9 752	122	1 932	1 673	629	951	1 257	7 339	55 429	120
1990	1 369	768	14 014		5 938	12 321	308	10 087	113	2 150	1 977	871	1 030	1 389	8 544	60 879	131
1991	1 559	823	20 397		6 271	13 490	343	9 931	161	2 179	1 795	1 005	1 044	1 160	8 186	68 344	147
1992	1 826	1 088	21 186		5 631	13 591	368	10 232	182	2 194	1 675	854	1 007	1 416	8 372	69 622	150
1993	2 063	923	20 489		5 651	13 428	465	8 938	177	2 309	1 766	975	880	1 787	8 027	67 878	146
1994	1 970	800	20 958		5 552	12 812	500	8 500	158	2 400	1 591	1 203	887	2 125	7 511	66 967	145

Investments as a % of GDP:

1994	1.0	0.7	1.2		1.4	1.1	1.1	1.0	1.3	0.9	1.0	1.7	1.1	1.3	0.9	1.1
-------------	-----	-----	-----	--	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Source : European Centre for Infrastructure Studies - 1996 report

Estimates in italic

* no data available for Greece and Eastern Germany

Employment by Mode of Transport

1.7.a

1994

1000 persons

	Railways	Other land transport incl. pipelines	Water transport (sea + incl. water)	Air transport	Auxiliary transport activities	Transport total	% of total employment
B	42.7	79.5	8.7	12.3	37.8	181.0	4.8%
DK	25.0	39.5	13.9	8.8	31.7	118.9	4.7%
D	327.1	443.6	35.0	58.1	658.0	1 521.8	4.2%
EL	12.0	95.8	38.9	5.0	47.5	199.2	5.3%
E	41.1	364.5	14.1	29.1	79.4	528.2	4.5%
F	185.7	451.4	8.0	58.5	212.2	915.8	4.2%
IRL	11.2	16.3	2.6	5.0	4.3	39.4	3.3%
I	140.2	448.6	39.6	33.0	124.2	785.6	3.9%
L	3.3	2.2	0.1	1.4	0.4	7.4	4.5%
NL	26.6	175.9	13.5	27.9	63.5	307.4	4.6%
A	62.3	94.6	1.2	4.3	26.8	189.2	5.1%
P	14.3	72.5	8.3	17.3	39.4	151.8	3.4%
FIN	17.4	58.0	10.7	5.2	19.3	110.6	5.4%
S	21.9	95.1	13.0	10.0	33.9	173.9	4.4%
UK	131.3	422.7	27.3	70.6	280.5	932.4	3.6%
EU15	1 062.1	2 860.2	234.9	346.5	1 658.9	6 162.6	4.2%

Source : EUROSTAT (employment according to NACE classification), national statistics

UK, A, S: data for 1995

Employment in Railways and Airlines

1.7.b

		Main railways				
		staff in 1000				
Company		1970	1980	1990	1995	1996
<i>B</i>	SNCB	56.7	65.7	45.2	41.9	41.1
<i>DK</i>	DSB	24.0	22.1	20.4	15.7	15.6
<i>D-W</i>	DB	392.7	329.0	236.0	294.9	256.7
<i>D-E</i>	DR	252.6	237.9	246.3	(DB)	(DB)
<i>EL</i>	CH	12.6	12.1	13.3	12.5	11.7
<i>E</i>	RENFE	85.1	71.5	49.7	39.0	37.4
<i>F</i>	SNCF	303.0	254.4	202.1	181.1	177.9
<i>IRL</i>	CIE	22.3	18.1	11.8	11.1	11.0
<i>I</i>	FS	197.6	220.7	200.4	129.8	123.4
<i>L</i>	CFL	4.4	4.2	3.5	3.2	3.2
<i>NL</i>	NS	26.8	26.9	26.2	24.5	24.0
<i>A</i>	ÖBB	73.9	72.5	66.9	61.3	57.0
<i>P</i>	CP	25.6	24.7	22.1	13.1	13.0
<i>FIN</i>	VR (+RHK)	27.7	28.7	20.2	15.3	14.9
<i>S</i>	SJ (+ Banverket)*	45.3	37.5	20.8	21.6	22.0
<i>UK</i>	BR (+ Railtrack)*	274.3	241.9	135.3	101.7	100.0
Total		1 824.6	1 667.9	1 320.2	966.7	908.9

*UK (1995): BR: 90.2 Railtrack: 11.5 *S (1995): SJ: 14.2; Banverket: 7.4

D: 1994 creation of DB AG out of former DB and DR

<i>USA</i>	AAR (freight)	566.3	459.0	216.4	188.2	181.2
<i>JAP</i>	JR	459.7	413.6	193.8	192.5	190.2

		Main airlines				
		staff in 1000				
Company		1980	1990	1994	1995	1996
<i>B</i>	Sabena	10.1	7.5	9.8	9.9	9.3
<i>DK/S</i>	SAS	16.4	19.6	19.1	18.7	21.3
<i>D</i>	Lufthansa	30.7	47.6	42.3	38.0	34.2
<i>EL</i>	Olympic	8.8	11.9	10.3	9.1	7.8
<i>E</i>	Iberia	24.2	28.8	23.0	23.6	19.7
<i>F</i>	Air France	33.2	39.8	37.5	37.3	36.5
<i>IRL</i>	Air Lingus	6.9	7.1	5.2	5.4	5.6
<i>I</i>	Alitalia	18.2	19.7	18.7	18.4	17.9
<i>L</i>	Luxair	0.7	1.1	1.2	1.2	1.3
<i>NL</i>	KLM	19.0	26.4	23.6	25.3	25.5
<i>A</i>	Austrian Airlines	2.6	4.2	3.9	3.9	4.1
<i>P</i>	TAP	10.0	10.5	8.8	8.2	7.4
<i>FIN</i>	Finnair	5.4	7.3	7.1	7.9	8.2
<i>UK</i>	British Airways	52.0	53.6	49.6	53.1	55.3
Total		238.2	285.1	260.1	260.0	254.2

Source: for railways : UIC, for airlines : IATA

Number of Enterprises by Mode of Transport

1995

1.8

	Railways	Other land transport incl. pipelines	Water transport (sea+ inland waterways)	Air transport	Auxiliary transport activities	Transport total	Persons employed per enterprise
B	11	12 322	2 415	197	4 344	19 289	9.4
D	99	89 317	2 413	408	33 511	125 748	12.1
DK	14	11 887	876	169	2 894	15 840	7.5
E	49	185 332	379	194	16 833	202 787	2.6
F	27	81 662	2 010	575	11 620	95 894	9.6
EL	1	20 000	175	57	5 157	25 390	7.8
I	29	102 165	565	164	19 201	122 124	6.4
IRL	2	2 252	43	38	752	3 087	12.8
L	1	505	39	6	136	687	10.8
NL	1	10 949	4 870	65	4 740	20 625	14.9
P	1	13 566	70	15	1 552	15 204	10.0
UK	114	48 078	1 194	1 083	10 581	61 050	15.3
A	21	11 255	110	112	2 419	13 917	13.6
FIN	2	19 286	290	78	1 287	20 943	5.3
S	11	22 918	318	91	2 210	25 548	6.8
EU15	383	631 494	15 767	3 252	117 237	768 133	8.0

Source : EUROSTAT and national sources

NACE classification (strong difference between statistical sources)

figures in italic: 1994 results

figures for IRL, NL are provisional

EL, L: Eurostat estimates

Turnover by Mode of Transport

1.9

1995

billion ECU

	Main railways	Other land transport incl. pipelines	Water transport (sea+ inland waterways)	Air transport	Auxiliary transport activities	Transport total	Turnover per person employed (1000 ECU)
B	1.54	8.49	1.60	2.46	12.59	26.68	147.4
D	10.20	35.80	3.78	7.78	49.42	106.98	70.3
DK	1.05	2.98	4.42	1.37	3.71	13.53	113.8
E	2.40	14.00	2.00	6.00	13.00	37.40	70.8
F	8.00	30.30	3.24	9.96	24.22	75.72	82.7
EL	0.10	4.41	4.15	1.53	3.13	13.32	66.9
I	6.40	22.70	3.46	9.27	23.48	65.31	83.1
IRL	0.50	1.50	0.20	0.40	0.32	2.92	74.1
L	0.08	0.40	0.00	0.50	0.25	1.23	166.2
NL	2.36	8.91	4.05	5.04	7.67	28.03	91.2
P	0.29	2.37	1.30	1.63	4.93	10.52	69.3
UK	9.07	24.57	4.44	15.06	32.09	85.23	91.4
A	1.52	6.02	0.22	1.41	8.15	17.32	91.5
FIN	0.54	3.30	1.69	1.15	3.00	9.68	87.5
S	1.30	7.56	2.72	2.04	9.59	23.21	133.5
EU15	45.35	173.31	37.27	65.60	195.55	517.08	83.9

Source : Eurostat

Internet Hosts

1.10

per 1000 inhabitants

	1995 Jan 31	1997 Jan 31	1998 Jan 31	Change 98/97 %
Finland	14.0	63.9	97.8	+53
Sweden	9.0	27.9	40.8	+46
Denmark	5.2	21.2	32.8	+55
Netherlands	5.7	17.8	25.8	+45
United Kingdom	4.1	13.0	18.0	+38
Germany	2.6	9.1	13.9	+53
Austria	3.6	12.3	13.7	+12
EU 15	2.5	8.8	12.9	+47
Luxembourg	1.5	8.3	11.8	+42
Ireland	1.7	7.6	11.3	+48
Belgium	1.9	6.6	11.0	+67
France	1.6	4.3	6.6	+53
Spain	0.7	3.0	5.1	+70
Italy	0.6	3.4	4.4	+30
Portugal	0.6	2.4	4.3	+79
Greece	0.4	1.6	2.5	+62
Estonia	0.9	6.1	11.3	+85
Slovenia	0.9	7.4	9.7	+31
Hungary	0.8	3.0	7.0	+133
Czech Rep.	0.0	4.1	5.8	+43
Slovak Rep.	0.3	1.5	2.8	+84
Latvia	0.2	2.4	2.6	+9
Poland	0.3	1.4	2.4	+72
C.E.C.	0.1	0.5	1.0	+97
Lithuania	0.0	0.5	1.1	+129
Bulgaria	0.0	0.4	0.8	+87
Romania	0.0	0.4	0.6	+59

Source : RIPE NCC

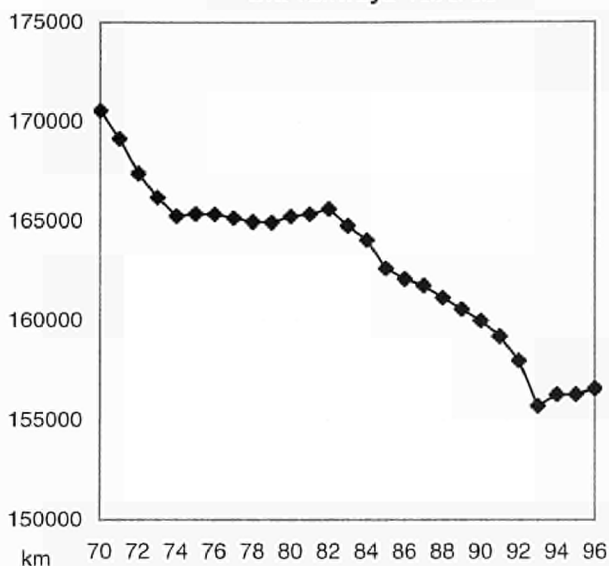
<http://www.ripe.net/statistics/hostcount.html#overview>

Chapter 2

Infrastructure

Railways : Length of Lines 2.1.a

UIC railways 1970-96



High speed rail network								km
	B	DK	D	E	F	I	UK	EU15
1981	-	-	-	-	301	150	-	451
1983	-	-	-	-	417	150	-	567
1988	-	-	90	-	417	224	-	731
1990	-	-	90	-	699	224	-	1 013
1991	-	-	427	-	699	224	-	1 350
1992	-	-	427	471	737	248	-	1 883
1993	-	-	427	471	1 057	248	-	2 203
1994	-	-	427	471	1 185	248	25	2 356
1995	-	-	427	471	1 185	248	25	2 356
1996	14	-	427	471	1 272	248	25	2 457
1997	85	20	427	471	1 272	248	25	2 548

Source : UIC, data for UIC member railways

Railways : Length of Lines

km

2.1.b

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100
1970	4 232	2 352	29 527	14 250	2 571	13 668	36 117	2 189	16 069	271	3 148	5 907	3 591	5 870	11 550	19 691	171 003	100
1980	3 978	2 015	28 517	14 248	2 461	13 542	34 382	1 987	16 133	270	2 760	5 847	3 588	6 096	11 382	18 490	165 696	97
1990	3 479	2 344	26 950	14 031	2 484	12 560	34 260	1 944	16 086	271	2 798	5 624	3 592	5 867	10 801	17 406	160 497	94
1993	3 410	2 349	40 369	D	2 484	12 601	32 579	1 944	15 942	275	2 757	5 600	3 062	5 885	9 476	16 996	155 729	91
1994	3 398	2 306	41 355	D	2 464	12 646	32 275	1 944	16 002	275	2 757	5 636	2 699	5 880	9 661	16 998	156 296	91
1995	3 368	2 349	41 719	D	2 474	12 280	31 939	1 947	15 998	275	2 739	5 672	2 850	5 880	9 782	17 026	156 298	91
1996	3 380	2 349	40 826	D	2 474	12 284	31 852	1 945	16 014	274	2 739	5 672	2 850	5 881	10 923	17 128	156 591	92

of which, % electrified :

1996	73%	17%	45%	D	0%	56%	45%	2%	64%	95%	73%	60%	22%	35%	68%	30%	47%
-------------	-----	-----	-----	---	----	-----	-----	----	-----	-----	-----	-----	-----	-----	-----	-----	------------

Main railway gauge and electric current used :

mm	1435	1435	1435	1435	1435	1668	1435	1600	1435	1435	1435	1435	1668	1524	1435	1435
dc volts	3000	3000				3000	1500	1500	3000		1500					Contact rail
ac volts		25000 50Hz	15000 16.7Hz	15000 16.7Hz			25000 50Hz			25000 50Hz		15000 16.7Hz	25000 50Hz	25000 50Hz	15000 16.7Hz	25000 50Hz

Source : UIC, data for UIC member railways

D : included in D(-W)

1435 mm = standard gauge

Motorways : Length at End of Year

km

2.2

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100
1970	488	184	4 461	1 600	11	387	1 553	0	3 913	7	1 209	439	66	108	403	1 073	15 902	100
1980	1 192	516	7 538	1 687	91	1 933	5 264	0	5 900	44	1 773	869	132	204	850	2 573	30 566	192
1990	1 666	601	8 959	1 850	190	4 425	6 824	26	6 185	78	2 092	1 470	318	225	939	3 181	39 029	245
1991	1 650	653	10 955	D	225	5 065	7 080	32	6 214	84	2 118	1 532	474	249	968	3 211	40 510	255
1992	1 667	706	11 013	D	280	6 209	7 408	32	6 289	95	2 134	1 554	519	318	1 005	3 246	42 475	267
1993	1 686	747	11 080	D	330	6 577	7 614	50	6 401	100	2 150	1 567	579	334	1 044	3 252	43 511	274
1994	1 665	786	11 143	D	380	6 485	7 956	56	6 401	121	2 167	1 589	587	388	1 141	3 286	44 151	278
1995	1 666	830	11 190	D	420	6 962	8 275	70	6 401	<u>123</u>	2 300	1 596	687	394	1 231	3 308	45 453	286
1996	1 674	880	11 300	D	470	7 293	8 300	80	6 439	115	2 360	1 607	710	431	1 330	3 344	46 333	291

Source : EUROSTAT , IRF , national statistics

Estimates in italic

D : included in D(-W)

Pipelines (Oil) : Length of Lines

2.3

	km																index 1970= 100	
	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	
1970	52	-	2 058	1 300	-	1 099	3 609	-	1 860	-	323	604	-	-	-	1 634	12 539	100
1980	458	77	2 086	1 301	-	1 753	5 254	-	3 069	-	391	777	-	-	-	3 166	18 332	146
1990	301	444	2 222	1 323	-	2 678	4 948	-	4 086	-	391	777	-	-	-	2 422	19 592	156
1991	294	444	3 318	D	-	3 097	4 871	-	4 098	-	391	777	-	-	-	2 650	19 940	159
1992	294	409	3 318	D	-	3 536	4 871	-	4 235	-	391	777	-	-	-	2 762	20 593	164
1993	294	409	3 318	D	-	3 536	4 830	-	4 235	-	391	777	-	-	-	2 601	20 391	163
1994	294	409	3 318	D	-	3 536	4 830	-	4 235	-	391	777	-	-	-	2 602	20 392	163
1995	294	409	3 318	D	-	3 691	4 830	-	4 235	-	391	777	-	-	-	2 602	20 547	164

Source : EUROSTAT , UN , ECMT

Includes only data for pipelines longer than 40 km

Estimates in italic

D : included in D(-W)

Inland Waterways : Length In Use

2.4

Navigable canals, rivers and lakes

km

index
1970=
100

	B	D(-W)	D-E	DK	E	F	EL	I	IRL	L	NL	A	P	FIN	S	UK	EU15	
1970	1 553	4 508	2 300	-	-	7 433	-	2 337	-	37	5 599	350	-	6 000	:	2 351	32 468	100
1980	1 510	4 395	2 302	-	-	6 568	-	2 337	-	37	4 843	350	-	6 057	:	2 351	30 750	95
1990	1 513	<u>4 350</u>	2 319	-	-	6 197	-	1 366	-	37	5 046	351	-	6 160	:	2 351	29 690	91
1991	1 513	7 341	D	-	-	5 951	-	1 366	-	37	5 046	351	-	6 160	:	2 353	30 118	93
1992	1 513	7 341	D	-	-	5 867	-	1 466	-	37	5 046	351	-	6 120	:	2 353	30 094	93
1993	1 513	7 681	D	-	-	5 825	-	1 466	-	37	5 046	351	-	6 120	:	2 353	30 392	94
1994	1 513	7 681	D	-	-	5 703	-	1 466	-	37	5 046	351	-	6 120	:	2 353	30 270	93
1995	1 513	7 343	D	-	-	5 962	-	1 466	-	37	5 046	351	-	6 120	:	2 353	30 191	93

Source : EUROSTAT , UN

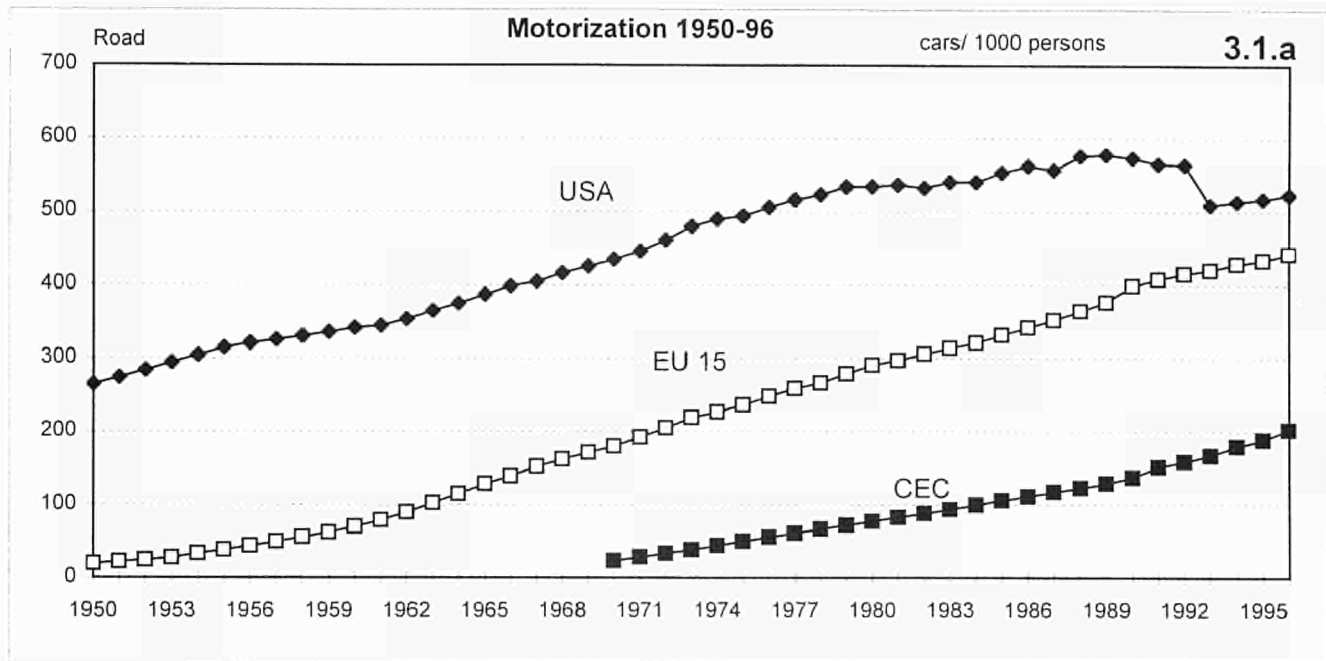
Estimates in italic underlined : change in time series

D : included in D(-W)

Sweden: data not available

Chapter 3

Means of Transport



USA : change in time series from 1993

Road

Motorization

3.1.b

number of cars per 1000 inhabitants

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970=100
1970	214	218	230	68	26	70	234	133	189	212	197	160	49	155	284	183	179	99
1980	321	271	377	160	89	202	341	217	313	352	322	298	94	256	347	266	289	160
1990	388	309	485	299	171	308	466	227	483	480	368	388	187	389	421	352	400	222
1991	397	307	462	D	173	321	474	234	501	496	368	397	203	385	421	349	409	227
1992	400	310	471	D	177	335	476	242	518	513	373	412	205	384	414	350	416	231
1993	409	312	479	D	188	343	478	250	520	523	376	422	224	371	410	355	421	234
1994	417	312	488	D	199	351	478	263	540	540	383	433	242	368	409	360	430	239
1995	421	321	495	D	211	362	477	267	553	559	364	447	258	372	411	358	435	241
1996	424	329	501	D	223	376	477	272	571	559	370	458	277	379	413	369	444	246

Source : EUROSTAT , national statistics , IRF

Estimates in italic

Underlined : change in the time series

D : included in D(-W)

Road

Passenger Cars

3.2

million

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970=100
1970	2.1	1.1	13.9	1.2	0.2	2.4	11.9	0.4	10.2	0.1	2.6	1.2	0.4	0.7	2.3	10.2	60.8	100
1980	3.2	1.4	23.2	2.7	0.9	7.6	18.4	0.7	17.7	0.1	4.6	2.2	0.9	1.2	2.9	15.0	102.6	169
1990	3.9	1.6	30.7	4.8	1.7	12.0	26.4	0.8	27.4	0.2	5.5	3.0	1.8	1.9	3.6	20.2	145.6	239
1991	4.0	1.6	37.0	D	1.8	12.5	27.1	0.8	28.4	0.2	5.6	3.1	2.0	1.9	3.6	20.2	149.8	246
1992	4.0	1.6	37.9	D	1.8	13.1	27.3	0.9	29.4	0.2	5.7	3.2	2.0	1.9	3.6	20.3	153.1	252
1993	4.1	1.6	38.9	D	2.0	13.4	27.6	0.9	29.7	0.2	5.8	3.4	2.2	1.9	3.6	20.6	155.7	256
1994	4.2	1.6	39.8	D	2.1	13.7	27.7	0.9	30.9	0.2	5.9	3.5	2.4	1.9	3.6	21.0	159.3	262
1995	4.3	1.7	40.4	D	2.2	14.2	27.8	1.0	31.7	0.2	5.6	3.6	2.6	1.9	3.6	21.0	161.7	266
1996	4.3	1.7	41.0	D	2.3	14.8	27.9	1.0	32.8	0.2	5.7	3.7	2.8	1.9	3.7	21.7	165.5	272

Source : EUROSTAT , national statistics , IRF

Estimates in italic

D : included in D(-W)

Vehicle Production

thousands

	Passenger cars			Commercial vehicles		
	1995	1996	Change 96/95 %	1995	1996	Change 96/95 %
B	410	385	-6.1	62	52	-15.1
D	4 360	4 540	+4.1	307	303	-1.2
E	1 959	1 942	-0.9	375	471	+25.5
F	3 051	3 148	+3.2	424	443	+4.5
I	1 422	1 318	-7.3	245	227	-7.2
NL	100	145	+44.6	17	18	+3.9
A	43	58	+34.3	9	9	-5.1
P	41	119	+188.9	16	13	-19.7
S	388	368	-5.1	102	95	-6.9
UK	1 532	1 686	+10.1	233	238	+2.3
EU 15	13 307	13 708	+3.0	1 791	1 870	+4.4

Source : Verband der Automobilindustrie e.V. (Frankfurt)

Road

Buses and Coaches**3.4**

thousands

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970=100
1970	16.2	5.0	47.3	16.7	10.5	30.7	41.0	2.0	32.9	0.6	9.5	6.8	5.9	8.1	14.3	79.2	327	100
1980	19.6	7.4	70.5	25.3	18.0	42.6	65.0	2.7	58.1	0.6	11.2	9.0	8.5	9.0	12.8	78.3	439	134
1990	15.6	8.1	70.4	30.0	21.4	45.8	75.0	4.0	77.7	0.8	12.1	9.4	12.1	9.3	14.6	73.0	479	147
1991	15.4	10.0	89.6	D	22.1	46.6	77.0	4.4	78.6	0.8	12.4	9.3	12.3	8.9	14.5	72.0	474	145
1992	15.0	11.3	90.9	D	22.7	47.2	76.0	4.6	78.2	0.8	12.3	9.4	12.8	8.7	14.2	72.0	476	146
1993	15.0	13.0	88.4	D	23.2	47.0	77.7	6.0	77.0	0.8	12.2	9.5	13.6	8.3	14.1	73.0	479	146
1994	14.9	13.6	88.5	D	23.5	47.0	79.3	6.2	78.0	0.9	11.0	9.6	14.3	8.1	14.3	75.0	484	148
1995	14.6	13.5	86.3	D	24.6	47.4	80.0	6.4	77.2	0.8	12.0	9.8	15.0	8.1	14.6	75.0	485	148
1996	14.7	14.0	90.0	D	25.1	48.4	82.0	6.6	78.0	0.9	12.0	9.7	15.6	8.2	14.9	75.0	495	151

Source : Eurostat, ECMT, national statistics

Estimates in italic

D: included in D(-W)

Road

Goods Vehicles (1)

3.5

thousands

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970=100
1970	187	245	1 028	160	105	710	1 504	49	877	9	286	121	100	108	145	1 966	7 600	100
1980	217	249	1 277	234	401	1 338	2 515	65	1 338	9	314	184	230	146	182	2 148	10 847	143
1990	285	287	1 389	264	743	2 333	3 568	143	2 349	11	507	253	555	264	310	2 729	15 989	210
1991	364	291	1 660	D	793	2 495	3 685	148	2 448	12	527	259	620	264	310	2 664	16 540	218
1992	400	297	1 849	D	798	2 650	3 677	145	2 400	13	565	269	684	263	305	2 630	16 944	223
1993	407	306	2 020	D	826	2 735	3 618	135	2 314	14	600	276	747	253	302	2 615	17 168	226
1994	417	322	2 114	D	849	2 832	3 606	130	2 325	15	650	283	830	249	304	2 626	17 552	231
1995	433	333	2 215	D	884	2 937	3 597	121	2 500	15	578	290	866	272	308	2 635	17 984	237
1996	446	340	2 273	D	915	3 057	3 600	115	2 850	16	560	294	917	259	312	2 688	18 642	245

Source : EUROSTAT, IRF, national statistics

Estimates in italic

D : included in D(-W)

(1) difference in definitions between countries (includes vans in some countries),
the comparability of the data is therefore limited.

Underlined: break in time series

Rail

Passenger Transport Vehicles

3.6

(coaches + railcars + trailers)

units

index
1970=
100

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	
1970	3 415	1 481	21 506	10 000	574	3 353	15 053	481	11 357	114	1 932	4 125	980	1 043	2 705	18 678	96 797	100
1980	3 641	1 613	18 357	10 761	660	3 506	15 922	343	13 611	102	1 986	4 055	1 143	1 095	2 021	17 042	95 858	99
1990	3 286	1 594	14 504	9 635	810	3 839	15 748	314	14 025	114	2 268	3 689	1 232	957	1 747	12 564	86 326	89
1991	3 252	1 586	23 949	D	820	3 948	15 764	317	13 959	142	2 332	3 833	1 252	971	1 708	11 825	85 658	88*
1992	3 231	1 666	23 210	D	830	3 972	15 682	322	14 148	150	2 563	3 834	1 270	979	1 657	11 291	84 805	88
1993	3 173	1 665	23 109	D	854	4 119	15 507	315	13 893	148	2 519	3 832	1 244	979	1 584	10 999	83 940	87
1994	3 109	1 623	19 616	D	861	4 193	15 589	318	13 744	146	2 631	3 779	1 346	968	1 623	10 637	80 183	83
1995	3 110	1 688	19 083	D	869	4 230	15 799	318	13 527	146	2 611	3 740	1 341	977	1 655	8 314	77 408	80
1996	3 271	1 534	18 163	D	869	4 448	15 764	334	13 068	146	2 691	3 287	1 394	947	1 589	8 000	75 505	78

Source : UIC

D : included in D(-W)

Rail

Goods Transport Wagons

3.7

thousands

index
1970 =
100

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	
1970	48.9	10.3	321.0	138.0	9.0	41.0	302.4	9.5	125.9	4.2	19.2	34.9	9.0	21.9	48.2	364.9	1 508.3	100
1980	43.4	8.3	334.2	142.2	10.9	41.0	253.1	4.7	113.4	3.7	12.3	38.7	6.7	21.5	45.9	141.2	1 221.2	81
1990	30.3	4.6	203.6	163.2	11.0	37.2	162.0	1.8	99.7	2.7	6.7	34.3	4.6	15.2	27.5	34.4	838.9	56
1991	29.6	4.5	363.9	D	11.0	36.1	141.0	1.8	97.4	2.5	6.4	34.8	4.4	14.7	25.0	30.9	803.9	53
1992	28.6	4.7	360.7	D	11.0	35.0	138.2	1.8	95.0	2.6	6.3	36.6	4.4	14.1	23.5	21.2	783.9	52
1993	20.8	4.6	312.2	D	11.1	31.5	134.3	1.8	91.6	2.5	6.4	34.7	4.2	14.0	22.4	27.7	719.8	48
1994	20.0	4.2	271.5	D	11.1	33.0	124.6	1.8	90.0	2.6	6.0	31.9	4.2	14.0	21.0	14.2	650.1	43
1995	20.3	4.1	245.9	D	11.1	29.7	116.1	1.8	89.1	2.4	6.0	28.9	3.9	14.0	20.4	<i>14.0</i>	608.0	40
1996	19.6	4.1	240.5	D	11.1	28.7	112.2	1.6	80.6	2.3	5.8	27.1	4.2	13.7	19.9	<i>14.0</i>	585.3	39

Source : UIC, data relate to main railways (UIC members)

Estimates in italic

D : included in D(-W)

Sea

EU Merchant Fleet

Number of ships of 1000 grt and over

Data as at January 1st, 1997

	B	DK (a)	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	1996
	Total fleet controlled																
Number	137	575	1 388	2 821	207	217	40	546	2	508	45	44	149	343	641	7 663	7,790
mio dwt	4.1	12.3	17.2	115.0	2.8	7.6	0.15	11.1	0.01	5.2	0.6	0.9	3.1	13.9	20.1	214.1	217.0
	National flag																
Number	5	386	431	903	120	125	31	402	2	365	28	32	102	190	203	3 325	3,532
mio dwt	0.01	7.2	6.0	46.0	1.4	4.2	0.13	7.2	0.01	3.2	0.1	0.38	1.1	2.0	4.0	83	86.8
	Foreign flag																
Number	132	189	957	1 918	87	92	9	144	0	143	17	12	47	153	438	4 338	4,258
mio dwt	4.1	5.2	11.2	68.9	1.4	3.4	0.02	3.9	0.00	2.0	0.5	0.5	2.0	11.9	16.1	131	130.2
	Share of foreign flag in total fleet																
Number	96%	33%	69%	68%	42%	42%	23%	26%	0%	28%	38%	27%	32%	45%	68%	57%	55%
dwt	100%	42%	65%	60%	51%	45%	14%	35%	0%	39%	79%	58%	64%	85%	80%	61%	60.0%

Source : ISL merchant fleet data bases; aggregates based on quarterly updates from the Lloyd's Maritime Information System

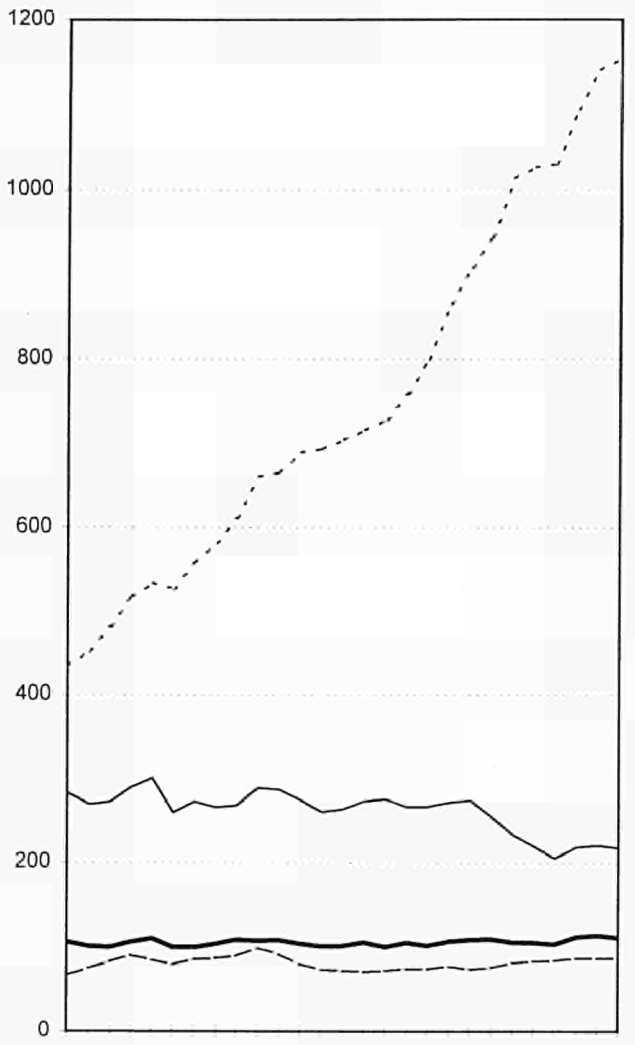
(a) including international registers like the Danish International Ship Register; including vessels registered at territorial dependencies

Chapter 4

Goods Transport

Goods Transport
Evolution 1970-96
billion tkm

4.1.a



- - - - Road
- Rail
- Inland waterways
- - - Pipeline

Evolution 1970-96**Performance by mode**
1000 mio tkm

	Road	Rail	Inland Water-ways	Pipelines	Total
1970	434	283	106	66	889
1980	665	287	108	93	1 154
1990	944	256	109	77	1 386
1994	1094	219	112	86	1 511
1995	1141	221	114	86	1 562
1996	1159	219	111	86	1 575
1990-96	+22.8 %	-14.6 %	+2.0 %	+12.3 %	+13.7 %

Source : EUROSTAT, ECMT, UIC, national statistics

Average annual change
% per year

	Road	Rail	Inland Water-ways	Pipelines	Total
1970-96	+3.8	-1.0	+0.2	+1.0	+2.2
1970-80	+4.4	+0.2	+0.2	+3.4	+2.6
1980-90	+3.6	-1.1	+0.1	-1.9	+1.9
1990-96	+3.5	-2.6	+0.3	+2.0	+2.2
1996	+1.6	-1.0	-2.2	-0.4	+0.9

Modal split
%

	Road	Rail	Inland Water-ways	Pipelines
1970	48.9	31.8	11.9	7.5
1980	57.7	24.9	9.4	8.1
1990	68.1	18.5	7.9	5.5
1994	72.4	14.5	7.4	5.7
1995	73.0	14.1	7.3	5.5
1996	73.6	13.9	7.0	5.5

Transport Distances and Groups of Goods

General data

1995	Road	Rail (1)	Inland waterways	Pipelines	Sea intra-EU	Total
tons transported, million	10 600	900	500	500	500	13 000
ton-km, billion	1100	220	110	90	400	1 920
average n° of km per ton	100	245	230	170	800	150
tons : internat. traffic, %	4	15	50	50	55	10
tkm : internat. traffic, %	20	45	70	50	70	35
Modal Split tons, %	81	7	4	4	4	100
Modal Split tkm, %	58	11	6	4	21	100

(1) : average km/tonne is 320 km if international traffic is not counted twice

Distance classes*

national transport
(national traffic only)

km	% of	
	tons	tkm
0-49	60	10
50-149	22	20
150- 499	15	45
500-	3	25

Groups of goods*

% of tkm

(NST/R classification groups in brackets)	Road	Rail	Inland waterways	Total
Agricultural products (0, 1)	29	13	13	25
Coal, other solid mineral fuels (2)	1	12	12	4
Petroleum and petroleum products (3)	5	8	19	6
Iron ore, steel other metal products (4, 5)	8	20	18	11
Cement, building materials (6)	19	11	25	18
Chemicals, fertilizers (7, 8)	9	11	10	10
Machinery, manufactured articles (9)	29	25	3	26
All goods	100	100	100	100

* data refer to EU 12, 1992 and 3 modes: road, rail and inland waterways

Modal Split by Country**1996**

tkm in %

	Road	Rail	Inland Waterways	Pipelines
B	75.0	12.7	9.6	2.6
DK*	82.9	6.2	0.0	10.9
D	66.2	15.9	14.4	3.4
EI*	98.1	1.9	0.0	0.0
E	91.9	5.0	0.0	3.0
F	67.2	21.0	2.4	9.3
IRL	90.6	9.4	0.0	0.0
I	85.3	9.2	0.1	5.4
L*	71.2	18.4	10.4	0.0
NL*	58.2	2.9	33.2	5.6
A	42.4	34.2	5.4	18.1
P*	90.3	9.7	0.0	0.0
FIN	72.7	26.6	0.7	0.0
S	62.4	37.6	0.0	0.0
UK	85.0	7.5	0.1	7.3
EU 15	73.6	13.9	7.0	5.5

* Modal Split based on national and international road traffic of vehicles registered in the country

Goods Transport

Road

1000 mio tkm

4.4

National and international haulage on national territory by vehicles registered in the country

(1)

	B (3)	DK (2)	D(-W) (5)	D-E	EL (2)	E (5)	F (4)	IRL	I	L (2)	NL (2)	A	P (2)	FIN	S	UK (4)	EU15	Index 1970= 100	modal share %
1970	13.1	4.8	78.0	12.2	7.0	51.7	63.6	4.0	58.7	0.1	12.4	6.8	6.7	12.4	17.8	85.0	434.3	100	48.9
1980	18.3	7.8	124.4	21.0	9.1	89.5	<u>98.1</u>	5.0	119.6	0.3	17.7	10.0	11.8	18.4	21.4	93.0	665.4	153	57.7
1990	32.1	9.4	169.8	13.0	12.6	151.0	137.0	5.1	177.9	<u>0.2</u>	22.9	13.3	10.9	26.3	26.5	136.3	944.4	217	68.1
1991	34.1	9.0	245.7	D	11.9	157.2	139.8	5.1	182.8	0.4	23.3	13.6	10.8	24.7	25.4	130.0	1013.8	233	70.7
1992	<u>33.0</u>	9.4	252.4	D	12.5	160.6	142.9	5.2	184.9	0.5	25.6	13.7	10.6	24.7	24.3	126.5	1026.7	236	71.5
1993	36.0	8.8	251.5	D	12.0	164.2	137.5	5.1	179.4	0.5	26.0	14.2	10.0	25.0	<u>25.9</u>	134.5	1030.4	237	72.4
1994	41.6	9.5	272.0	D	12.1	172.3	145.4	5.3	187.2	0.5	25.7	15.2	11.2	<u>25.7</u>	27.0	143.7	1094.4	252	72.4
1995	42.6	9.3	279.7	D	12.4	183.2	157.1	5.4	194.8	0.5	27.0	15.7	11.1	23.2	29.3	149.6	1141.0	263	73.1
1996	42.8	9.4	281.3	D	12.8	<i>186.7</i>	158.2	5.5	197.6	0.6	27.6	16.6	11.2	24.1	31.2	153.9	1159.4	267	73.6

Source : ECMT , Eurostat completed by national statistics and estimates.

National and international haulage by vehicles registered in the country (1995, bio tkm): DK 23.4; EL 17.0; L 2.1; NL 60.6; P 17.0

Estimates in italic

(1) road+rail+pipelines+inland waterways

underlined: change in time series

(2) national traffic only

(3) national+international traffic

D : included in D(-W)

(4) vehicles with a payload over 3 tonnes

(5) transport on national territory

Goods Transport

Railways

4.5

1000 mio tkm

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100	(1) modal share %
1970	7.9	1.9	71.5	41.5	0.7	9.7	67.6	0.5	18.1	0.8	3.7	10.0	0.8	6.3	17.3	24.5	282.8	100	31.8
1980	8.0	1.6	64.9	56.4	0.8	11.3	66.4	0.6	18.4	0.7	3.4	11.2	1.0	8.3	16.6	17.6	287.3	102	24.9
1990	8.4	1.7	61.9	39.8	0.6	11.6	50.7	0.6	19.5	0.6	3.1	12.8	1.5	8.4	19.1	16.0	256.2	91	18.5
1991	8.2	1.9	80.3	D	0.6	10.8	51.5	0.6	19.7	0.6	3.0	13.0	1.7	7.6	18.8	15.3	233.4	83	16.3
1992	8.1	1.9	69.8	D	0.5	9.6	49.5	0.6	19.9	0.6	2.8	12.3	1.8	7.9	19.2	15.5	219.9	78	15.3
1993	7.6	1.8	64.9	D	0.5	8.1	45.0	0.6	18.4	0.6	2.7	12.0	1.7	9.3	18.6	13.8	205.5	73	14.4
1994	8.1	2.0	69.1	D	0.3	9.0	48.8	0.6	20.5	0.6	2.8	13.2	1.6	9.9	19.0	13.0	218.6	77	14.5
1995	7.3	1.9	68.8	D	0.3	10.4	47.9	0.6	22.2	0.5	3.1	13.9	2.0	9.6	19.4	13.1	221.0	78	14.2
1996	7.3	1.8	67.7	D	0.3	10.2	49.5	0.6	21.3	0.6	3.1	13.4	1.9	8.8	18.8	13.6	218.8	77	13.9

Source : UIC, ECMT, national statistics

non-UIC railways are included (ca. 1% of market)

Estimates in italic

D : included in D(-W)

(1) : road+rail+pipelines+inland waterways

Goods Transport

4.6

Inland Waterways

1000 mio tkm

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100	(1) modal share %
1970	6.7		48.8	2.4			14.2	0.0	0.4	0.3	30.7	1.3		0.4		0.3	105.5	100	11.9
1980	5.9		51.4	2.2			12.2	0.0	0.2	0.3	33.5	1.6		0.4		0.4	108.0	102	9.4
1990	5.4		54.8	1.9			7.6	0.0	0.1	0.3	36.5	1.7		0.3		0.2	108.9	103	7.9
1991	5.2		56.0	D			6.8	0.0	0.1	0.3	34.8	1.5		0.2		0.2	105.2	100	7.3
1992	5.1		57.2	D			6.9	0.0	0.1	0.3	33.5	1.4		0.2		0.2	105.0	100	7.3
1993	5.1		57.6	D			6.0	0.0	0.1	0.3	32.1	1.5		0.2		0.2	103.0	98	7.2
1994	5.5		61.8	D			5.6	0.0	0.1	0.3	36.0	1.8		0.2		0.2	111.6	106	7.4
1995	5.6		64.0	D			5.9	0.0	0.1	0.3	35.1	2.0		0.2		0.2	113.5	108	7.3
1996	5.5		61.3	D			5.7	0.0	0.2	0.3	35.3	2.1		0.2		0.2	111.0	105	7.0

Source : ECMT , Eurostat, national statistics

Estimates in italic

D : included in D(-W)

(1) : road+rail+pipelines+inland waterways

Pipelines (Oil)

1000 mio tkm

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100	(1) modal share %
1970	0.3	0.0	15.1	2.2		1.0	28.2		9.1		4.1	3.6				2.7	66.2	100	7.5
1980	1.8	0.0	14.3	5.0		3.0	34.7		11.9		5.0	7.1				10.1	92.9	140	8.1
1990	1.0	1.7	13.3	3.3		4.2	20.5		11.5		4.9	5.3				11.0	76.7	116	5.5
1991	1.1	2.2	15.7	D		4.8	22.7		11.8		5.4	6.7				11.1	81.5	123	5.7
1992	1.2	2.4	15.7	D		5.3	23.4		12.2		5.5	6.7				11.0	83.4	126	5.8
1993	1.3	2.5	16.1	D		5.4	23.3		12.2		5.5	6.7				11.6	84.6	128	5.9
1994	1.4	2.9	16.8	D		5.5	22.8		12.5		5.6	7.0				12.0	86.4	131	5.7
1995	1.4	2.9	16.6	D		5.9	22.2		12.8		5.3	6.8				12.2	86.0	130	5.5
1996	1.5	3.1	14.5	D		6.1	21.9		12.6		6.0	7.1				13.3	86.1	130	5.5

Source : ECMT, Eurostat

Estimates in italic

D : included in D(-W)

(1) : road+rail+pipelines+inland waterways

Port Traffic (Major Seaports)

million tons

Port, Country	1970	1980	1990	1995	1996	change 96/95 %
1 Rotterdam, NL	226	276	288	291	284	-2.4
2 Antwerpen, B	78	82	102	108	107	-1.4
3 Marseille, F	74	103	90	87	91	+4.7
4 Hamburg, D	47	63	61	72	71	-1.7
5 Le Havre, F	58	77	54	54	56	+3.4
6 London, UK	64	48	58	51	53	+2.9
7 Genoa, I	53	51	44	46	46	+0.2
8 Forth ports, UK			25	47	46	-3.2
9 Tees & Hartlep., UK	23	38	40	45	45	+0.2
10 Trieste, I	27	38	34	38	42	+9.7
11 Wilhelmshaven, D	22	32	16	34	37	+9.3
12 Algeciras, E	8	22	25	34	37	+8.3
13 Milford Haven, UK	41	39	32	32	37	+14.1
14 Dunkerque, F	25	41	37	39	35	-10.4
15 Southampton, UK	28	25	29	32	34	+6.9
16 Amsterdam, NL	21	22	31	31	33	+6.5
17 Bremen/B'haven, D	23	25	28	31	32	+1.6
18 Tarragona, E	4	20	24	28	31	+8.1
19 Liverpool, UK	31	13	23	30	31	+2.4
20 Bilbao, E	11	21	25	25	29	+14.3
Zeebrugge, B	8	12	30	31	28	-8.1
Gothenburg, S	20	22	26	27	28	+3.7
Lisbon, P	9	14	14	14	13	-8.9
Saloniki, EL	8	9	14	13	13	+1.5
Dublin, IRL	7	7	8	10	11	+11.7
København, DK	6	7	9	11	10	-4.6
Helsinki, FIN	4	5	8	10	10	+4.0
Sum of these ports	926	1 112	1 176	1 272	1 288	+1.3
				1970-1995		: +1.0 %

Source : Institute of Shipping Economics and Logistics, Bremen

Inland Ports
Freight loaded and unloaded
 Fluvial and fluvio-maritime traffic
 million tons

	Port	Country	1995	1996	Change 96/95 %
1	Duisburg	D	48.4	44.4	-8.3
2	Paris	F	20.3	18.5	-8.9
3	Liège	B	14.9	15.8	5.8
4	Karlsruhe	D	10.3	10.3	-0.2
5	Strasbourg	F	9.7	9.3	-4.3
6	Mannheim	D	7.7	7.9	3.1
7	Ludwigshafen	D	8.2	7.7	-5.9
8	Köln	D	6.8	7.6	11.1
9	Heilbronn	D	4.9	5.2	6.5
10	Bruxelles / Brussel	B	5.1	4.8	-5.8
11	Dortmund	D	5.4	4.8	-11.0
12	Neuss	D	4.9	4.7	-4.5
13	Mulhouse	F	3.9	4.0	3.9
14	Frankfurt am Main	D	3.6	3.8	6.1
15	Saarlouis / Dillingen	D	2.5	3.6	42.7
16	Krefeld	D	3.4	3.3	-5.1
17	Düsseldorf	D	3.0	3.0	0.7
18	Kehl	D	3.1	2.9	-6.0
19	Hanau	D	2.2	2.7	23.6
20	Västerås	S	2.4	2.7	9.2
	Berlin	D	3.4	2.4	-30.4
	Wien	A	1.4	1.7	22.1
	Arnhem	NL	1.3	1.7	27.4
	Köping	S	1.6	1.5	-6.6
	Mertert	L	1.6	1.4	-14.8
	Linz	A	1.1	1.2	6.8
	Mantova	I	0.5	0.7	33.4
	Varkaus	FIN	0.3	0.4	26.0
<i>for information :</i>					
	Basel	CH	8.0	7.2	-10.8

Source: European Federation of Inland Ports (EFIP)

Air
Airport Traffic (Major Airports)

1000 tons

Airport, Country	1994	1995	1996	change 96/95 %
1 Frankfurt Rhein/Main, D	1 246	1 297	1 338	3.2
2 Amsterdam Schiphol, NL	838	978	1 083	10.7
3 London Heathrow, UK	967	1 043	1 053	0.9
4 Paris Charles de Gaulle, F	787	824	866	5.1
5 Bruxelles, B	380	427	451	5.6
6 Köln/Bonn, D	236	276	316	14.4
7 Luxembourg, L	242	286	281	-1.9
8 London Gatwick, UK	224	232	277	19.5
9 Roma Fiumicino, I	256	257	259	0.9
10 Paris Orly, F	295	276	246	-10.8
11 Madrid Barajas, E	213	230	243	5.5
12 Stockholm Arlanda, S	93	104	113	8.6
13 London Stansted, UK	88	93	107	15.3
14 East Midlands, UK	56	83	105	26.1
15 Milano Malpensa, I	111	126	98	-22.2
16 Athens Hellenikon, EL	95	98	111	13.7
17 Wien Schwechat, A	83	93	95	1.7
18 Oostende, B	60	82	92	12.0
19 Lisbon, P	81	89	90	1.1
20 Helsinki, FIN	74	78	84	7.1
21 Manchester, UK	56	51	81	57.7
22 Barcelona, E	59	68	80	17.8
23 Munich, D	64	65	76	16.8
24 Dublin, IRL	54	60	67	12.2
25 Milano Linate, I	67	68	66	-2.9
Total of these airports	6 725	7 284	7 676	5.4

Source : ACI

Consignments*

thousands

Company	1994	1995	1996	change 96/95 %
International traffic				
Kombiverkehr, D	302.6	368.8	335.6	-9.0
Ökombi, A	122.1	128.1	132.6	+3.5
Cemat, I	88.4	94.7	113.2	+19.5
Novatrans, F	73.4	75.6	77.9	+3.0
T.R.W., B	66.2	61.7	65.5	+6.2
Trailstar, NL	14.0	18.3	19.3	+5.5
Kombi-Dan, DK	5.9	6.6	5.5	-16.7
Swe-Kombi, S	5.6	6.2	7.3	+17.7
C.T.L., UK	1.6	9.5	22.1	+132.6
Combiberia, E	13.8	7.4	9.6	+29.7
Total	693.6	776.9	788.6	+1.5
National traffic				
Kombiverkehr, D	309.7	261.0	250.3	-4.1
Cemat, I	140.0	167.0	193.8	+16.0
Novatrans, F	132.9	124.3	146.6	+17.9
Ökombi, A	43.8	43.1	38.6	-10.4
Kombi-Dan, DK	2.5	2.5	2.3	-8.0
Swe-Kombi, S	34.0	34.0	17.6	-48.2
T.R.W., B	0.3	0.7	1.0	+42.9
Total	663.2	632.6	650.2	+2.8
*Consignment = equivalent of an average road transport (= 2.3 TEU)				

Tonne-kilometres

Year	bio tkm	of which national	Semi- trailers	% of traffic	
				Rolling road	Swap bodies
1986	13	7	27%	11%	62%
1990	19	7	20%	18%	62%
1992	20	7	18%	17%	65%
1993	22	7	16%	16%	68%
1994	25	8	14%	17%	69%
1995	25	7	14%	19%	67%
1996	28	8	12%	20%	68%

Source: UIRR; UIRR companies represent 55% of the market in Europe

Traffic through the Alps : internal, import, export and transit traffic
(Alpine Arc : Mt. Cenis/Fréjus to Brenner)

Rail

million net-tonnes

	<u>Switzerland</u>		<u>Austria</u>	<u>France</u>	Total
	St. Gotthard	Simplon/ Lötschberg	Brenner	Mont-Cenis	
1985	11.2	2.8	4.7	7.5	26.2
1990	13.6	4.3	5.5	7.2	30.6
1992	12.4	5.0	8.2	6.8	32.4
1993	11.7	4.3	7.6	7.0	30.6
1994	13.2	4.7	8.3	7.7	33.9
1995	13.6	4.4	8.4	8.0	34.4
1996	11.7	4.0	7.9	9.7	33.3
annual growth					
85-90	4.0	9.0	3.2	-0.8	3.2
90-95	0.0	0.5	7.8	3.1	2.4
1996	-14.0	-9.0	-1.2	15.4	-3.2

Road

million net-tonnes

	<u>Switzerland</u>		<u>Austria</u>	<u>France</u>	Total
	St. Gotthard	Simplon G.St. Bernard St. Bernardino	Brenner	Fréjus Mont-Blanc	
1985	1.9	0.8	14.3	12.3	29.3
1990	3.1	1.1	13.6	21.8	39.6
1992	3.9	1.2	16.5	23.1	44.7
1993	4.5	1.1	17.1	24.7	47.4
1994	5.1	1.1	17.6	26.5	50.3
1995	5.5	1.1	20.0	25.8	52.4
1996	5.9	1.2	19.0	25.0	51.1
annual growth					
85-90	10.3	6.6	-1.0	12.1	6.2
90-95	12.2	0.0	8.0	3.4	5.8
1996	7.3	9.0	-5.0	-3.1	-2.5

Source: GVF

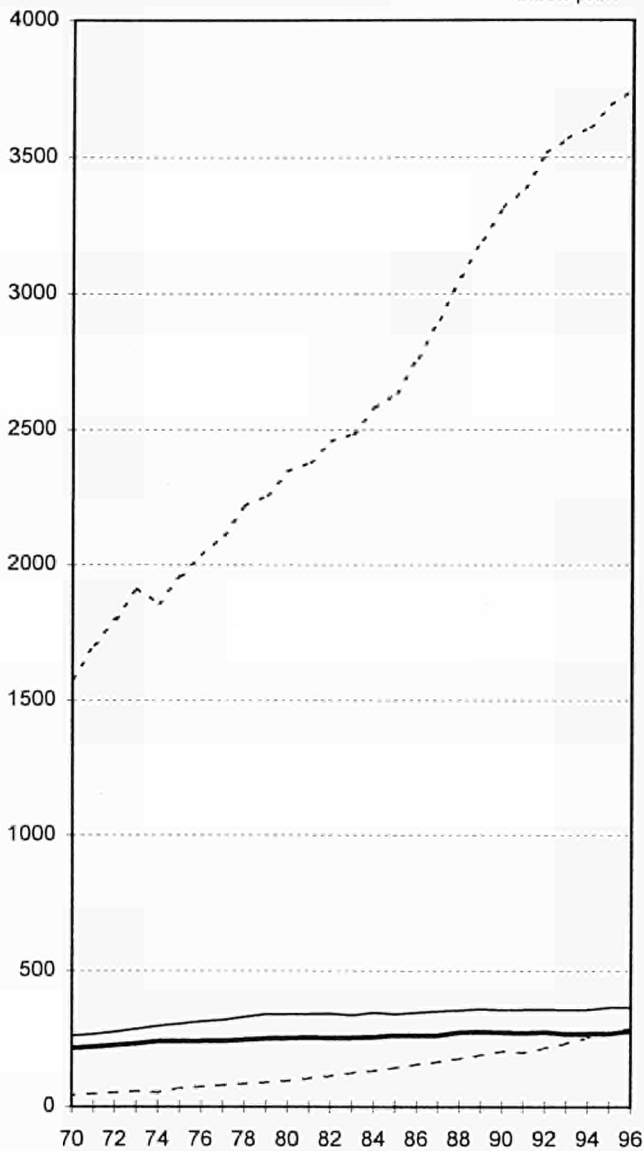
Chapter 5

Passenger Transport

Passenger Transport
Evolution 1970-96

5.1.a

bllion pkm



Main Modes of Transport**Performance by mode**

1 000 mio pkm

	Passenger cars	Buses & Coaches	Urban Rail	Railway	Air (1)	Total
1970	1 582	263	38	216	43	2 142
1980	2 349	338	40	253	96	3 075
1990	3 317	355	48	274	204	4 198
1994	3 609	357	41	269	254	4 530
1995	3 689	366	41	270	274	4 640
1996	3 748	366	42	279	290	4 726
1990-96	+ 13 %	+ 3 %	- 13 %	+ 2 %	+ 42 %	+ 13 %

Sources: ECMT, UIC, UITP, national statistics, estimates

(1) European traffic, Source : AEA, IACA and estimates

Worldwide traffic of EU carriers was 550 bio pkm in 1995

Average annual change

% per year

	Passenger cars	Buses & Coaches	Urban Rail	Railway	Air	Total
1970-96	+3.4	+1.3	+0.3	+1.0	+7.6	+3.1
1970-80	+4.0	+2.5	+0.4	+1.6	+8.4	+3.7
1980-90	+3.5	+0.5	+1.8	+0.8	+7.8	+3.2
1990-96	+2.1	+0.5	-2.2	+0.3	+6.1	+2.0
1996	+1.6	+0.1	+2.5	+3.4	+6.0	+1.9

Modal split

%

	Passenger cars	Buses & Coaches	Urban Rail	Railway	Air
1970	73.8	12.3	1.8	10.1	2.0
1980	76.4	11.0	1.3	8.2	3.1
1990	79.0	8.5	1.1	6.5	4.9
1994	79.7	7.9	0.9	5.9	5.6
1995	79.5	7.9	0.9	5.8	5.9
1996	79.3	7.7	0.9	5.9	6.1

All Modes of Transport Performance by mode

1 000 mio pkm

	Powered two-wheelers	Cycling	Walking	Water-borne transport	Main modes	All modes
1970	97	61	155	13	2 142	2 468
1980	114	67	165	20	3 075	3 441
1990	108	72	149	26	4 198	4 553
1994	110	70	161	27	4 530	4 898
1995	112	70	163	27	4 640	5 012
1990-95	+ 4 %	-2 %	+ 9 %	+4 %	+11 %	+ 10 %

Sources : UITP : Transport demand study for DG VII

Main modes : see table 5.1.b

Average annual change

% per year

	Powered two-wheelers	Cycling	Walking	Water-borne transport	Main modes	All modes
1970-95	+0.6	+0.6	+0.2	+3.0	+3.1	+2.9
1970-80	+1.6	+1.0	+0.7	+4.1	+3.7	+3.4
1980-90	-0.5	+0.7	-1.0	+3.0	+3.2	+2.8
1990-95	+0.7	-0.4	+1.8	+0.8	+2.0	+1.9

Modal split trips

%

	Powered two-wheelers	Cycling	Walking	Water-borne transport	Main modes
1970	3.9	2.5	6.3	0.5	86.8
1980	3.3	1.9	4.8	0.6	89.4
1990	2.4	1.6	3.3	0.6	92.2
1994	2.3	1.4	3.3	0.6	92.5
1995	2.2	1.4	3.2	0.5	92.6

Modal Split for Land Transport

by Country (pkm) in % for 1995

	Passenger cars	Powered two-wheelers	Bus	Urban rail (tram & metro)	Railway
B	81.0	1.2	11.1	0.7	6.0
DK	79.1	0.8	13.6	-	6.4
D	82.8	1.2	7.8	1.0	7.2
EI	90.9	1.5	5.5	0.7	1.5
E	81.5	3.4	10.0	1.1	4.1
F	84.5	2.1	5.2	1.1	7.1
IRL	90.3	0.6	6.4	-	2.7
I	75.8	6.5	10.6	0.6	6.5
L	83.0	0.8	10.2	-	6.0
NL	81.8	1.5	8.1	0.8	7.8
A	74.6	1.4	11.5	1.7	10.7
P	81.7	3.2	10.7	0.4	3.9
FIN	80.0	1.5	12.8	0.6	5.1
S	83.5	0.7	8.5	1.4	6.0
UK	87.9	0.6	6.2	1.0	4.2
EU 15	82.4	2.5	8.2	0.9	6.0

Passenger Transport			Passenger Cars														1000 mio pkm		5.2	
	B	DK	D(-W)	D-E	EL (1)	E (2)	F	IRL (1)	I	L (1)	NL	A (3)	P	FIN	S	UK	EU15	index 1970= 100	modal share % (4)	
1970	49.3	33.3	370.1	24.5	13.5	64.3	304.7	15.3	211.9	2.0	66.3	32.9	17.5	23.7	55.4	297.0	1 581.7	100	75.2	
1980	65.4	38.1	463.7	56.0	45.0	188.9	452.5	27.9	324.0	2.8	107.1	47.8	41.0	33.9	66.7	388.0	2 348.8	148	77.4	
1990	80.7	53.7	592.8	90.3	76.2	282.0	586.0	36.3	522.6	3.5	136.2	62.4	65.0	51.2	90.0	588.0	3 317.0	210	79.9	
1991	82.9	55.3	700.0	D	79.5	293.4	599.0	37.1	538.3	3.7	136.7	70.4	67.5	50.6	91.4	582.0	3 387.8	214	80.1	
1992	84.6	56.6	719.5	D	82.5	305.2	618.0	38.7	602.2	3.7	138.6	69.3	71.6	50.5	91.7	583.0	3 515.7	222	80.4	
1993	86.9	57.4	729.8	D	86.0	311.8	634.6	40.0	603.1	3.8	140.5	67.9	82.9	49.7	90.7	584.0	3 569.0	226	80.6	
1994	89.5	59.1	720.7	D	90.8	318.6	651.2	41.2	600.3	3.9	146.9	68.2	90.0	49.6	84.0	595.0	3 608.9	228	80.4	
1995	91.2	61.5	730.5	D	95.0	328.3	664.3	42.4	614.5	4.0	146.8	68.1	99.5	50.1	87.0	606.0	3 689.0	233	80.2	
1996	92.4	63.5	734.9	D	99.0	339.3	674.3	43.8	625.6	4.0	145.9	65.7	105.0	50.4	84.5	620.0	3 748.3	237	80.0	
passenger-km per person per year																				
1996	9099	12065	8971		9451	8640	11551	12066	10899	9639	9396	8150	10574	9834	9558	10547	10044			
Source : ECMT, national statistics, estimates					D : included in D(-W)					Estimates in italic										
(1) : estimate based on results of DG VII studies					(3) : Source : Austrian Ministry for Environment															
(2) : 1980-96 estimate based on vehicle stock and vehicle-km data					(4) : Passenger cars + Buses and Coaches + Railways+ Air															

1000 mio pkm

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	1970= 100
1970	1.08	1.14	11.50	8.29	0.40	9.25	21.36	0.19	29.38	0.02	4.11	1.46	4.06	0.43	0.38	3.69	96.7	100
1975	1.22	1.13	11.50	8.52	0.56	10.85	21.96	0.22	35.76	0.03	4.06	1.54	4.42	0.56	0.47	5.30	108.1	112
1980	1.26	0.97	11.48	8.14	0.74	11.55	20.59	0.23	39.90	0.03	3.71	1.50	4.20	0.63	0.53	8.06	113.5	117
1985	1.25	0.89	10.25	7.47	0.89	12.10	18.80	0.24	42.92	0.03	3.21	1.39	4.23	0.75	0.56	7.60	112.6	104
1990	1.21	0.83	9.02	6.30	1.00	12.39	16.95	0.25	44.15	0.03	2.75	1.25	4.73	0.91	0.58	5.85	108.2	112
1994	1.34	0.64	10.50	D	1.52	13.67	16.52	0.26	51.98	0.04	2.72	1.32	3.94	0.95	0.70	4.35	110.5	114
1995	1.35	0.63	10.71	D	1.53	13.65	16.69	0.26	53.13	0.04	2.78	1.32	3.95	0.95	0.71	4.41	112.1	116
passenger-km per person per year																		
1995	133	121	131		146	348	287	73	927	98	180	164	398	186	80	75	301	

Source : UITP

Estimates in italic

D : included in D(-W)

Passenger Transport

Buses & Coaches**5.4**

1000 mio pkm

(1)

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100	modal share %
1970	9.3	4.6	48.6	19.1	4.8	20.9	25.2	1.2	32.0	0.4	11.1	9.1	4.4	7.0	5.5	60.0	263.2	100	12.5
1980	9.1	7.3	65.6	24.4	5.8	28.1	38.0	3.0	57.8	0.4	13.2	9.8	7.6	8.5	7.3	52.0	337.9	128	11.1
1990	10.9	9.3	56.6	16.5	5.1	33.4	41.3	2.6	84.0	0.4	13.0	8.7	10.3	8.5	9.0	46.0	355.5	135	8.6
1991	11.2	9.2	70.3	D	5.1	35.5	42.9	2.4	84.7	0.4	14.0	8.7	10.7	8.1	9.3	45.0	357.5	136	8.5
1992	11.6	9.3	69.9	D	5.2	35.5	41.1	2.8	87.8	0.5	14.0	9.4	11.4	8.0	9.3	43.0	358.7	136	8.2
1993	11.6	9.2	70.2	D	5.2	37.1	42.0	2.9	81.5	0.5	13.7	10.3	11.8	8.0	9.3	43.0	356.2	135	8.0
1994	12.0	9.5	68.6	D	5.6	38.1	42.6	3.0	79.3	0.5	13.9	10.8	12.6	8.0	9.2	43.0	356.6	136	7.9
1995	12.5	10.6	68.5	D	5.7	40.2	41.0	3.0	85.9	0.5	14.5	10.5	13.1	8.0	8.8	43.0	365.7	139	8.0
1996	11.4	11.0	68.2	D	5.7	38.1	41.2	3.0	86.6	0.5	14.5	12.5	13.5	8.0	9.0	43.0	366.2	139	7.8

passenger-km per person per year

1996	1123	2090	832		544	970	706	826	1509	1205	934	1551	1360	1561	1018	732	981
-------------	------	------	-----	--	-----	-----	-----	-----	------	------	-----	------	------	------	------	-----	------------

Source : ECMT, national statistics

Estimates in italic

Belgium: change in time series in 1993

Spain : from 1995, old series was extrapolated to avoid break

D : included in D(-W)

(1) : Passenger cars + Buses and Coaches + Railways+ Air

1000 mio pkm

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970=100
1970	0.86	-	9.80	4.83	0.63	3.67	6.50	-	2.21	-	1.24	0.75	0.93	0.10	1.44	5.20	38.2	100
1975	0.76	-	9.00	5.06	0.71	3.83	6.90	-	3.05	-	1.22	0.80	0.75	0.10	1.70	4.80	38.7	101
1980	0.77	-	8.50	5.34	0.68	3.88	7.70	-	3.66	-	1.35	0.82	0.74	0.12	1.97	4.30	39.8	104
1985	0.78	-	8.30	7.07	0.76	3.47	9.20	-	4.14	-	1.39	1.04	0.64	0.34	1.86	6.30	45.3	119
1990	0.74	-	8.60	6.50	0.83	4.38	10.20	-	4.57	-	1.26	1.11	0.67	0.35	1.86	6.50	47.6	125
1994	0.79	-	8.90	D	0.72	4.15	10.00	-	5.10	-	1.39	1.34	0.58	0.37	1.51	6.50	41.4	108
1995	0.80	-	8.50	D	0.74	4.25	9.00	-	5.23	-	1.38	1.53	0.53	0.39	1.42	6.80	40.6	106
1996	0.80	-	8.40	D	0.74	4.49	10.00	-	5.30	-	1.39	1.50	0.50	0.40	1.40	6.65	41.6	109
passenger-km per person per year																		
1996	79	-	103		71	114	171	-	92	-	90	186	50	78	158	113	111	

Source : UITP

Estimates in italic

D : included in D(-W)

France: 1995 result affected by strike

Passenger Transport		Railways																5.6		
		1000 mio pkm																(1)		
		B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100	modal share %
1970		7.6	3.6	39.2	17.7	1.5	15.0	41.0	0.8	34.9	0.2	8.0	6.4	3.5	2.2	4.6	30.4	216.4	100	10.3
1980		7.0	4.5	41.0	22.0	1.5	14.8	54.7	1.0	42.9	0.2	8.9	7.6	6.1	3.2	7.0	30.3	252.7	117	8.3
1990		6.5	5.1	44.6	17.5	2.0	16.7	63.8	1.2	48.3	0.2	11.1	8.7	5.7	3.3	6.0	33.2	273.8	127	6.6
1991		6.8	4.9	57.5	D	2.0	16.4	62.3	1.3	49.2	0.2	15.1	9.4	5.7	3.2	5.5	32.0	271.5	125	6.4
1992		6.8	4.8	57.2	D	2.0	17.6	62.6	1.2	51.1	0.3	15.4	9.7	5.7	3.1	5.4	31.5	274.4	127	6.3
1993		6.7	4.8	58.7	D	1.7	16.5	58.2	1.3	49.9	0.3	15.2	9.5	5.4	3.0	5.8	30.5	267.4	124	6.0
1994		6.6	5.1	60.7	D	1.4	16.1	58.9	1.3	51.7	0.3	14.4	9.4	5.1	3.0	5.9	28.8	268.8	124	6.1
1995		6.8	5.0	63.6	D	1.6	16.6	55.6	1.3	52.4	0.3	14.0	9.8	4.8	3.2	6.2	29.3	270.3	125	6.0
1996		6.8	4.9	65.3	D	1.8	16.6	59.8	1.3	52.8	0.3	14.1	9.9	4.5	3.3	6.2	32.0	279.4	129	6.1
passenger-km per person per year																				
1996		668	931	797		167	424	1024	357	920	684	908	1224	453	635	700	545	749		

Source : ECMT , UIC and national statistics

Non-UIC railways are included (ca. 2% of market)

D : included in D(-W)

France: Railway strike in 1995

(1) : Passenger cars + Buses and Coaches + Railways+ Air

Passenger Transport			Waterborne Transport														5.7	
1000 mio pkm																		
	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	1970= 100
1970	0.93	1.81	0.34		1.59	0.11	0.31	0.39	1.09		0.18	0.02	0.06	0.87	3.59	1.75	13.0	100
1975	0.82	1.80	0.57		1.90	0.13	0.56	0.45	1.36		0.34	0.02	0.06	1.52	4.40	2.12	16.1	123
1980	0.69	1.80	0.67		2.66	0.16	1.05	0.70	2.02		0.44	0.03	0.07	1.69	4.48	3.04	19.5	150
1985	0.60	1.79	0.63		2.96	0.18	1.30	0.85	2.61		0.54	0.03	0.08	2.14	4.29	3.63	21.6	166
1990	0.49	1.78	0.87	D	4.06	0.20	1.75	0.92	3.29		0.64	0.03	0.10	2.97	5.04	4.08	26.2	201
1994	0.38	1.79	1.08	D	4.69	0.20	2.12	1.08	3.23		0.46	0.03	0.10	2.93	4.38	4.75	27.2	209
1995	0.36	1.78	1.05	D	4.75	0.21	1.96	1.12	3.54		0.44	0.03	0.10	2.90	4.54	4.48	27.3	209
passenger-km per person per year																		
1995	36	342	13		454	5	34	313	62		28	4	10	568	514	76	73	
Source : UITP			D : included in D(-W)						<i>Estimates in italic</i>									

Passenger Transport

Bicycle Transport

5.8.a

1000 mio person-km

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970 = 100
1970	4.0	4.5	12.0	5.0	0.7	0.7	4.5	0.65	8.0	0.02	11.0	1.6	0.3	1.7	1.6	4.4	60.7	100
1975	3.85	4.5	13.0	5.2	0.7	0.7	4.5	0.70	8.2	0.02	11.6	1.6	0.3	1.9	1.4	4.4	62.6	103
1980	3.7	4.5	16.9	5.4	0.7	0.7	5.0	0.80	8.5	0.02	9.9	1.6	0.3	2.2	1.6	5.1	66.9	110
1985	3.55	4.1	18.4	5.6	0.8	0.8	4.8	1.07	8.7	0.02	11.8	1.6	0.3	1.9	2.2	6.1	71.7	118
1990	3.4	4.9	18.1	5.7	0.8	0.8	4.5	0.75	9.0	0.02	13.0	1.4	0.3	1.5	2.2	5.3	71.7	118
1994	3.3	4.6	23.6	D	0.8	0.8	4.4	0.67	9.0	0.02	13.2	1.2	0.3	1.3	2.4	4.5	70.1	116
1995	3.3	4.7	23.5	D	0.8	0.8	4.4	0.67	9.0	0.02	13.3	1.15	0.3	1.3	2.4	4.5	70.1	116

person-cycling-km per person per year

1995	325	893	287		76	20	75	185	157	39	857	143	30	254	271	77	188
-------------	-----	-----	-----	--	----	----	----	-----	-----	----	-----	-----	----	-----	-----	----	------------

Source : UITP / European Cyclists Federation : Transport demand study for DG VII

Estimates in italic

D : included in D(-W)

Bicycle Transport

Cycling as a % of all trips

Country	Cycling as a % of all trips	Year	Selected cities	Cycling as a % of all trips	Year
The Netherlands	27	1991/93	Groningen	39	1990
			Utrecht	32	1995
			Amsterdam	28	1990
Denmark	18	1993	Odense	21	1995
			Copenhagen	20	1995
			Arhus	16	1995
Germany	10	1994	Münster	34	1990
			Erlangen	30	1990
			Freiburg	22	1996
Belgium	10	1995	Bruges	20	1994/95
			Gent	12	1991
			Brussels	1	1991
Sweden	10	1995	Västerås	33	1981
			Malmö	20	1985
			Göteborg	7.5	1992
Finland	9	1995	Oulu	25	1995
			Helsinki	9	1995
Ireland	7	1995	Dublin	5	1995
Austria	5	1995	Salzburg	19	1993
			Graz	13	1993
			Vienna	3	1993
Italy	4	ca 1995	Ferrara	31	1995
			Parma	19	ca 1995
			Padua	19	ca 1995
France	3	1995	Strasbourg	12	1991
			Avignon	10	1980
			Paris	0.7	1991
Greece	2 - 3	1995	Volos	12	1995
			Athens	0	ca 1995
United Kingdom	2	1995	Cambridge	34	ca 1995
			York	22	1991/93
			London	1	1991/93
Luxembourg	1.5	1995	Luxembourg	1	1995
Portugal	1	1995	Lisbon	<1	1995
Spain	0.7	1995	San Sebastian	1.8	ca 1995
			Valencia	1.5	ca 1995
			Madrid	0	ca 1995
EU 15	5	1995			
USA	0.7	1995	Gainesville, FL	33	ca 1995
Japan	14	1992	Tokyo	17	1990

bold: outstanding cities for cyclists (in NL: also Delft, in USA: Davis, CA)

Source : European Cyclists Federation (ECF), Japanese Bicycle Promotion Institute, City administrations and DG VII calculations/estimates based on ECF data on pkm and average trip length. Data for Tokyo relate to vehicle-trips only.

Passenger Transport

Air Traffic Between Countries

5.9

1995

reporting country (from and to)

million passengers

	B	D	DK	E	F	EL	I	IRL	L	NL	P	UK	A	FIN	S	EU15
B		1.07	0.30	1.91	1.00	0.42	1.08	0.14	0.04	0.25	0.36	1.80	0.23	0.14	0.28	9.02
D	1.06		1.14	13.53	3.35	4.39	3.59	0.43	0.16	1.73	1.66	6.58	1.82	0.54	0.69	40.66
DK	0.26	1.21		0.54	0.54	0.42	0.48	0.06	0.03	0.38	0.13	1.27	0.19	0.31	1.98	7.79
E	1.98	13.76	0.81		3.45	0.19	2.88	0.62	0.23	2.01	0.76	18.31	0.73	0.52	1.09	47.33
F	1.03	3.61	0.46	3.57		1.04	3.62	0.47	0.09	1.31	1.27	6.76	0.55	0.26	0.42	24.49
EL	0.43	4.84	0.60	0.18	0.87		1.15	0.07	0.04	0.91	0.02	4.47	0.75	0.24	0.89	15.47
I	1.06	3.52	0.42	2.80	3.44	1.11		0.16	0.06	0.99	0.40	4.49	0.47	0.10	0.19	19.22
IRL	0.14	0.43	0.08	0.62	0.48	0.07	0.17		0.00	0.17	0.14	5.84	0.03	0.00	0.02	8.20
L	0.04	0.18	0.03	0.23	0.11	0.05	0.05	0.01		0.06	0.07	0.16	0.00	0.00	0.00	0.99
NL	0.30	1.74	0.43	2.05	1.22	0.92	1.01	0.19	0.05		0.55	4.31	0.36	0.16	0.53	13.83
P	0.35	1.51	0.07	0.70	1.23	0.02	0.42	0.15	0.07	0.54		2.50	0.12	0.04	0.07	7.78
UK	1.87	6.60	1.39	18.27	6.57	4.58	4.69	6.02	0.16	4.28	2.76		1.17	0.49	1.21	60.07
A	0.23	1.84	0.18	0.74	0.54	0.82	0.50	0.03	0.00	0.35	0.12	1.17		0.05	0.15	6.73
FIN	0.14	0.54	0.31	0.52	0.26	0.24	0.10	0.00	0.00	0.16	0.04	0.49	0.05		0.90	3.74
S	0.28	0.70	1.60	1.04	0.42	0.90	0.18	0.02	0.00	0.53	0.10	1.24	0.14	0.90		8.01
EU15	9.16	41.55	7.82	46.68	23.48	15.17	19.91	8.37	0.94	13.67	8.37	59.40	6.64	3.74	8.42	273.33

Note : table is meant to be read vertically

bold= 20 most important relations

Airborne Transport

Traffic at selected major airports

Total passenger movements

million passengers

Airport	Country	1970	1980	1990	1996	1997	Change 97/96 %
1 London Heathrow	UK	15.6	27.5	43.0	55.8	58.0	+3.8
2 Frankfurt Rhein-Main	D	9.4	17.6	29.4	38.8	40.3	+3.9
3 Paris Ch. de Gaulle	F	2.2	10.1	22.5	31.7	35.3	+10.9
4 Amsterdam Schiphol	NL	5.2	9.4	16.5	27.8	31.6	+13.6
5 London Gatwick	UK	3.7	9.7	21.2	24.1	27.0	+10.8
6 Paris Orly	F	10.4	15.7	24.3	27.4	25.1	-8.4
7 Rome Fiumicino	I	6.5	11.4	17.7	23.8	25.0	+8.5
8 Madrid Barajas	E	4.8	10.1	16.2	21.9	23.6	+8.0
9 München	D	3.6	6.0	11.4	15.7	17.9	+14.1
10 Copenhagen Kastrup	DK	6.5	8.6	12.1	15.9	16.8	+6.2
11 Palma de Mallorca	E	4.8	7.3	11.3	15.4	16.6	+7.7
12 Manchester	UK	1.9	4.3	10.1	14.8	16.2	+9.1
13 Bruxelles Zaventem	B	2.8	5.1	7.1	13.5	15.9	+17.9
14 Düsseldorf	D	3.6	7.2	11.9	14.4	15.5	+7.7
15 Stockholm Arlanda	S	2.6	4.3	14.0	15.0	15.2	+7.0
16 Barcelona	E	4.0	5.8	9.0	13.4	15.1	+12.1
17 Milano Linate	I	2.9	6.2	9.5	12.6	14.3	+13.6
18 Athens Hellenikon	EL	3.7	9.2	10.1	10.6	10.6	
19 Dublin	IRL	1.9	2.6	5.5	9.1	10.3	+13.2
20 Vienna	A	1.5	2.7	5.5	9.1	9.7	+6.5
Total of these airports		97.6	180.8	308.3	410.8	439.8	+7.1
<i>Average annual growth rate</i>		<i>1970-1997 :+ 5.7 %</i>					

Source: ACI, ICAO

Estimates in italic

Airborne Transport

Major EU-Airlines

Scheduled services, international + domestic

1000 million pkm

Airline	Country					% change 97/96	in Europe 1997
		1980	1990	1996	1997		
British Airways	UK	16.08	44.66	100.56	105.70	+5.1	15.62
Lufthansa	D	21.06	42.10	63.26	71.35	+12.8	14.03
Air France	F	25.40	36.62	57.47	69.99	+21.8	8.22
KLM	NL	14.06	28.17	48.86	55.39	+13.4	6.52
Alitalia	I	12.88	19.13	34.56	35.99	+4.1	7.90
Iberia	E	14.85	20.49	25.92	27.63	+6.6	6.82
SAS	DK/N/S	7.53	11.52	19.49	20.33	+4.3	8.54
Sabena	B	4.85	5.91	9.01	11.27	+25.1	4.52
Finnair	FIN	2.12	4.71	8.57	9.63	+12.4	5.12
Olympic Airways	EL	5.06	7.76	8.53	9.26	+8.6	3.54
TAP-Air Portugal	P	3.43	6.84	7.98	8.77	+10.0	3.34
Austrian Airlines	A	1.12	2.82	5.44	6.23	+14.5	2.18
Aer Lingus	IRL	2.05	3.14	5.13	5.89	+14.8	2.20
Luxair	L	0.03	<i>0.20</i>	<i>0.42</i>	<i>0.45</i>	+6.2	0.45
Total of companies		130.50	234.05	395.20	437.88	+10.8	89.00
<p style="text-align: center;"><i>Average annual growth rate 1980-1997 : +7.4%</i></p>							

Source: AEA , IATA

Estimates in italic

Chapter 6

Safety

Road Fatalities

6.1

persons killed (1000)

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970= 100
1970	2.95	1.21	19.19	2.14	0.93	4.20	15.09	0.54	10.21	0.13	3.18	2.24	1.42	1.06	1.31	7.77	73.6	100
1980	2.40	0.69	13.04	2.01	1.23	5.02	12.54	0.56	8.54	0.10	2.00	1.74	2.26	0.55	0.85	6.24	59.8	81
1990	1.98	0.63	7.91	3.14	1.74	6.95	10.29	0.48	6.62	0.07	1.38	1.39	2.32	0.65	0.77	5.40	51.7	70
1991	1.87	0.61	11.30	D	1.79	6.80	9.62	0.45	7.50	0.08	1.28	<u>1.39</u>	2.48	0.63	0.75	4.75	51.3	70
1992	1.67	0.58	10.63	D	2.00	<u>6.01</u>	9.08	0.42	7.43	0.07	1.29	1.40	2.37	0.60	0.76	<u>4.38</u>	48.7	66
1993	1.66	0.56	9.95	D	2.01	5.51	9.05	0.43	6.65	0.07	1.25	1.28	2.08	0.48	0.63	3.81	45.4	62
1994	1.69	0.55	9.81	D	2.08	5.62	8.53	0.40	6.58	0.07	1.30	1.34	1.93	0.48	0.59	3.65	44.6	61
1995	1.51	0.58	9.45	D	2.04	5.75	8.41	0.44	6.51	0.07	1.33	1.21	2.10	0.44	0.57	3.77	44.2	60
1996	1.36	0.53	8.73	D	2.07	5.48	8.08	0.45	6.19	0.07	1.18	1.03	2.10	0.40	0.54	3.60	41.8	57

SOURCE: UN-ECE, ECMT

Persons dying within 30 days, except France (6), Italy (7), Portugal (1) and Greece (3).

D : included in D(-W)

Spain : change from 1 day to 30 days threshold in 1993

Railway Fatalities

6.2

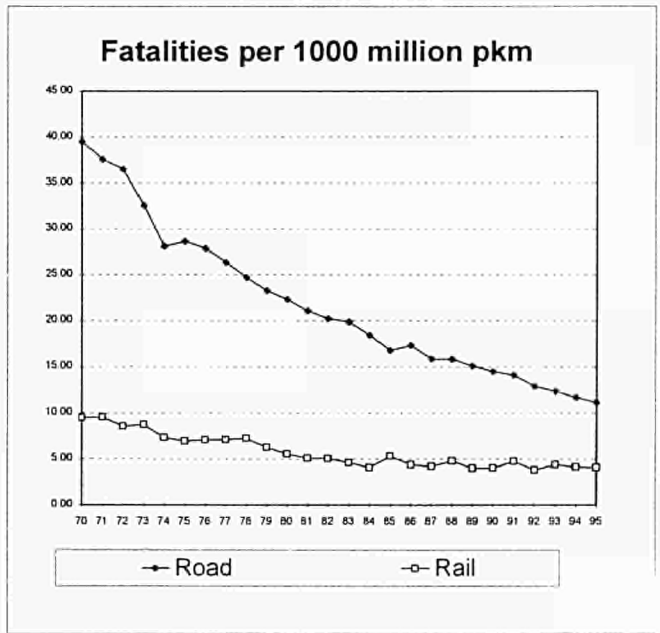
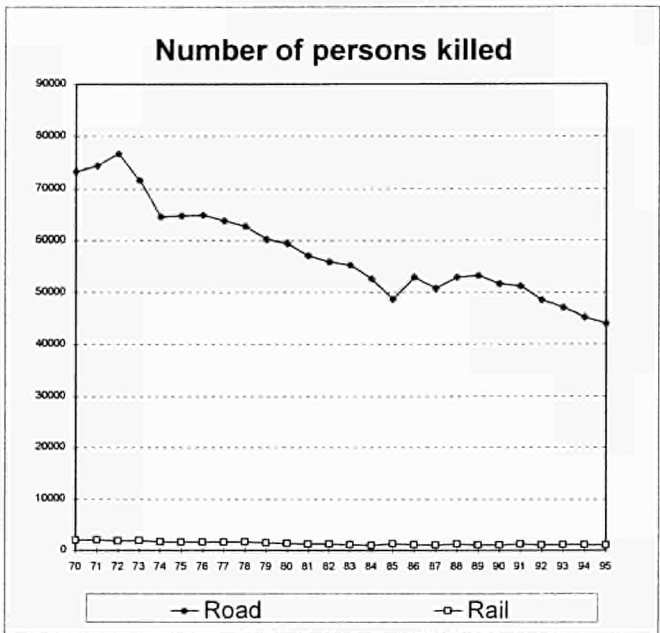
persons killed in accidents involving railways

	B	DK	D(-W)	D-E	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU15	index 1970=100
1970	90	26	549	50	50	75	273	5	296	2	84	110	200	65	40	129	2 044	100
1980	52	18	288	50	38	74	203	20	228	4	27	75	186	24	49	59	1 395	68
1990	20	6	198	51	34	30	188	14	204	2	43	54	131	36	18	79	1 108	54
1995	20	10	275	D	33	23	129	7	12	3	35	68	95	17	9	200	936	46
1996	26			D	42	21	136	8				47	122	12	16			
train passengers killed																		
1970	3	7	146	5	1	17	54	0	41	0	10	26	19	5	6	41	381	100
1980	4	3	69	5	1	17	33	16	48	1	8	9	29	4	25	46	318	83
1990	0	1	45	5	0	4	30	1	9	0	2	6	22	0	3	39	167	44
1995	3	0	34	D	3	0	22	0	4	0	0	7	12	1	2	10	98	26
1996	6	0	35	D	0	0	14	0	1	0	1	3	10	3	0	8	81	21

Source : UIC

D : included in D(-W)

Estimates in italic



Chapter 7

Environment

Heavy duty vehicles (Lorries)

g per kw/h

	as from :	CO	VOCs	NOx	Particulate matter
EURO I	1.10.1993	4.5	1.10	8	0.612 <85 kW 0.36 >85 kW
EURO II	1.10.1996	4.0	1.10	7	0.15
EURO III*	1.1.2000	2.1	0.66	5	0.10

* proposal

Passenger Cars

Petrol g/km

	CO	VOCs	NOx
Directive 91/441/EEC *	3.34	0.66	0.49
Directive 94/12/EC *	2.7	0.34	0.25
proposal 2000	2.3	0.20	0.15

Diesel g/km

	CO	VOCs	NOx	Particulate matter
Directive 94/12/EC *	1.0	0.9		0.10
proposal 2000	0.64	0.56	0.5	0.05

* : as measured on new test cycle for application in year 2000

Emissions by Type of Pollutant

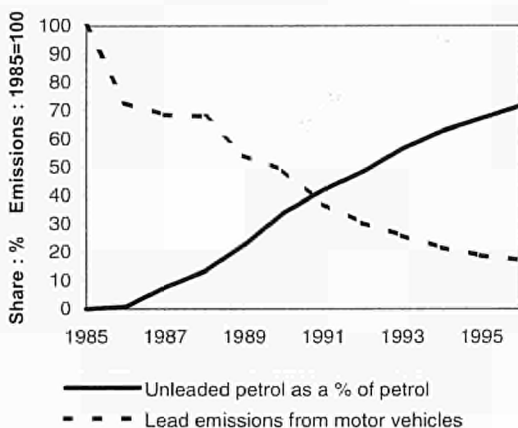
Pollutant	Total emissions EU 15 1994	of which transport	of which road transport
	Million tonnes	%	%
NOx Nitrogen oxyde	12	63%	51%
Trend 1990-94 (11 countries)	-10%	-8%	-9%
CO Carbon monoxyde	43	66%	63%
Trend 1990-94 (10 countries)	-19%	-21%	-22%
VOC Volatile organic compounds	13	40%	37%
Trend 1990-94 (10 countries)	-14%	-25%	-26%
SO₂ Sulphur dioxide	12	6%	4%
Trend 1990-94 (11 countries)	-30%	-6%	-5%

Source : Eurostat, DG VII

Notes :

- emissions for 1994 were obtained using 1994 results for 10 or 11 Countries and extrapolations of 1990 results for the remaining Countries
- Countries with no 1994 data for NO_x and SO₂ : Greece, Italy, Ireland, Luxembourg
- Countries with no 1994 data for CO and VOC : Greece, Italy, Ireland, Luxembourg, Sweden

Lead emissions



Share of fuel

Percentage share : 3rd quarter 1997

	Diesel	Unleaded petrol	Leaded petrol
B	62	30	8
DK	52	48	0
D	43	57	0
EL	45	24	30
E	56	19	25
F	63	26	12
IRL	41	45	15
I	46	28	27
L	53	42	5
NL	54	46	0
A	57	43	0
P	55	21	24
FIN	43	57	0
S	31	69	0
UK	40	44	17
EU 15	49	39	12

1000 tons of fuel used in 3rd quarter 1997

EU15	28 612	22 814	7 287
-------------	--------	--------	-------

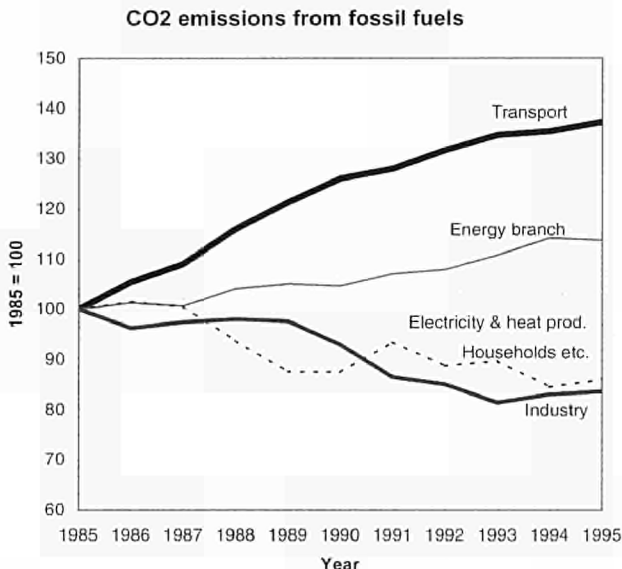
Source : Eurostat

Energy Consumption

	1990	1994	1995	Growth per year 1990-95
	million tonnes oil equivalents			
Gross inland consumption	1 239.7	1 335.8	1 366.8	2.0%
- Losses / final non-energy consumption	422.6	454.4	468.0	2.1%
Final energy consumption	817.1	881.4	898.8	1.9%
of which :				
- Industry	252.3	248.1	257.8	0.4%
(%)	30.9	28.1	28.7	
- Services / households / agriculture	318.1	368.5	365.1	2.8%
(%)	38.9	41.8	40.6	
-Transport	246.7	272.2	275.8	2.3%
(%)	30.2	30.9	30.7	
of which :				
- Rail	6.3	7.3	7.4	3.3%
<i>of which petroleum products</i>	(2.3)	(2.7)	(2.7)	3.0%
- Road	206.3	226.6	229.0	2.1%
- Air	27.4	31.3	32.5	3.5%
- Inland navigation	6.7	7.0	6.7	0.0%
(Sea)*	34.85	34.9	35.8	0.5%

Source : Eurostat

* : Sea (fuel from maritime bunkers) not included in final consumption

CO₂ Emissions (EU 15)Mio tonnes CO₂

Emissions from fossil fuels	1985		1990		1995		% of EU
	90/85	% p.a.	95/90	% p.a.			
EU 15 (14% of world)	2 997	0.6	3 088	-0.3	3 048	100	
Electricity and heat prod.	926	1.4	994	-1.0	946	31	
Energy branch	126	0.9	132	1.7	143	5	
Industry	626	-1.4	582	-2.1	523	17	
Households, commerce	734	-2.6	642	-0.3	631	21	
Transport	585	4.7	738	1.7	804	26	
<i>of which :</i>							
Railways (1)	12	-4.9	9	-1.4	9	0	
Road transport	500	4.6	626	1.6	678	22	
Air transport	62	5.9	82	3.3	97	3	
Inland navigation (2)	12	10.7	21	0.0	21	1	

Notes : (1) : without fossil fuel for electricity production
 (2) : including passenger transport and leisure boating

Source : Eurostat

CO₂ Emissions (World)Mio tonnes CO₂

Emissions from fossil fuels	1985	90/85 %p.a.	1990	95/90 %p.a.	1995	% of World	tons per person
World	19 491	1.9	21 400	0.7	22 150	100	4.0
EU 15	2 997	0.6	3 088	-0.3	3 048	14	8.2
USA	4 608	1.3	4 908	1.3	5 229	24	19.9
Japan	910	3.2	1 065	1.6	1 151	5	9.2
ex-USSR	3 534	-1.5	3 275	-5.4	2 483	11	8.5
China	1 871	4.9	2 374	4.8	3 007	14	2.5
India	427	7.1	602	5.9	803	4	0.9

Source : IEA

Specific emissions of CO₂ by mode

EU average 1995 (estimate)

grams/passenger km	
Passenger car (1)	125
Bus	45
Railway	65
Air	175

grams/tonne km	
Road freight	190
Railway (2)	30
Inland navigation	30
Pipeline	7

Source: DG VII

(1) occupancy 1.7 persons/car

(2) The % of railway lines which are electrified represent approximately 75 % of train-km. More than 50% of electrical energy for railways are produced by non-fossil fuels (nuclear, hydro, etc.).

	Fuel density	Carbon	CO ₂ emissions (kg)	
	Kg/l at 15°C	content %	per l	per kg
Petrol	0.75	85	2.34	3.20
Diesel	0.86	86	2.71	3.15

Noise Emission Limits

for selected vehicles
dB(A)

Motor vehicles

Vehicle category	YEAR			
	1972	1982	1989-90	1995-96
Passenger car	82	80	77	74
Urban bus	89	82	80	78
Heavy lorry	91	88	84	80

Method of measurement described in Council Directive 92/97/EEC of 10 November 1992, Official Journal L371 of 19/12/1992.

Two and three wheelers

Motorcycles	YEAR		
Engine size	1980	1989	1997
< 80 cm ³	78	77	75
>80 cm ³ and < 175 cm ³	80-83	79	77
>175 cm ³	83-86	82	80

Motor assisted cycle	YEAR	
Speed		1997
< 25 km/h		66
> 25km/h		71

Directive 97/24/EC of 17 June 1997, Official Journal L226 of 18/8/1997.

dB (A) : A-weighted decibels , logarithmic scale,
+3dB(A) = doubling of noise

Chapter 8

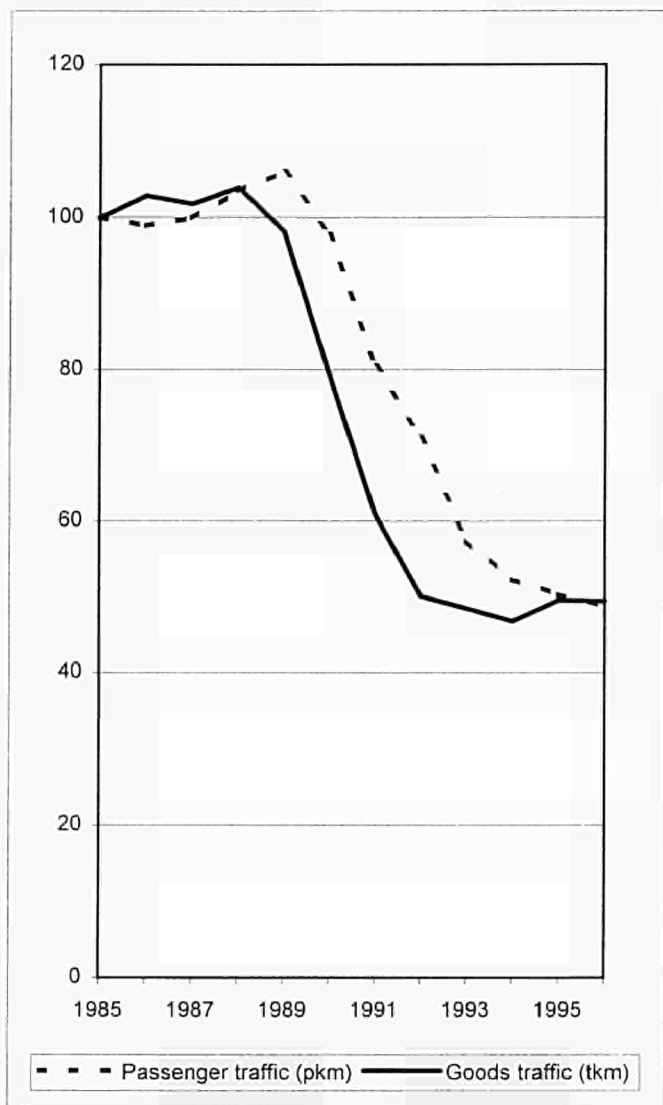
Central and Eastern European Countries

(CEC)

BG	Bulgaria
CS	Czechoslovakia (till 92)
CZ	Czech Republic (from 93)
EST	Estonia
H	Hungary
LT	Lithuania
LV	Latvia
PL	Poland
RO	Romania
SLO	Slovenia
SK	Slovak Republic (from 93)

CEC - Railway Transport

Passenger and goods traffic
1985 = 100



CEC : Evolution 1970-96**Performance by mode of transport**

1000 mio tkm

	Road	Rail	Inland waterways	Pipelines	Total
1970	55	274	10	16	355
1980	122	364	13	37	537
1985	134	341	13	37	525
1989	145	336	15	39	534
1990	144	270	12	32	458
1994	124	159	6	24	313
1995	131	169	8	23	331
1996	136	168	8	25	337
1989-96	- 6.1 %	- 50.0 %	- 42.6 %	- 35.1 %	- 36.8 %

Sources: National statistics, ECMT , UIC

Average annual change

% per year

	Road	Rail	Inland waterways	Pipelines	Total
1970-96	+3.6	-1.9	-0.6	+1.7	-0.2
1970-80	+8.4	+2.9	+3.0	+8.7	+4.2
1980-89	+1.9	-0.9	+1.0	+0.4	-0.1
1989-96	-0.9	-9.4	-7.6	-6.0	-6.3
1996	+3.8	-0.3	+7.6	+8.1	+2.1

Modal split

%

	Road	Rail	Inland waterways	Pipelines
1970	15.4	77.3	2.8	4.6
1980	22.8	67.8	2.5	6.9
1985	25.6	64.9	2.4	7.0
1989	27.1	62.9	2.7	7.3
1990	31.5	58.9	2.5	7.1
1995	39.6	51.0	2.3	7.0
1996	40.3	49.8	2.5	7.5

Goods Transport

Road

8.3

1000 mio tkm

	BG	CS	CZ	SK	EST	H	LT	LV	PL	RO	SLO	CEC	1970= 100	% of all tkm
1970	7.0	10.1			2.4	5.8	3.4	2.9	15.8	5.2	2.1	54.6	100	15.4
1980	13.1	21.3			4.2	11.4	6.9	5.1	44.6	11.8	3.9	122.3	224	22.8
1985	13.5	21.5			4.4	12.7	7.4	5.9	36.6	27.9	4.7	134.5	246	25.6
1989	15.1	23.2			4.8	14.5	8.1	6.0	38.4	30.0	4.6	144.8	265	27.1
1990	13.8	23.3			4.5	15.2	7.3	5.9	40.3	29.0	4.9	144.1	264	31.5
1991	8.0	17.4			3.8	14.0	7.0	4.9	39.6	20.7	4.3	119.8	219	33.1
1992	7.0	14.0			1.5	12.8	5.0	2.5	42.0	15.7	2.8	103.3	189	33.7
1993	8.5		13.0	5.5	1.1	13.4	6.9	1.3	40.7	15.4	2.8	108.5	199	36.1
1994	10.0		<u>22.7</u>	4.9	1.4	13.0	4.6	1.4	45.4	18.3	2.4	124.1	227	39.6
1995	11.0		20.1	5.2	1.6	13.0	5.2	1.8	51.1	19.7	2.4	131.0	240	39.6
1996	11.5		19.3	5.2	1.7	13.1	4.2	2.2	56.5	19.8	2.5	136.0	249	40.3

Source: ECMT, Eurostat, national statistics

Estimates in italic

Goods Transport

Railways

8.4

1000 mio tkm

	BG	CS	CZ	SK	EST	H	LT	LV	PL	RO	SLO	CEC	1970= 100	% of all tkm
1970	13.9	55.9			5.1	19.8	13.6	15.5	99.3	48.1	3.3	274.3	100	77.3
1980	17.7	66.2			5.9	24.4	18.2	17.6	134.7	75.5	3.9	364.2	133	67.8
1985	18.2	66.1			6.5	21.8	20.9	19.9	118.9	64.1	4.3	340.6	124	64.9
1989	17.0	66.2			9.6	19.3	21.8	21.1	109.6	67.1	4.2	335.9	122	62.9
1990	14.1	59.4			7.0	16.5	19.3	18.5	81.8	48.8	4.2	269.5	98	58.9
1991	8.7	45.8			6.6	11.6	17.8	16.7	64.0	32.5	3.3	206.8	75	57.2
1992	7.8	44.0			3.4	9.8	11.3	10.1	57.0	24.2	2.6	170.2	62	55.5
1993	7.7		25.2	13.9	3.7	7.1	9.9	9.9	63.3	21.9	2.3	164.8	60	54.8
1994	7.8		22.8	12.3	3.3	6.8	8.0	9.5	64.7	21.6	2.3	159.1	58	50.8
1995	8.6		22.6	13.7	3.6	7.5	7.7	9.8	68.2	24.0	2.9	168.5	61	51.0
1996	7.5		22.2	11.9	3.9	8.0	8.1	12.4	67.4	24.2	2.3	168.0	61	49.8

Source: UIC, ECMT

Estimates in italic

Goods Transport

Inland Waterways

8.5

1000 mio tkm

	BG	CS	CZ	SK	EST	H	LT	LV	PL	RO	SLO	CEC	1970= 100	% of all tkm
1970	1.83	2.43			0.01	1.76	0.12	0.05	2.30	1.35	0.00	9.9	100	2.8
1980	2.61	3.59			0.01	2.15	0.15	0.09	2.33	2.35	0.00	13.3	135	2.5
1985	2.00	4.36			0.01	2.14	0.17	0.30	1.41	2.35	0.00	12.7	129	2.4
1989	1.95	5.10			0.01	2.11	0.17	0.30	1.19	3.70	0.00	14.5	147	2.7
1990	1.61	4.42			0.00	2.04	0.16	0.29	1.03	2.09	0.00	11.6	118	2.5
1991	1.02	3.89			0.00	1.72	0.14	0.34	0.74	2.03	0.00	9.9	100	2.7
1992	0.84	2.98			0.00	1.60	0.05	0.40	0.75	1.89	0.00	8.5	86	2.8
1993	0.46		1.26	0.84	0.00	1.62	0.05	0.00	0.66	1.59	0.00	6.5	66	2.2
1994	0.36		1.19	0.85	0.00	1.35	0.03	0.00	0.79	1.90	0.00	6.5	66	2.1
1995	0.73		1.32	0.42	0.00	1.26	0.02	0.00	0.88	3.11	0.00	7.7	79	2.3
1996	0.63		1.35	0.38	<i>0.00</i>	1.34	0.01	0.00	0.85	3.77	<i>0.00</i>	8.3	85	2.5

Source: ECMT, national statistics

Estimates in italic

Goods Transport

Pipelines (Oil)

8.6

1000 mio tkm

index

1970 = % of
100 all tkm

	BG	CS	CZ	SK	EST	H	LT	LV	PL	RO	SLO	CEC		
1970	0.0	6.4				1.0			7.0	1.8		16.2	100	4.6
1980	0.8	9.8				4.4			17.1	5.2		37.2	230	6.9
1985	1.0	9.0				4.9			17.0	4.8		36.7	226	7.0
1989	0.9	8.5				5.0			17.7	6.7		38.7	239	7.3
1990	0.6	7.5				5.3			13.9	5.1		32.4	200	7.1
1991	0.5	6.2				5.0			10.4	3.2		25.2	155	7.0
1992	0.3	5.3				4.3			11.9	2.6		24.4	150	8.0
1993	0.3		2.0	0.0		4.1			12.2	2.5		21.1	130	7.0
1994	0.4		2.2	0.0		4.2			14.3	2.8		23.8	147	7.6
1995	0.4		2.3	0.0		4.1			13.5	2.9		23.3	143	7.0
1996	0.4		2.3	0.0		4.5			15.3	2.7		25.2	155	7.5

Source: ECMT, national statistics

LV: 6 100 mio tkm transit traffic in 1996

Estimates in italic

LT: 2 000 mio tkm transit traffic in 1995

Passenger Transport

Railways

8.7

1000 mio pkm

	BG	CS	CZ	SK	EST	H	LT	LV	PL	RO	SLO	CEC	index 1970 =100
1970	6.2	20.5			1.2	15.2	2.1	3.8	36.9	17.8	1.5	105.2	100
1980	7.1	18.0			1.6	13.7	3.3	4.8	46.3	23.2	1.4	119.4	113
1985	7.8	19.8			1.6	9.6	3.4	5.2	52.0	31.1	1.7	132.2	126
1989	7.6	19.7			1.6	9.6	3.5	5.6	55.9	35.5	1.4	140.3	133
1990	7.8	19.4			1.5	9.2	3.6	5.4	50.4	30.6	1.4	129.3	123
1991	4.9	19.2			1.3	7.6	3.2	3.9	40.1	25.4	0.8	106.4	101
1992	5.4	16.9			1.0	6.9	2.7	3.7	32.6	24.3	0.5	94.0	89
1993	5.8		8.5	4.6	0.7	6.5	2.7	2.4	24.7	19.4	0.6	75.9	72
1994	5.1		8.5	4.5	0.5	6.4	1.6	1.8	21.8	18.3	0.6	69.1	66
1995	4.7		8.0	4.2	0.4	6.2	1.1	1.4	21.0	18.9	0.6	66.5	63
1996	5.1		8.1	3.8	0.3	6.4	0.9	1.2	19.8	18.4	0.6	64.5	61

passenger-km per person per year

1996	606		786	699	210	629	240	475	513	812	308	613
------	-----	--	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Source: UIC, ECMT (1970-1980 results)

for comparison: bus transport in CEC countries in 1996: 111 bio pkm

Passenger Cars

8.8

Vehicle stock

million

	BG	CS	CZ	SK	EST	H	LT	LV (1)	PL	RO	SLO	CEC	index 1970= 100
1970	0.16	1.00			0.03	0.24	0.05	0.04	0.48	0.04	0.18	2.2	100
1980	0.82	2.12			0.13	1.11	0.25	0.17	2.63	0.24	0.42	7.9	358
1985	1.06	2.73			0.18	1.44	0.34	0.22	3.67	0.95	0.50	11.1	504
1989	1.27	3.12			0.23	1.73	0.45	0.27	4.85	1.22	0.55	13.7	622
1990	1.32	3.24			0.24	1.94	0.49	0.28	5.26	1.29	0.58	14.6	666
1991	1.36	3.34			0.26	2.11	0.53	0.33	6.11	1.43	0.59	16.1	730
1992	1.36	3.48			0.28	2.06	0.57	0.35	6.51	1.59	0.61	16.8	764
1993	1.40		2.69	1.00	0.32	2.09	0.60	0.39	6.77	1.79	0.63	17.7	804
1994	1.59		2.97	0.99	0.34	2.18	0.65	<u>0.42</u>	7.15	2.02	0.66	19.0	862
1995	1.65		3.11	1.02	0.38	2.28	0.72	0.33	7.51	2.20	0.70	19.9	905
1996	1.71		3.35	1.06	0.41	2.43	0.79	0.38	8.05	2.41	0.73	21.3	969

Cars per 1000 inhabitants :

1996	204		325	197	277	239	212	153	209	107	366	203
------	-----	--	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Source: Eurostat, ECMT, national statistics

estimates in italic underlined : change in time series

(1) change in vehicle register, vehicle stock overestimated before 1994

CEC passenger car traffic in 1996: ca. 400 bio pkm

Airports and Seaports

Traffic at selected major airports

		Million passengers			Change 97/96 %
		1995	1996	1997	
Prague	<i>CZ</i>	3.21	3.80	4.36	+14.8
Budapest	<i>H</i>	2.94	3.31	3.62	+9.2
Warsaw	<i>PL</i>	2.38	3.07	3.52	+14.6
Bucarest	<i>RO</i>	1.46	1.40	:	
Sofia	<i>BG</i>	1.00	1.10	1.08	-1.1
Ljubljana	<i>SLO</i>	0.64	0.67	0.71	+6.2
Riga	<i>LV</i>	0.51	0.51	0.54	+5.8
Tallinn	<i>EST</i>	0.37	0.43	0.50	+16.6
Vilnius	<i>LT</i>	0.35	0.37	0.41	+10.9
Bratislava	<i>SK</i>	0.21	0.27	:	

Source: Airport Council International

Traffic at selected seaports

		Million tons loaded/unloaded			Change 96/95 %
		1993	1995	1996	
Constanta	<i>RO</i>	26.3	34.4	35.8	+4.1
Ventspils	<i>LV</i>	22.4	29.6	35.7	+20.8
Gdansk	<i>PL</i>	23.0	18.3	16.5	-9.9
Bourgas	<i>BG</i>	13.6	17.4	15.6	-10.3
Szceczin	<i>PL</i>	14.4	15.6	16.3	+4.3
Klaipeda	<i>LT</i>	7.4	12.8	12.8	+0.0
Tallinn	<i>EST</i>	12.5	13.0	14.1	+8.1
Gdynia	<i>PL</i>	7.8	7.6	8.6	+12.6
Riga	<i>LV</i>	4.7	7.5	7.5	-0.6
Koper	<i>SLO</i>	5.2	6.8	6.5	-4.4

Source: ISL, national statistics

External trade EU 15-CEC 8.10

1000 tonnes

EU 15 imports from

	1990	1992	1994	1995	1996
Εστονια	:	922	2 376	3 921	4 436
Λατвия	:	3 714	6 555	7 702	6 543
Λιθθανια	:	3 712	5 926	4 350	3 636
Πολανδ	27 006	36 473	46 782	43 673	40 235
Ψζεψη Ρεπ.	11 204	24 358	22 605	22 279	22 136
Σλωακ Ρεπ.	<i>inc CZ</i>	<i>inc CZ</i>	5 743	6 575	5 997
Ηθνγαρυ	6 344	6 912	7 382	8 332	8 490
Σλωενια	:	1 286	2 397	2 512	2 413
Ρομανια	4 109	2 243	3 738	4 741	4 325
Βθλγαρια	1 472	1 813	2 440	3 923	3 657

Total 10 countries

50 134 81 434 105 945 108 009 101 866

EU 15 exports to

	1990	1992	1994	1995	1996
Εστονια	:	628	775	1 203	1 537
Λατвия	:	602	585	1 179	1 212
Λιθθανια	:	779	424	576	765
Πολανδ	3 489	9 332	9 813	10 798	14 632
Ψζεψη Ρεπ.	1 482	4 508	4 734	5 655	6 885
Σλωακ Ρεπ.	<i>inc CZ</i>	<i>inc CZ</i>	1 137	1 559	2 111
Ηθνγαρυ	1 604	2 223	3 680	3 538	3 666
Σλωενια	:	1 738	3 637	3 404	3 356
Ρομανια	2 443	3 186	2 222	2 776	3 465
Βθλγαρια	479	967	1 179	1 053	723

Total 10 countries

9 497 23 962 28 185 31 740 38 352

Source: Eurostat

CEC - MED Countries

	Population 1996 million	Natural 1996 population growth %	GDP 1995 Bio ECU	GDP (PPP) /capita 1995 EU=100
Bulgaria	8.4	- 0.6	9.9	24
Czech Rep.	10.3	- 0.1	36.1	55
Slovak Rep.	5.4	+ 0.2	13.3	41
Estonia	1.5	- 0.7	2.8	23
Hungary	10.2	- 0.3	33.4	37
Lithuania	3.7	+ 0.0	3.5	24
Latvia	2.5	- 0.8	3.4	18
Poland	38.6	+ 0.1	90.2	31
Romania	22.6	- 0.3	27.3	23
Slovenia	2.0	+ 0.0	14.2	59
CEC	105.1	- 0.1	234.1	32
Algeria	28.6	+ 1.9	35	27
Cyprus	0.8	+ 4.1	6.3	75
Egypt	60.6	+ 2.3	36.1	20
Israel	5.7	+ 2.9	64.8	84
Jordan	5.6	+ 2.9	5.1	22
Lebanon	3.1	+ 2.3	7.7	25
Malta	0.4	+ 0.0	2.1	55
Morocco	27.6	+ 1.8	25.9	20
Palestinian Auth.	2.5	+ 3.0	n.d.	n.d.
Syria	14.6	+ 2.9	12.5	25
Tunisia	9.1	+ 1.6	13.2	28
Turkey	62.7	+ 1.7	109.2	26
Mediterranean	221.2	+ 2.1	317.9	25

Source: UN, Eurostat, World Bank, European Commission: Agenda 2000

PPP= Purchasing Power Parities

Chapter 9

Comparison with USA and Japan

USA : Evolution 1970-96

Performance by mode of transport

1000 mio tkm

	Road (1)	Rail (2)	Inland waterways	Pipelines	Total
1970	602	1117	343	629	2691
1975	663	1101	363	740	2868
1980	810	1342	422	859	3433
1985	891	1280	410	824	3405
1990	1073	1510	516	853	3951
1995	1345	1906	534	878	4663
1996	1440	1980	518	904	4842
1990-96	+ 34.1 %	+ 31.1 %	+ 0.5 %	+ 6.0 %	+ 22.5 %

Source: US Department of Transport

(1) Intercity truck traffic

(2) Class 1 railways (91% of rail freight traffic, total traffic: 2175 bio tkm)

Average annual change

% per year

	Road	Rail	Inland waterways	Pipelines	Total
1970-96	+3.4	+2.2	+1.6	+1.4	+2.3
1970-80	+3.0	+1.9	+2.1	+3.2	+2.5
1980-90	+2.8	+1.2	+2.0	-0.1	+1.4
1990-96	+5.0	+4.6	+0.1	+1.0	+3.4
1996	+7.1	+3.9	-3.0	+3.0	+3.8

Modal split

%

	Road	Rail	Inland waterways	Pipelines
1970	22.4	41.5	12.8	23.4
1975	23.1	38.4	12.7	25.8
1980	23.6	39.1	12.3	25.0
1985	26.2	37.6	12.0	24.2
1990	27.2	38.2	13.1	21.6
1996	29.7	40.9	10.7	18.7

USA : Evolution 1970-96

Performance by mode of transport

1000 mio pkm

	Car *	Railway	Bus	Urban Rail	Air	Total
1970	3 258	17	81	18	189	3 563
1980	3 926	18	111	18	352	4 424
1985	4 208	18	153	17	467	4 863
1990	4 867	21	196	19	577	5 681
1995	5 701	22	219	18	667	6 627
1996	5 841	22	219	20	716	6 818
1990-96	+ 20.0 %	+ 3.1 %	+ 12.1 %	+ 3.1 %	+ 24.0 %	+ 20.0 %

Source: US Department of Transport

*Passenger car (1996: 3773 bio pkm) and other 2-axle 4-tyre vehicles (1996: 2068 bio pkm)

Average annual change

% per year

	Car	Railway	Bus	Urban Rail	Air	Total
1970-96	+2.3	+0.9	+3.9	+0.5	+5.3	+2.5
1970-80	+1.9	+0.2	+3.2	+0.1	+6.4	+2.2
1980-90	+2.2	+1.8	+5.9	+1.0	+5.1	+2.5
1990-96	+3.1	+0.5	+1.9	+0.5	+3.7	+3.1
1996	+2.5	-1.5	+0.1	+8.6	+7.4	+2.9

Modal split

%

	Car	Railway	Bus	Urban Rail	Air
1970	91.4	0.5	2.3	0.5	5.3
1980	88.7	0.4	2.5	0.4	8.0
1985	86.5	0.4	3.2	0.4	9.6
1990	85.7	0.4	3.4	0.3	10.2
1996	85.7	0.3	3.2	0.3	10.5

Comparison EU 15 - USA - Japan - World

		EU 15	USA	JAPAN	World	EU % of World
Population						
million	1996	373	264	125	5 780	6%
Population growth						
%	1996	0.3	1	0.25	1.4	1%
GDP						
billion ECU	1996	6 800	5 800	3 600	22 000	31%
GDP per capita						
ECU	1996	18 200	22 000	28 900	3 600	*
Exports (without intra-EU)						
billion ECU	1996	624	491	324	2 045	31%
Passenger cars stock						
million	1995	162	136	43	480	34%
Motorization						
cars per 1000 persons	1995	435	515	343	83	*
Commercial vehicles						
million	1995	18	65	20	160	11%
Car production						
million	1996	13.7	6.1	7.9	36.7	37%
Bicycle production						
million	1995	13.6	8.0	6.6	107.0	13%
Freight transport road					(1)	
billion tkm	1995	1 140	1 345	295	7 000	16%
Freight transport rail					(1)	
billion tkm	1995	220	2 100	25	6 500	3%
Passenger transport cars						
billion pkm (2)	1995	3 690	5 700	800	15 000	25%
Passenger transport rail				(3)		
billion pkm	1995	270	22	400	1 900	14%
Ports						
tons loaded/unloaded	1995	2 500	1 000	1 000	9 000	28%
CO2-Emissions						
billion tons	1995	3.1	5.2	1.2	22.2	14%

Sources: UN, IMF, Eurostat, UIC

* : EU has GDP per capita and motorization levels circa 5 times the World levels

(1) World freight transport: ca. 55 000 billion tkm (of which sea: 38 000 bio tkm)

(2) Passenger transport includes the use of light trucks in the USA and Japan

(3) incl. tramway and metro transport (= ca. 25 bio pkm)

Statistical Sources

1. European legal acts on transport statistics

Council Directive (80/1119/EEC) of 17 November 1980 on statistical returns in respect of carriage of goods by inland waterways (O.J. L 339 of 15.12.1980)

Council Directive (80/1177/EEC) of 4 December 1980 on statistical returns in respect of carriage of goods by rail as part of regional statistics (O.J. L 350 of 23.12.1980)

Council Directive (95/64/EC) of 8 December 1995 on statistical returns in respect of carriage of goods and passengers by sea (O.J. L 320 of 30.12.1995) and rules for implementation: Commission Decision (98/385/EC in O.J. L 174 of 18.06.1998)

Draft Council Regulation (EC)

on statistical returns in respect of carriage of passengers, freight and mail by air (COM (95) 353 final of 14.09.1995)

Council Regulation (EC) No 1172/98 of 25 May 1998

on statistical returns in respect of carriage of goods by road (O.J. L 163 of 6.6.1998)

(replaces Council Directive (78/546/EEC) of 12 June 1978 and Council Directive (89/462/EEC) of 18 July 1989)

2. Eurostat

Jean Monnet Building, Rue Alcide De Gasperi,

L-2920 Luxembourg

Contact Points : the Eurostat data shops

<http://europa.eu.int/eurostat.html>

- *Transport : Annual Statistics*
- *Air Transport*
- *Maritime Transport*
- *Carriage of Goods : Railways*
- *Carriage of Goods : Road*
- *Carriage of Goods : Inland waterways*

3. International Statistical Sources

United Nations UN-ECE

Palais des Nations, CH-1200 Genève, Switzerland

Tel +41 22 917 2453

Fax +41 22 917 0039

<http://www.un.org>

- *Annual Bulletin of Transport Statistics for Europe*
- *Statistics of Road Accidents in Europe*

European Conference of Ministers of Transport (ECMT)

24, rue Louis David, F-5755 Paris Cedex 16, France

Tel +33 1 45 24 97 22

Fax +33 1 45 24 97 42

<http://www.oecd.org>

- *Statistical Trends in Transport*
- *Trends in the Transport Sector*

Association of European Airlines (AEA)

Avenue Louise 350, B-1050 Brussels, Belgium

Tel +32 2 627 0600

Fax +32 2 648 4017

aeasec@aea.infonet.com

- *Yearbook*

Airports Council International (ACI)

European Region : 6 Square de Meeûs, B-1000 Brussels, Belgium

Tel +32 2 552 0978

Fax +32 2 513 2642

<http://www.aci-europe.org>

- *European Airports Traffic Report*

European Cyclists' Federation (ECF)

Avenue de Broqueville, 158 (b.3), B-1200 Brussels, Belgium

Tel +32 2 771 8768

Fax +32 2 762 3003

<http://webhotel.uni2.dk/dcf/ecf>

ecf_brussels@compuserve.com

- *Report on cycling : study for DG VII*

**European Automobile Manufacturer's Association
(ACEA)**

Rue du Noyer 211, B-1000 Bruxelles, Belgium

Tel +32 2 732 5550

Fax +32 2 738 7310

European Federation of Inland Ports (EFIP)

6, place des Armateurs, B-1000 Bruxelles, Belgium

Tel +32 2 420 7037

Fax +32 2 420 6974

Institute for Shipping Economics and Logistics (ISL)

Universitätsallee GW 1 Block A, D-28359 Bremen, Germany

Tel +49 421 22096-0

Fax +49 421 2209655

<http://www.isl.org>

subscription@isl.org

- *Shipping Statistics Yearbook*

International Air Transport Association (IATA)

33, Route de l'Aéroport, CH-1215 Geneva Airport, Switzerland

Tel +41 22 799 2525

Fax +41 22 799 2680

<http://www.iata.org/ar97>

- *World Air Transport Statistics*

International Road Federation (IRF)

63, rue Lausanne, CH-1200 Genève, Switzerland

Tel +41 22 731 7150

Fax +41 22 731 7158

<http://www.is.eunet.ch/irf>

- *World Road Statistics*

**International Union (Association) of
Public Transport (UITP)**

Avenue de l'Uruguay 19, B-1000 Bruxelles, Belgium

Tel +32 2 673 6100

Fax +32 2 660 1072

<http://www.uitp.com>

administration@uitp.com

- *Transport Demand of Modes not covered in
International Transport Statistics, study for DG VII*

International Union of Railways (UIC)

16, rue Jean-Rey, F-75015 Paris, France

Tel +33 1 44 49 22 81

Fax +33 1 44 49 20 39

<http://www.uic.asso.fr>

- *International Railway Statistics*

**Union Internationale des Sociétés
de Transport Combiné Rail-Route (UIRR)**

Avenue du Port, 100, bte3, B-1210 Bruxelles, Belgium

Tel +32 2 425 4793

Fax +32 2 425 3827

<http://www.uirr.com>

- *UIRR Report*

4. National Statistical Sources

Belgique/België

Institut National de Statistique (INS)

Rue de Louvain 44, B-1000 Bruxelles, Belgium

Tel +32 2 548 62 11

Fax +32 2 548 62 62

Ministère des Communications

Rue d'Arlon 104, B-1040 Bruxelles, Belgium

- *Les transports en Belgique*

Danmark

Danmark Statistik

Sejrogade 11, Postboks 2550, DK-2100 København, Denmark

Tel +45 39 17 39 17

Fax +45 39 17 39 99

<http://www.dst.dk>

dst@dst.dk

- *Transportstatistik*

Deutschland

Statistisches Bundesamt

Gustav-Stresemann-Ring 11, PB 5528, D-65189 Wiesbaden, Germany

Tel +49 611 751

Fax +49 611 753 966

<http://www.statistik-bund.de>

pressestelle@stba.bund400.de

Deutsches Institut für Wirtschaftsforschung DIW

Königin-Luisenstr. 5, D-14195 Berlin, Germany

Tel +49 30 897 89 300

Fax +49 30 897 89 200

<http://www.diw.berlin.de>

- *Verkehr in Zahlen*

Ellas (Greece)

National Statistical Service of Greece

14-16 Lycourgou Street, GR-10166 Athens, Greece

Tel +30 1 32 48 511

Fax +30 1 32 22 205

(<http://www.thales.iacm.forth.gr/esye>)

Espana

Instituto Nacional de Estadística (INE)

Paseo de la Castellana 183, E-28071 Madrid, Spain

Tel +34 1 583 91 00

Fax +34 1 579 27 13

<http://www.ine.es>

info@ines.es

Ministerio de Fomento, Centro de Publicaciones

Paseo de la Castellana Pl. 2a, E-28071 Madrid, Spain

- *Los Transportes y las Comunicaciones*

France

Institut National de la Statistique et des Etudes Economiques (INSEE)

18, Boulevard Adolphe Pinard, F-75675 Paris CEDEX 14, France

Tel +33 1 41 17 5050

Fax +33 1 41 17 66 66

<http://www.insee.fr>

Ministère des Transports et du Tourisme, Service Economique et Statistique (SES)

Tour Pascal B, F-92055 Paris-La Défense Cedex, France

Tel +33 1 40 81 21 22

Fax +33 1 40 81 1772

- *Mémento de Statistiques des Transports*

Ireland

Central Statistical Office

Skehard Road, IRL-Cork, Ireland

Tel +353 21 35 90 00

Fax +353 21 35 9090

<http://www.cso.ie>

webmaster@cso.ie

Italia

Istituto Nazionale di Statistica (ISTAT)

Via Cesare Balbo 16, I-00184 Roma, Italy

Tel +39 6 488 4673

Fax +39 6 488 4797

<http://www.istat.it>

dipdiff@istat.it

Ministerio dei Trasporti e della Navigazione

Instituto Poligrafico e Zecca dello Stato

Piazza della Croce, I-00100 Roma, Italy

- *Conto nazionale dei trasporti*

Luxembourg

Service central de la statistique et des études économiques (STATEC)

6, Boulevard Royal, L-2449 Luxembourg

Tel +352 4781 4210

Fax +352 46 4289

<http://www.statec.gouvernement.lu>

statec.post@statec.eta.lu

Nederland

Centraal Bureau voor de Statistiek (CBS)

Prinses Beatrixlaan 428, PB 959, NL-2270 AZ Voorburg, Netherlands

Tel +31 70 337 3800

Fax +31 70 387 74 29

<http://www.cbs.nl>

verkoop@cbs.nl

- *Zakboek Verkeer en Vervoer*

Österreich

Österreichisches Statistisches Zentralamt (ÖSTAT)

Hintere Zollamtstrasse 2b, Postfach 9000, A-1033 Wien, Austria

Tel +43 1 71128 7985

Fax +43 1 71128 7728

<http://www.oestat.gv.at>

info@oestat.gv.at

Portugal

Instituto Nacional de Estatística (INE)

Av. Antonio de Almeida, P-1078 Lisboa Cedex, Portugal

Tel +351 1 847 0050

Fax +351 1 847 3964

<http://www.ine.pt>

ine@ine.pt

- *Estatísticas dos Transportes e Comunicações*

Suomi/Finland

Statistics Finland

Työpajakatu 13, FIN-00022 Helsinki, Finland

Tel +358 9 1734 1

Fax +358 9 173422 91

<http://www.stat.fi>

webmaster@stat.fi

- *Transport Statistical Yearbook for Finland*

Sverige

Statistics Sweden

Karlavägen 100, S-11581 Stockholm, Sweden

Klostergatan 23, S-70189 Örebro, Sweden

Tel +46 8 783 40 00

Fax +46 8 661 52 61

<http://www.scb.se>

infoservice@scb.se

Swedish Institute for transport and communication analysis (SIKA)

POB 3118, S-103 62 Stockholm, Sweden

Tel +46 8 453 59 85

Fax +46 8 215 872

maria.nelson@sika-institute.se

United Kingdom

Office for National Statistics

1 Drummond Gate - London SW1V 2QQ, United Kingdom

Tel +44 171 533 5676

Fax +44 171 533 5689

<http://www.ons.gov.uk>

gloria.ryan@ons.gov.uk

Department of the Environment, Transport and the Regions (DETR)

76 Marsham Street, GB-London W1P 4DR, United Kingdom

Tel +44 171 271 3745

- *Transport Statistics Great Britain*

Schweiz

Generalsekretariat EVED, Dienst für Gesamtverkehrsfragen

Kochergasse 10, CH-3003 Bern, Switzerland

- *Alpenquerender Güterverkehr auf Strasse und Schiene*

For any request concerning European statistics, please contact one of the Eurostat data shops.

For comments and suggestions on the content of the pocketbook please contact:

Eurostat, Unit C2 (Transport statistics)
Jean Monnet Building
L-2920 Luxembourg
e-mail: transport-unit@eurostat.cec.be

or :

European Commission
Directorate General for Transport
Unit VII/E/1
Beaulieu 31, office 5/30
B-1160 Brussels
e-mail: figures-transport@dg7.cec.be

CORRIGENDUM

"EU Transport in figures — Statistical Pocketbook — 1998"

Table 8.10 on page 89 should be replaced with the following table

Catalogue number: C3-11-98-875-EN-K

External trade EU 15-CEC 8.10

1000 tonnes

EU 15 imports from

	1990	1992	1994	1995	1996
Estonia	:	922	2 376	3 921	4 436
Latvia	:	3 714	6 555	7 702	6 543
Lithuania	:	3 712	5 926	4 350	3 636
Poland	27 006	36 473	46 782	43 673	40 235
Czech Rep.	11 204	24 358	22 605	22 279	22 136
Slovak Rep.	<i>inc CZ</i>	<i>inc CZ</i>	5 743	6 575	5 997
Hungary	6 344	6 912	7 382	8 332	8 490
Slovenia	:	1 286	2 397	2 512	2 413
Romania	4 109	2 243	3 738	4 741	4 325
Bulgaria	1 472	1 813	2 440	3 923	3 657

Total 10 countries

50 134 81 434 105 945 108 009 101 866

EU 15 exports to

	1990	1992	1994	1995	1996
Estonia	:	628	775	1 203	1 537
Latvia	:	602	585	1 179	1 212
Lithuania	:	779	424	576	765
Poland	3 489	9 332	9 813	10 798	14 632
Czech Rep.	1 482	4 508	4 734	5 655	6 885
Slovak Rep.	<i>inc CZ</i>	<i>inc CZ</i>	1 137	1 559	2 111
Hungary	1 604	2 223	3 680	3 538	3 666
Slovenia	:	1 738	3 637	3 404	3 356
Romania	2 443	3 186	2 222	2 776	3 465
Bulgaria	479	967	1 179	1 053	723

Total 10 countries

9 497 23 962 28 185 31 740 38 352

Source: Eurostat

European Commission

EU transport in figures — Statistical pocketbook — 1998

Luxembourg: Office for Official Publications
of the European Communities

1998 — 101 pp. — 10.5 x 21 cm

ISBN 92-828-3670-3

7

17

C3-11-98-875-EN-C



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-828-3670-3



9 789282 836705 >