

Aviation and maritime statistics in the candidate countries

Data 1995-2000



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1. FOREWORD

This publication presents the first extensive collection of up-to-date statistics on the transportation of passengers and goods by air and by sea in the Candidate Countries. It has the twofold aim of drawing a detailed picture of the aviation and maritime sector in each country and encouraging the harmonisation of the currently available data. It was prepared within the framework of the PHARE Multi-Country Co-operation Programme, thanks to the precious contribution of the National Statistical Institutes, Ministries of Transport, other Competent National Authorities and industry bodies. Detailed data on the PHARE Candidate Countries is provided as well as summary data concerning aviation and maritime transport in MED Candidate Countries.

The first section presents, country by country, statistics on passengers, freight and mail and aircraft movements in the major airports and on the transportation of goods, passengers and vessel traffic in the major ports. An analysis of the major trends is illustrated by a number of figures and tables, accompanied by a brief description of the infrastructure and policies in the transport sector. Although the data are derived from the current statistical systems in each country, and therefore not always comparable, many of the tables are common to all countries.

The second section focuses on the existing statistical system for aviation and maritime transport in each country. It describes the sources, the definitions and classifications adopted and their compliance to the EU statistical requirements in this field.

The successful completion of this publication, addressed to a large number of users, is an important step towards the adaptation of the national statistical systems in Candidate Countries to meet the legal requirements of future membership of the European Union.

John ALLEN
Head of Transport Unit

2. OVERVIEW OF AVIATION AND MARITIME TRANSPORT IN THE CANDIDATE COUNTRIES

The PHARE Candidate Countries are a very diverse group. In terms of their size, both geographically and in population, they vary from larger countries, e.g. Poland with an area of 313 thousand km² and a population of 39 million and Romania (238 thousand km², 23 million), to smaller economies such as Slovenia (20 thousand km², 2 million), Estonia (45 thousand km², 1.4 million) and Latvia (65 thousand km², 2.4 million) (Table 1).

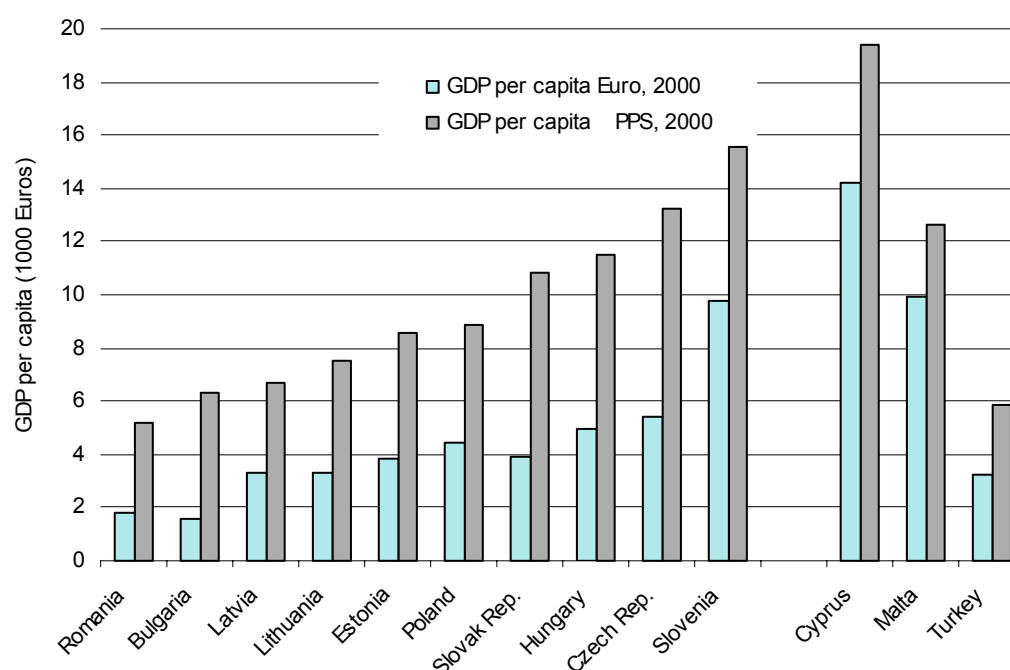
Table 1: General Statistics (all data relate to the year 2000 or the latest year available)

	Area 1000 km ²	Population million ⁽¹⁾	Population density inhab./km ² ⁽¹⁾	GDP mn Euro 2000	GDP per capita Euro 2000	GDP per capita PPS 2000
EU-15	3 191.1	376.5	118.0	8 523 926	22 520	22 520
Bulgaria	111.0	8.2	73.8	13 026	1 600	6 300
Czech Rep.	78.9	10.3	130.3	55 045	5 400	13 200
Estonia	45.2	1.4	31.8	5 460	3 800	8 600
Latvia	64.6	2.4	37.5	7 762	3 300	6 700
Lithuania	65.3	3.7	56.6	12 249	3 300	7 500
Hungary	93.0	10.0	108.0	50 281	5 000	11 500
Poland	312.7	38.7	123.6	171 050	4 400	8 900
Romania	238.4	22.5	94.2	39 983	1 800	5 200
Slovak Rep.	49.0	5.4	110.1	20 883	3 900	10 800
Slovenia	20.3	2.0	98.1	19 532	9 800	15 600
Cyprus	9.3	0.8	81.6	9 510	14 200	19 400
Malta	0.3	0.4	1 228.8	3 862	9 900	12 600
Turkey	769.6	64.8	84.2	217 430	3 200	5 900

⁽¹⁾ 1999 data

Source: New Cronos

Figure 2: GDP per capita by country



In terms of population density, four countries, the Czech Republic, Poland, the Slovak Republic and Hungary lie around the EU-15 average while the others are less densely populated, notably Estonia and Latvia. Poland has the largest GDP of the group while Estonia the smallest, a reflection of the two countries respective sizes. Looking at GDP in terms of GDP per capita, a different picture appears (see Figure 2). Adjusting for internal purchasing power, four countries emerge as having a GDP per capita around or above half the EU-15 average. These are Slovenia, the Czech Republic, Hungary and the Slovak Republic. The candidates other than the PHARE countries are an even more diverse group, including the very large Turkish economy and the extremely compact economy of Malta, which has a population density more than ten times the EU-15 average. In terms of GDP per capita, Cyprus emerges as the front runner and, when internal purchasing power is considered, is within touching distance of the EU-15 average.

MARITIME TRANSPORT

In 2000, maritime ports in the seven PHARE Candidate Countries having direct access to the sea handled over 210 million tonnes of freight. Latvia, Poland and Estonia together account for 65% of the total (see Figure 5). 19 ports (referred to as major ports) had a throughput of 1 million tonnes or more (Table 3 and Figure 4).

Table 3: Maritime transport in the Candidate Countries, 2000

	Goods (mio tonnes)				Vessels Inward movements	Passengers 1000		Main Port (Freight handled)		Major ports: More than 1 mio t per year
	Total	Loaded (Exports)	Unloaded (Imports)	Transit		Embarked	Disem- barked	Name	Share of total freight (%)	
Bulgaria	17.8	7.2	10.2	0.4	2 412	:	:	Burgas	:	2
Estonia ⁽²⁾	39.8	9.4	3.3	27.1	14 159	2 683	3 509	Tallinn	73	5
Latvia ⁽³⁾⁽⁴⁾	51.8	49.2	2.5		6 801	13	13	Ventspils	67	3
Lithuania	22.7	4.9	2.3	15.5	7 253	52	54	Klapeida	100	1
Poland ⁽¹⁾⁽³⁾	47.3	31.5	15.8	:	35 238	2 205	2 260	Gdansk	35	5
Romania	25.5	12.3	11.8	1.4	4 874	:	:	Costantza	90	2
Slovenia ⁽³⁾	9.0	2.4	6.7	:	2 368	18	19	Koper / Capodistria	100	1
All PHARE ⁽⁵⁾	213.9	:	:	:	73 105	:	:		69	19
Cyprus ⁽¹⁾⁽³⁾	7.4	1.6	5.3	0.5	5 289	517	518	Limassol	47	3
Malta ⁽¹⁾⁽³⁾	5.7	0.6	5.1	:	5 372	:	:	Marsaxlokk	51	2
Turkey ⁽¹⁾⁽³⁾	149.0	45.3	103.7	:	26 591	:	:	Izmit	21	17

⁽¹⁾ For Poland, Malta and Turkey the number of inwards vessels is estimated (total divided by two) and for Malta this is 1999 data.

⁽²⁾ The passenger figures for Estonia are for international passengers only.

⁽³⁾ The figures for goods loaded and unloaded for Latvia, Poland, Slovenia, Malta and Turkey include transit traffic.

⁽⁴⁾ For Latvia, the figures for vessel movements are for the three major ports Riga, Ventspils and Liepaja only while those for passengers are for Riga only.

⁽⁵⁾ The all PHARE countries figure for the share of total freight accounted for by the largest port exclude Bulgaria.

Figure 4: Tonnage handled by the Candidate Countries' Ports in 2000

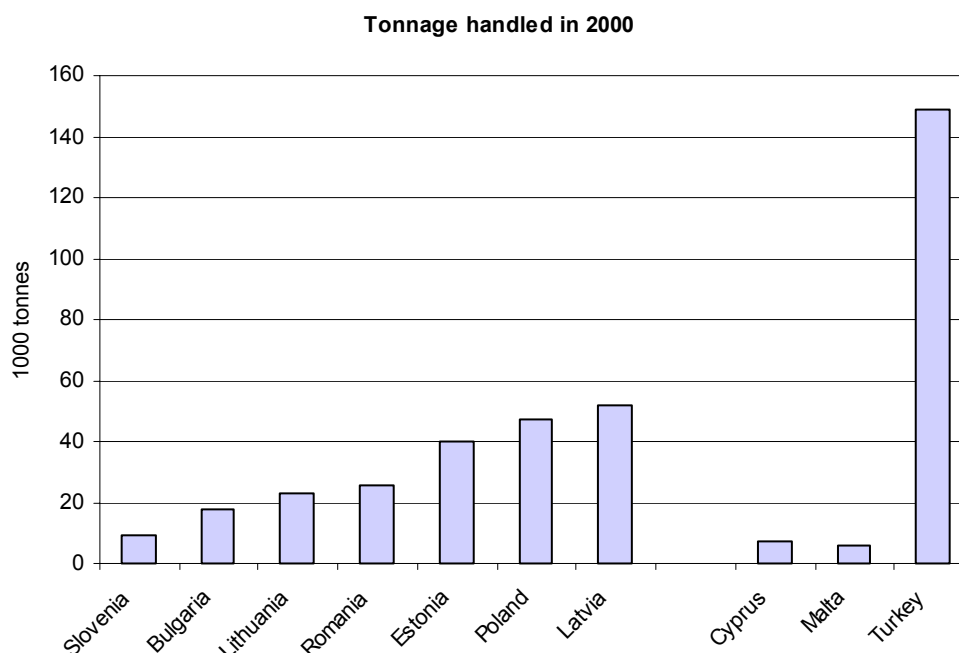
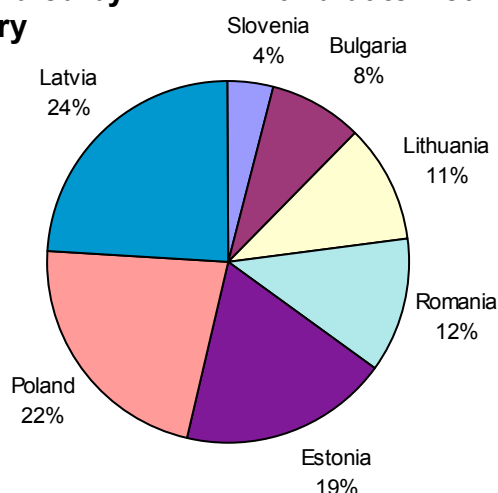


Figure 5: Tonnage handled by PHARE Candidate Countries' ports in 2000 - share by country



Poland and Estonia had 5 major ports each. At a country level, Latvia, Poland and Estonia handled 40 million tonnes or more. One noticeable feature was that there was more outward than inward tonnage for countries with a Baltic Sea coastline while those with a Black Sea or Adriatic coastline processed more inward than outward tonnage. Estonia and Lithuania reported substantial volumes of transit tonnage, 27 million tonnes for Estonia and 16 million tonnes for Lithuania; it is likely that Latvia also has substantial transit volumes although no details were available. Indeed, operations in the ports of the three Baltic States were parallel to those of Belgium and the Netherlands, both sets serving an economic hinterland well beyond the borders of their own countries. Leaving aside Bulgaria, where no information is available at the individual port level, on average, the major port in each country accounted for 69% of total freight tonnage, ranging from 100% for Klaipeda in Lithuania and Koper in Slovenia to 35% for Gdansk in Poland. For passenger numbers, Estonia and Poland were the major countries, Estonia handling some 7.5

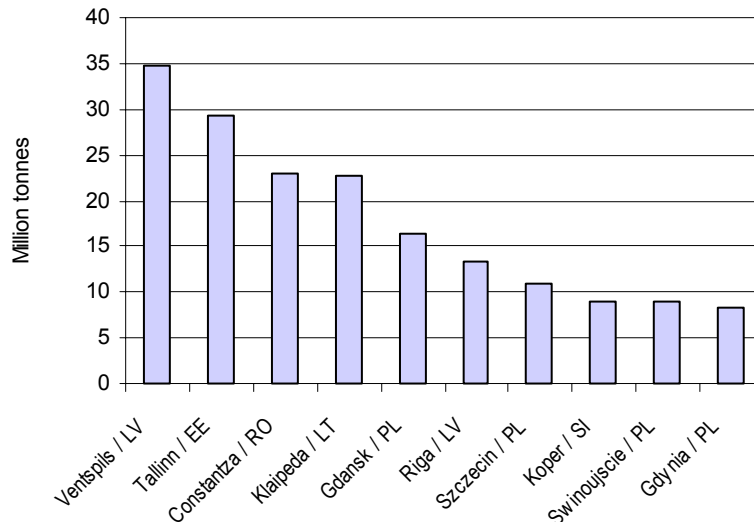
million passengers in 2000 and Poland some 4.5 million, both substantially larger figures than for any other PHARE country. There were some 70 thousand vessel movements inward to the PHARE countries in 2000, nearly half of which were accounted for by Poland and another quarter by Estonia. For the other Candidate Countries, Turkey's importance as a maritime nation is shown by the fact that its ports handled nearly 150 million tonnes in 2000, about three quarters of the total for the PHARE countries as a whole. For all three of the other Candidate Countries, goods unloaded far outweighed goods loaded.

The list of the top ten ports in the PHARE Candidate Countries features each country's major port for maritime transport, with the exception of Burgas in Bulgaria where no port level information is available (Table 6 and Figure 7). Latvia is represented by two ports, Ventspils and Riga while Poland has four, Gdansk, Szczecin, Swinoujscie and Gdynia. Four ports, Ventspils, Tallinn, Constantza and Klaipeda handled more than 20 million tonnes in 2000. A large number of Turkish ports would feature in such a list. Izmit for example handled about 31.4 million tonnes in 2000, Aliaga nearly 25 million, Istanbul over 17 million and Mersin nearly 13 million. On the other hand, the largest port in terms of cargo transport in Cyprus is Limassol with 3 million tonnes in 2000 and in Malta it is Marsaxlokk with 2.9 million tonnes.

Table 6: TOP 10 maritime ports in the PHARE Candidate Countries, 2000 (on the basis of total tonnage handled) - in million tonnes

1	Ventspils / LV	34.8
2	Tallinn / EE	29.2
3	Constantza / RO	22.9
4	Klaipeda / LT	22.7
5	Gdansk / PL	16.5
6	Riga / LV	13.3
7	Szczecin / PL	10.9
8	Koper / SI	9.0
9	Swinoujscie / PL	8.9
10	Gdynia / PL	8.4

Figure 7: Top-10 maritime ports in the PHARE Candidate Countries in 2000



In the development of maritime transport in the PHARE Candidate Countries over the period 1995 to 2000 in terms of the growth in tonnage handled, Estonia recorded an annual average rise over the five years of 20.4% while Lithuania recorded 12.3% and Latvia and Slovenia around 6% (Table 8, Figure 9 and Figure 10). In contrast, cargo volumes for Poland remained stable while Bulgaria and Romania suffered declines. No doubt, the buoyant performance of the three Baltic States owed much to the strong developments in the Russian economy while Slovenia benefited from the progress of Koper as a point of entry for many central European countries. The problems faced by Bulgaria and Romania reflect in part the difficulties in neighbouring Baltic states and, in the case of Romania, the consequential disruption of traffic on the Danube.

Looking at the situation for passengers, both the major passenger PHARE countries, Poland and Estonia, achieved growth. In the case of Poland, this reached an average of 35% per year over the period, probably partly a reflection of Poland's success in capitalising on the end of 'duty free' on intra EU routes. This may also help to explain the continued growth in Estonian figures. The surprise was the growth of 12% per year achieved by Lithuania although this was from a very low base. The more limited information for vessel movements shows that Poland recorded an annual average rise of 19.4% over the period while Estonia achieved 11% and Slovenia 8.7%. Amongst the Candidate Countries other than the PHARE group, Turkey saw its volume of freight grow over the five years recording a 7.3% annual average rise. Cyprus recorded an average 3.2% decline. Conversely, Turkey and Malta saw their passenger numbers decline, whereas Cyprus recorded an average 5.6 % growth.

Table 8: Maritime transport in the Candidate Countries, 1995 and 2000

	Total of gross weight of goods (mio tonnes)			Total number of passengers excl. cruise (1000)			Number of vessel movements (inwards)		
	1995	2000	Average Annual Growth %	1995	2000	Average Annual Growth %	1995	2000	Average Annual Growth %
Bulgaria ^{(1) (2)}	21.5	17.8	-3.7	:	:	:	3 652	2 412	-8.0
Estonia ⁽²⁾	15.7	39.8	20.4	5 343	7 432	6.8	8 405	14 159	11.0
Latvia ⁽³⁾	38.9	51.8	5.9	33	26	-5.7	:	6 801	:
Lithuania	12.7	22.7	12.3	58	106	12.7	6 931	7 253	0.9
Poland	48.2	47.3	-0.4	989	4 465	35.2	14 541	35 238	19.4
Romania	38.0	25.5	-7.7	-	-	-	:	4 874	:
Slovenia	6.8	9.0	5.8	40	38	-1.3	1 557	2 368	8.7
all PHARE	181.8	213.9	3.3	:	:	:	:	:	:
Cyprus ⁽⁴⁾	8.7	7.4	-3.2	787	1 035	5.6	4 743	5 289	2.2
Malta ^{(5) (6)}	5.2	5.7	1.5	228	217	-0.8	:	5 372	:
Turkey ⁽⁶⁾	97.6	149.0	7.3	1 802	1 243	-6.0	:	26 733	:

⁽¹⁾ 1996 data for gross weight of goods and vessel movements for Bulgaria instead of 1995.

⁽²⁾ Bulgarian and Estonian figures for gross weight of goods include the tare weight of containers and ro-ro units.

⁽³⁾ Latvia: 1996 figures for passengers and for the port of Riga only.

⁽⁴⁾ For Cyprus the number of passengers includes cruise.

⁽⁵⁾ Malta: 1999 vessel data.

⁽⁶⁾ For Malta and Turkey 1994 data instead of 1995 and the data excludes cruise passengers. The number of cruise passengers is nevertheless relevant for Malta (for the year 2000 = 167810).

Figure 9: Growth in tonnage handled in maritime ports in the Candidate Countries 1995 / 2000

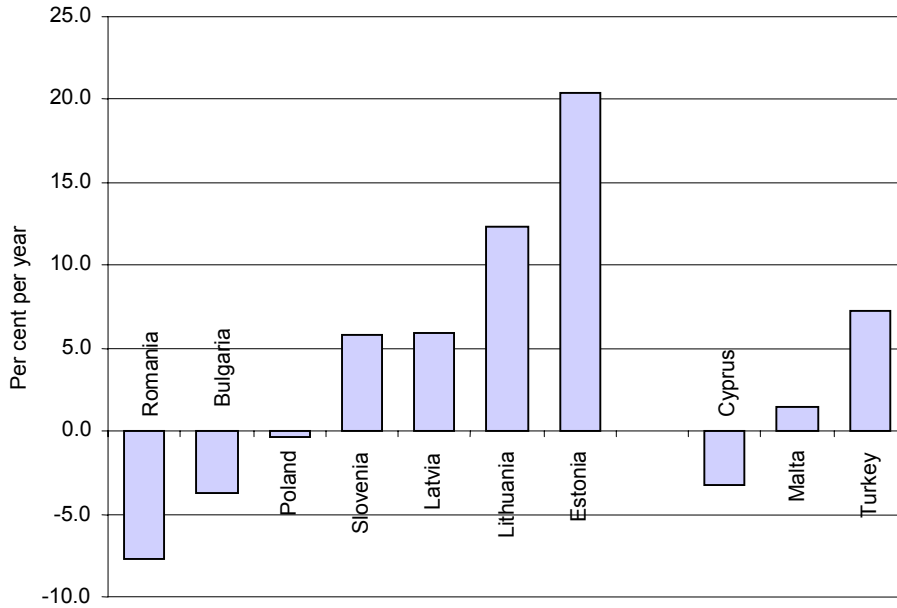
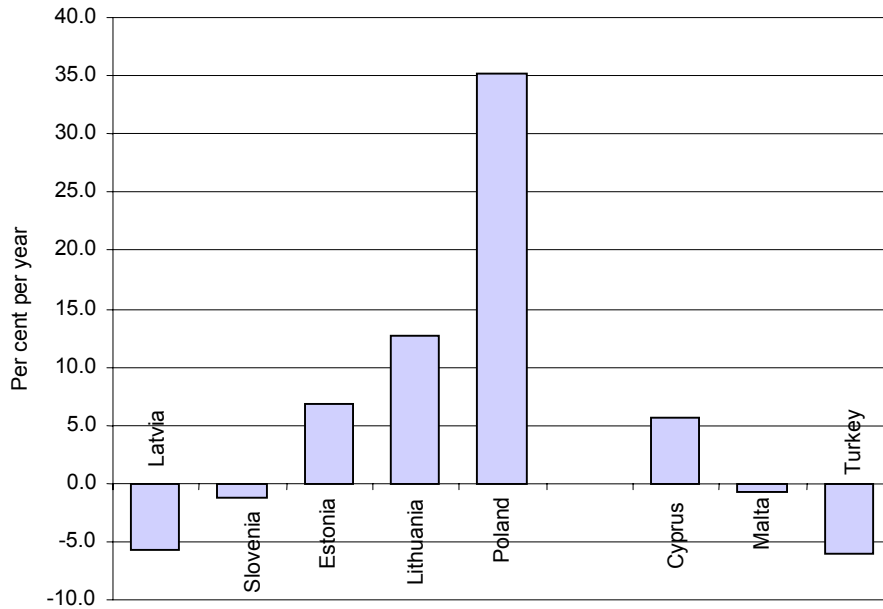


Figure 10: Growth in passenger movements at maritime ports in the Candidate Countries 1995 / 2000



Note: development of Cyprus includes cruise passengers.

Considering the performance of national maritime transport operators in 2000 in terms of passengers, Estonia and Poland were the major countries, recording 246 million passenger kilometres and 100 million respectively (Table 11). For freight transport, Poland, Bulgaria and Slovenia were the major participants with 134 million tonne kilometres, 74 million and 28 million respectively. In addition, Lithuanian operators carried 4.5 million tonnes of freight.

Table 11: Transport performance of the main national maritime operators, 2000

	Passengers carried (1000)	Passenger kilometres (million)	Freight and mail carried (mio. tonnes)	Tonne kilometres (million)
Bulgaria	:	:	18.62	74.4
Estonia	4 800	246	2.00	4.3
Latvia	:	:	:	:
Lithuania	64	44	4.52	:
Poland	600	100	23.00	134.0
Romania	:	:	:	:
Slovenia	:	:	3.46	27.8

AVIATION TRANSPORT

In 2000, airports in the PHARE Candidate Countries handled the arrival and departure of 24 million passengers, with numbers at 20 airports (referred to as major airports) exceeding 100 thousand passengers per year (Table 12 and Figure 13). The Czech Republic and Poland handled just under 6 million passengers each, both exploiting the increasing tourist potential of their countries and, in the Czech Republic, building up Prague Airport as a hub for many destinations in the PHARE countries and beyond. The Czech Republic and Poland together account for nearly 50% of the total amount of passengers carried in the PHARE Candidate Countries (see Figure 14). Hungary had a little over 4.5 million passengers with Romania and Bulgaria recording over 2 million. For all the PHARE Candidate Countries, international air transport was dominant; only in Poland and Romania did national transport exceed 10% of the total. On average, the largest airport (in many countries the only major airport) in each country accounted for 85% of the total passenger transport. Only Poland with 6, Bulgaria and the Czech Republic with three and the Slovak Republic with two had more than one major airport. In the other Candidate Countries, Turkey had a higher passenger volume than the PHARE Candidate Countries combined and its domestic share accounted for 44% of the total. Cyprus, a popular holiday destination, also featured a higher passenger volume than any individual PHARE country. Prague was the busiest PHARE Candidate Country airport in 2000 with over 5.5 million passengers, followed by Budapest with 4.7 million and Warsaw with 4.3 million (Table 15 and Figure 16). All these figures were dwarfed by the close to 16 million passengers passing through Istanbul Ataturk airport (Turkey). Larnaca airport in Cyprus saw 4.7 million passenger arrivals and departures, while Malta International airport reached close to 3 million.

Table 12: National and international passenger transport by air, 2000

	Number of passengers				Main airport		
	Arrivals and departures (1000)	Direct transit (1000)	International passengers (1000)	National passengers (1000)	Name	Share of national total (%)	N° airports >100 000 passengers
Bulgaria	2 255.1	30.3	2 093.1	154.7	Sofia	49	3
Czech Rep.	5 821.6	42.6	5 691.0	130.6	Praha / Ruzyně	95	3
Estonia	577.6	:	558.5	19.1	Tallinn	97	1
Latvia ⁽¹⁾	575.8	0.5	576.3	:	Riga	100	1
Lithuania	580.9	17.3	597.4	0.8	Vilnius	87	1
Hungary	4 696.8	:	4 696.8	:	Budapest / Ferihegy	100	1
Poland	5 732.9	:	4 696.3	1 036.6	Warsaw	75	6
Romania	2 379.1	182.4	2 247.4	314.1	Bucharest-Otopeni	73	1
Slovak Rep.	429.6	:	398.3	31.2	Bratislava	66	2
Slovenia	986.0	5.0	991.0	:	Ljubljana	100	1
All PHARE	24 035.2	:	22 546.5	:	.	85	20
Cyprus	6 125.2	16.5	:	:	Larnaca	77	2
Malta	2 912.7	38.3	2 951.0	:	Malta Intl	100	1
Turkey ⁽¹⁾	34 322.3	1 590.0	17 079.9	12 931.8	Istanbul / Ataturk	44	14

⁽¹⁾ International and national traffic data is for 1999 for Turkey.

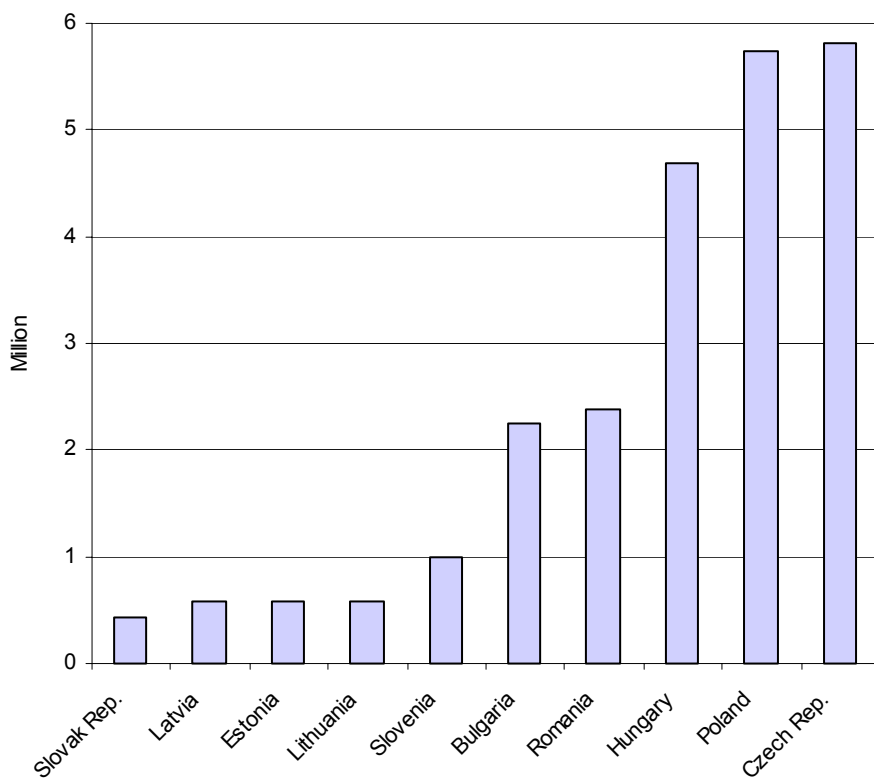
Figure 13: Airport arrivals and departures of passengers in PHARE Candidate Countries in 2000


Figure 14: Airport arrivals and departures of passengers in PHARE Candidate Countries in 2000, share by country

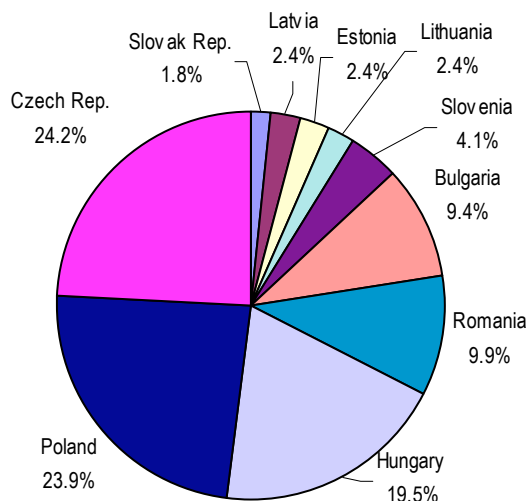
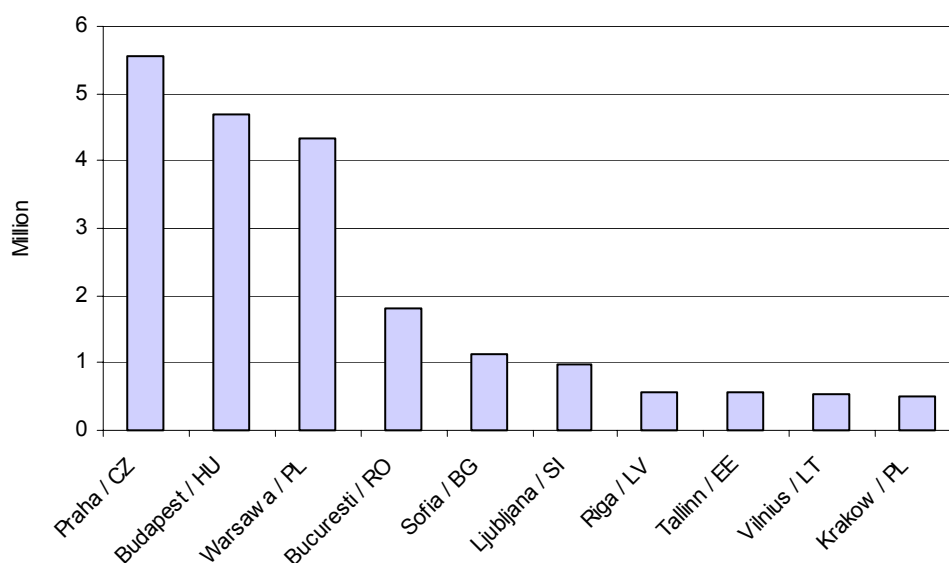


Table 15: TOP 10 airports in the PHARE Candidate Countries, 2000 (on the basis of total number of passengers carried)

	mn. passengers
1 Praha / CZ	5.55
2 Budapest / HU	4.70
3 Warsawa / PL	4.33
4 Bucuresti / RO	1.82
5 Sofia / BG	1.13
6 Ljubljana / SI	0.99
7 Riga / LV	0.57
8 Tallinn / EE	0.56
9 Vilnius / LT	0.52
10 Krakow / PL	0.49

Figure 16: TOP-10 airports in the PHARE Candidate Countries, 2000



In the development of aviation transport in the PHARE Candidate Countries between 1995 and 2000, all the countries achieved a growth in passenger numbers between 1995 and 2000 (Table 17, Figure 18, Figure 19 and

Figure 20). The fastest growth was seen in Poland which averaged close to 12% a year over the period. Hungary, Slovenia, Estonia, the Slovak Republic and the Czech Republic recorded growth rates between 8 and 10% a year. Among those recording lower growth rates were Romania and Bulgaria, no doubt feeling the effects of the difficulties being experienced by their Balkan neighbours. The picture for freight and mail tonnage was more mixed. In 2000, Poland recorded the highest volume with over 60 thousand tonnes followed by Hungary with over 40 thousand tonnes and the Czech Republic with just under 40 thousand tonnes. Growth rates in Estonia and Hungary exceeded 13% a year while Poland achieved around 10% a year. For flight movements in 2000, Poland recorded the highest figure with over 156 thousand, followed by the Czech Republic with 117 thousand and Romania with 58 thousand. Between 1995 and 2000, the annual average growth in flight numbers exceeded 17% per year in Poland and between 8 and 11% per year in Estonia, Hungary and Lithuania. Bulgaria recorded a slight fall over the period. In the Candidate Countries other than the PHARE group, Turkey has recorded a growth rate in passenger numbers of over 13% per year since 1994 and Malta and Cyprus also recorded increases. Turkey also achieved an increase of 13% per year for freight and mail shipments between 1994 and 2000, while Cyprus recorded a decline. For flight movements, Cyprus and Malta displayed low rates of increase compared with most of the PHARE countries while Turkey showed a decline.

Table 17: Development of airport transport in the Candidate Countries between 1995 and 2000

	Total number of passengers (1000)			Freight & mail (loaded and unloaded, 1000 t)			Number of flight movements (1000)		
	1995	2000	Average Annual Growth %	1995	2000	Average Annual Growth %	1995	2000	Average Annual Growth %
Bulgaria	2 217	2 285	0.6	26.4	17.3	-8.1	41.4	40.7	-0.3
Czech Rep.	3 872	5 822	8.5	34.8	37.8	1.7	92.7	116.7	4.7
Estonia ⁽¹⁾	367	560	8.8	2.5	4.7	13.5	13.8	23.3	11.0
Latvia ⁽²⁾	505	576	2.7	3.9	4.7	3.5	16.4	18.4	2.9
Lithuania ⁽³⁾	421	581	6.7	18.0	12.4	-7.1	17.6	26.4	8.4
Hungary	2 936	4 697	9.9	23.2	43.5	13.4	26.2	40.2	9.0
Poland	3 274	5 733	11.9	38.3	61.2	9.9	70.4	156.3	17.3
Romania ⁽⁴⁾	2 079	2 379	4.6	13.3	15.3	4.7	:	58.3	:
Slovak Rep.	284	430	8.6	4.9	4.5	-1.4	35.1	41.3	3.3
Slovenia	638	991	9.2	6.6	7.0	1.2	17.9	21.3	3.6
All PHARE	16 592	24 053	7.7	171.9	208.4	3.9	331.4	484.7	7.9
Cyprus	4 665	6 125	5.6	39.7	33.5	-3.4	44.3	53.1	3.7
Malta ⁽⁵⁾	2 447	2 951	3.2	10.1	13.7	5.1	26.5	29.2	3.2
Turkey ⁽⁵⁾	16 323	34 482	13.3	132.2	276.2	13.1	327.2	318.3	-0.9

⁽¹⁾ Estonia: all data for Tallinn Airport only. There were 30234 aircraft movements at Estonian airports overall in 2000.

⁽²⁾ Latvia: 1996 data instead of 1995 for flight movements.

⁽³⁾ Lithuania: Passenger data is for arrivals and departures only.

⁽⁴⁾ Romania: 1997 data for passengers and freight in place of 1995. Freight data is international traffic only. 16 thousand tonnes of freight and mail were carried on domestic routes in 2000.

⁽⁵⁾ For Malta and Turkey 1994 data instead of 1995 for passengers and freight. For flight movements, 1997 data replaces 1995.

Figure 18: Annual average growth in number of passengers in the Candidate Countries

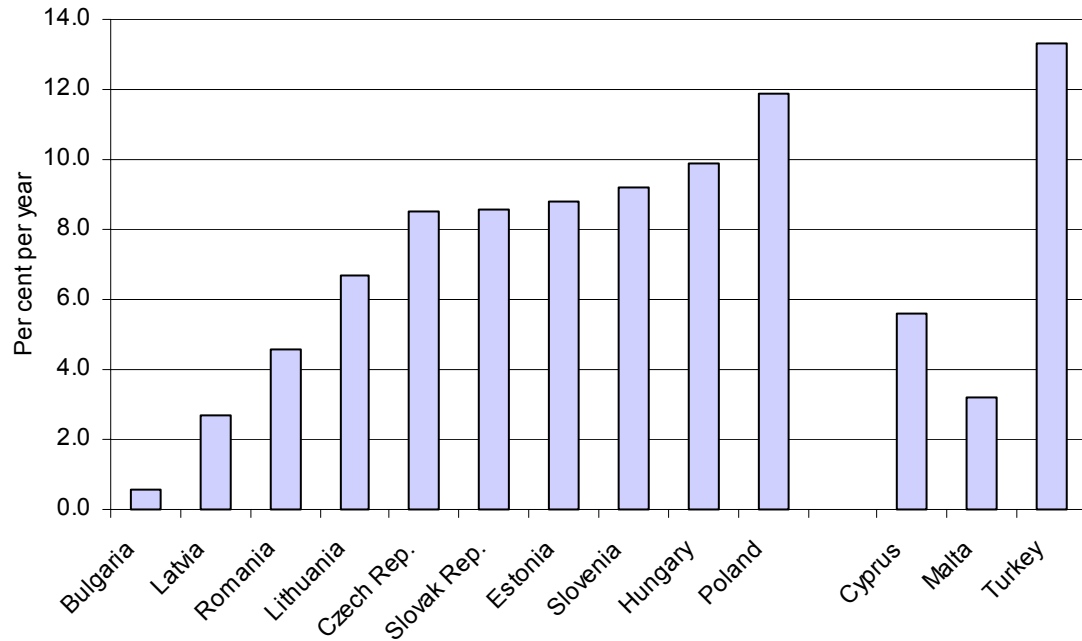


Figure 19: Annual average growth in freight and mail tonnage in the Candidate Countries

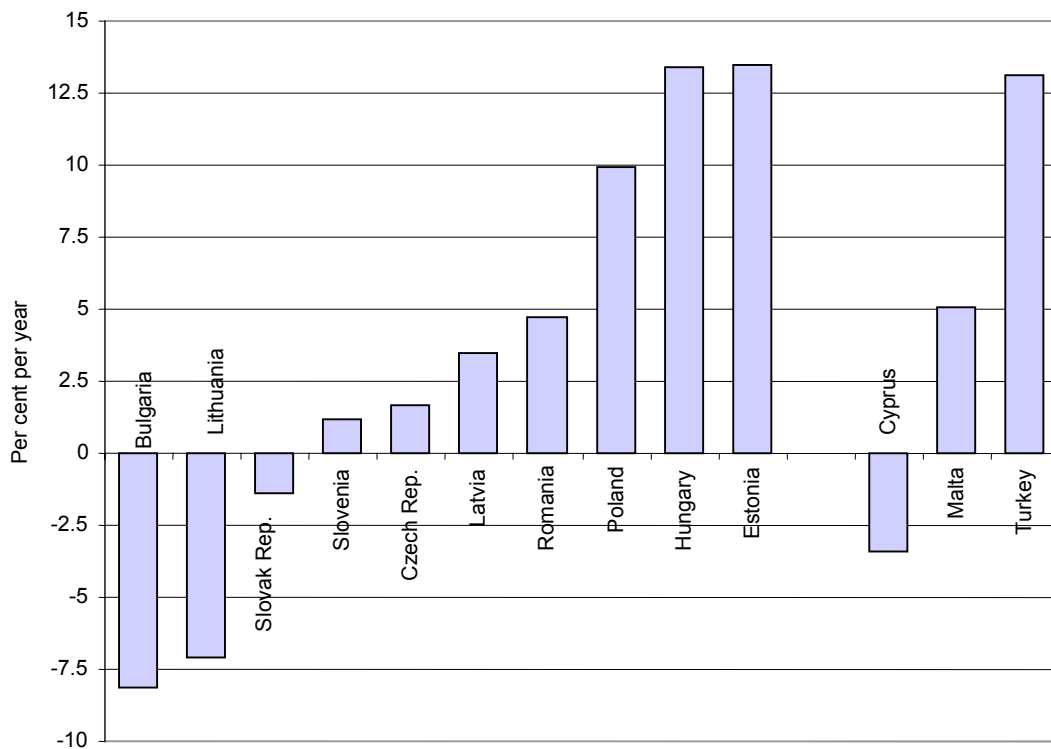
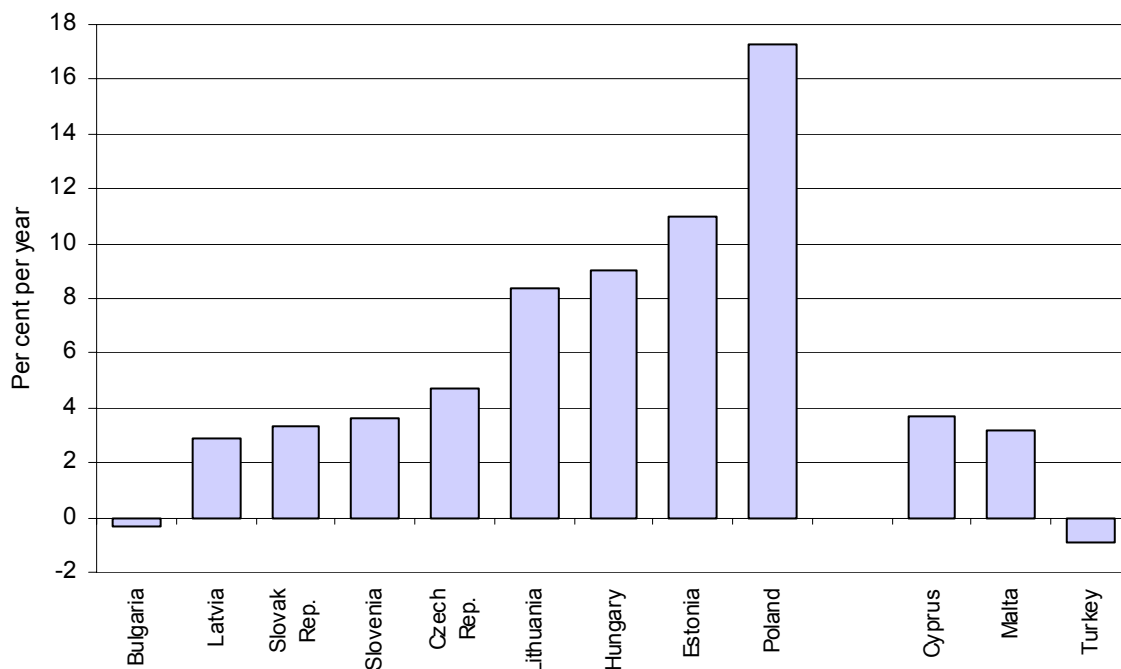


Figure 20: Annual average growth in flight movements in the Candidate Countries


Looking at the performance of national air passenger transport operators in 2000, Poland, the Czech Republic and Hungary led the way, recording 6 billion passenger kilometres, 5.9 billion and 3.5 billion respectively though the Czech operators carried the most passengers at 3.5 million (Table 21). The first two countries were also the leaders in freight transport, Poland achieving 87 million tonne kilometres and Hungary 60 million. Bulgaria recorded 46 million tkm. For the Candidate Countries other than the PHARE group, not surprisingly Turkish operators carried many more passengers in 2000 over many more passenger kilometres, more than 13 billion passenger kilometres to be precise. Turkish operators also carried nearly a million tonnes of freight and mail.

Table 21: Transport performance of the main national air carriers in the Candidate Countries, 2000

	Passengers carried 1000	Passenger kilometres (1000 million)	Freight and mail carried (1000 tonnes)	Tonne kilometres (million)	Number of flights
Bulgaria	1 261	2.26	22.0	46.0	:
Czech Rep.	3 484	5.86	19.0	37.8	52 530
Estonia	333	0.30	5.7	5.4	:
Latvia	218	:	:	:	7 999
Lithuania	343	0.46	3.3	4.1	14 226
Hungary	2 476	3.54	22.0	59.7	:
Poland	2 900	6.00	28.0	87.5	:
Romania	:	:	:	:	:
Slovak Rep.	159	0.25	0.7	0.2	:
Slovenia	866	0.87	4.6	4.5	:
Cyprus	1 452	2.80	18.4	:	12 567
Malta ⁽¹⁾	1 649	:	:	:	:
Turkey ⁽¹⁾	10 097	13.35	936.0	:	:

⁽¹⁾ 1999 data for Turkey, Malta

COUNTRY CHAPTERS

3. COUNTRY CHAPTERS

3.1 BULGARIA

Bulgaria is located in the eastern part of the Balkan Peninsula on the ancient trade road between Europe and Asia. The country measures 110 993,6 square km and shares its borders with Romania, Yugoslavia, Greece and Turkey. The Bulgarian population is 8 149 468 (on the 31 December 2000). The length of the Bulgarian coastline along the Black Sea is 378 km.

Bulgarian economy has faced a regular growth, from 1990 to 2000 the GDP growth rate was 5,8% at constant prices from 1999 to 2000 (see Table BG1).

Table BG1: Gross domestic product in Bulgaria - thousands levs

	1999	2000	Volume index, 1999 = 100
GDP in thousands levs	22 776 444	25 453 649	105.8

Note: Preliminary data

Source: Bulgarian NSI

In 2000 the transport sector represented 4.3% of the total gross value added. The air and sea transport sectors, including supporting activities, represented about 13.9% of the gross value added generated by all the transport sectors. Within the transport sector 10.9% went to the account of maritime transport and 2.99% of air transport (Table BG2).

Table BG2: Gross value added in thousands levs

	1999	2000
Total	19 890 889	22 532 628
Transport sector	941 128	973 346
Total sea including supporting activities	125 033	106 112
Total air including supporting activities	60 253	29 074
Total air-sea including supporting activities	185 286	135 186

Note: Preliminary data

Source: Bulgarian NSI

In terms of employment, in 2000 the transport sector represented 6.3% of the total number of employees with 119 587 employees. Air and sea transport, including the supporting activities, represented 0.7% (13 522 employees) of the total number of Bulgarian employees. Within the transport sector, employment of air and maritime transport played only a minor role with respectively 6.3% and 5.0% of the number of employees working in this sector (Table BG3).

Table BG3: Number of employees in 2000 (employees under labour contract as average number)

	2000
Total	1 900 940
Transport sector	119 587
Maritime transport	5 312
Supporting activity	729
Total maritime including supporting activities	6 041
Air transport	
air - scheduled transport	2 916
air - non-scheduled transport	1 033
supporting activity	3 532
Total air including supporting activities	7 481
Total air and maritime including supporting activities	13 522
Total air and maritime sea without supporting activities	9 261

Source: Bulgarian NSI

In 2000 the transport expenditures on acquisition of tangible fixed assets represented 17.9% of the total expenditures, and the expenditures of air and maritime transport represented 10.8% of the transport expenditures (Table BG4).

Table BG4: Expenditures on acquisition of tangible fixed assets in thousands levs

	1999	2000
Total	4 600 900	5 409 400
Total transport	858 500	971 100
Total air and maritime transport excluding supporting activities	27 271	38 616
Total air and maritime transport including supporting activities	106 426	105 108
Share of total transport in total expenditures	18.66%	17.95%
Share of air and maritime including supporting activities in total	2.31%	1.94%
Share of air and maritime including supporting activities in total transport	12.40%	10.82%
Share of air and maritime excluding supporting activities in total	0.59%	0.71%
Share of air and maritime excluding supporting activities in total transport	3.18%	3.98%

Source: Bulgarian NSI

Maritime transport

A total of 16 ports exist in Bulgaria, but only 2 ports are over the threshold of 1 million tonnes of cargo per year and none are over the threshold of 200 thousands passengers a year.

These two major ports are: Burgas, with a handling capacity of 20 to 25 millions tonnes, and Varna, with a capacity of 15 millions tonnes. From the point of view of statistics, these two ports include the traffic of several harbours. When reporting data to the Bulgarian NSI the port of Varna groups in its declaration 3 ports and the port of Burgas 4 ports.

When reporting data to the Ministry of Transport and Communications the port of Varna regroups in its declaration 7 ports and the port of Burgas a total of 9 ports.

This is due to the administrative organisation of the ports, which again is closely linked to the geographical situation.

Like other Bulgarian ports, Burgas and Varna have seen their traffic decrease until 1999, but this trend seems to have changed when looking at 2000 results.

Two main public maritime operators were operating until 1998, but one of them faced bankruptcy in 1998. Since 1999 mainly the “Bulgarian Maritime Fleet” is operating in the sector.

Equipment

On the 31 December 2000 there were 94 cargo ships registered in Bulgaria, with a total deadweight tonnage of 1 786 149 tonnes. Dry cargo barges represent 75% of both number and deadweight tonnage (Table BG5). Only one passenger vessel, with a capacity of 60 passengers, and one Ro-Ro ship is owned by a Bulgarian maritime operator. From 1995 to 1998 the total number of ships in Bulgaria has slowly decreased.

Table BG5: Evolution of the vessel fleet of the Bulgarian maritime operators by type of vessel (number and DWT).

Type of vessels	1995		1996		1997		1998		1999		2000	
	Number	DWT	Number	DWT	Number	DWT	Number	DWT	Number	DWT	Number	DWT
Sea cargo vessels	102	1 808 609	98	1 754 656	106	1 835 521	107	1 859 075	97	1 812 964	94	1 786 149
Dry cargo barge	77	1 336 109	75	1 329 899	76	1 355 661	78	1 395 515	72	1 357 939	70	1 339 797
Ferries	2	25 988	2	25 988	2	25 988	2	25 988	2	25 988	2	25 988
Container carriers	7	82 358	8	92 800	11	135 103	11	135 103	13	154 218	12	145 545
Ro-ro ships	1	5 350	1	5 350	1	5 350	1	5 350	1	5 350	1	5 350
Tanker barge	9	331 154	6	272 969	10	285 769	9	269 469	9	269 469	9	269 469
Refrigerated transport ships	6	27 650	6	27 650	6	27 650	6	27 650	-	-	-	-
Passenger vessels	6	705 ⁽¹⁾	3	395 ⁽¹⁾	3	410 ⁽¹⁾	3	395 ⁽¹⁾	3	395 ⁽¹⁾	1	60 ⁽¹⁾

Source: Bulgarian NSI, Maritime operator reporting form

(1) = Number of passenger seats

In 2000 refrigerated transport ships are no longer part of the fleet because they were owned by the Bulgarian operator that faced bankruptcy in 1998. Most of the ships of the Bulgarian maritime fleet were built after year 1980 (Table BG6).

Table BG6: Vessel fleet of the Bulgarian maritime operator by year of construction at the end of year 2000 (number and DWT).

Type of vessels	1960-1969		1970-1979		1980-1989		since 1990	
	Number	GT	Number	GT	Number	GT	Number	GT
Sea cargo vessels	16	120044	32	569365	34	389147	12	132135
Dry cargo barge	16	120044	26	395037	16	244943	12	132135
Ferries			2	19213				
Container carriers	-	-	-	-	12	127046	-	-
Ro-ro ships	-	-	1	4490	-	-	-	-
Tanker barge	-	-	3	150625	6	17158	-	-
Refrigerated transport ships	-	-	-	-	-	-	-	-
Passenger vessels	-	-	1	60 ⁽¹⁾	-	-	-	-

Source: Bulgarian NSI, Maritime operator reporting form

(1) Number of passenger seats

Transport of goods

The Bulgarian statistical law protects data of individual ports and only statistics on the total traffic of goods at the country level are published.

From 1996 to 1999 the gross weight of goods transported to and from the Bulgarian ports has decreased at an average rate of -9.7%. The imports have faced the most important decrease at an average rate of -11.8%. Exports have in average decreased by 5.8% during the same period.

From 1999 to 2000 the tendency changed: the total gross weight of goods transported increased by 12.4%, and more precisely by 11.8% for the imports and by 8.4% for the exports (Table BG7, Figure BG8 and Table BG9).

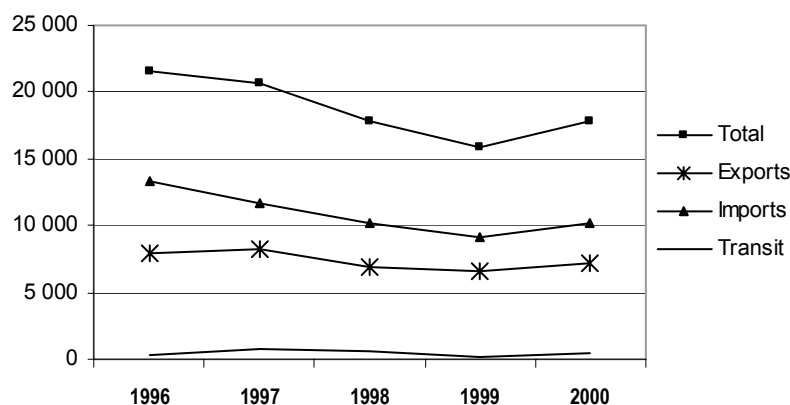
Table BG7: Gross weight of goods transported - thousand of tonnes

	1995*	1996	1997	1998	1999	2000
Total	14 416	21 536	20 668	17 846	15 848	17 806
Loaded (Exports)	7 958	7 908	8 214	6 936	6 602	7 157
Unloaded (Imports)	5 697	13 344	11 695	10 237	9 154	10 237
Transit passing	761	284	759	669	78	412
National coastal traffic	0	0	0	4	14	0

*:without Neftohim Burgas

Source: Bulgarian NSI, Ports reporting form

Figure BG8: Evolution of the gross weight of goods transported - thousand of tonnes



Source: Bulgarian NSI, Ports reporting form

Table BG9: Gross weight of goods transported -Variations

	1996-1997	1997-1998	1998-1999	1999-2000
Total	-4.03%	-13.65%	-11.20%	12.35%
Loaded (Exports)	3.87%	-15.56%	-4.82%	8.41%
Unloaded (Imports)	-12.36%	-12.47%	-10.58%	11.83%
Transit passing	167.25%	-11.86%	-88.34%	428.21%
National coastal traffic			250.00%	-100.00%

Source: Bulgarian NSI, Ports reporting form

In 2000, nearly 55% of the gross weight of goods unloaded was transported on Bulgarian ships, this share was only 15% for the gross weight of goods loaded. The Bulgarian maritime operators handled 38% of the total gross weight of goods transported to the Bulgarian ports.

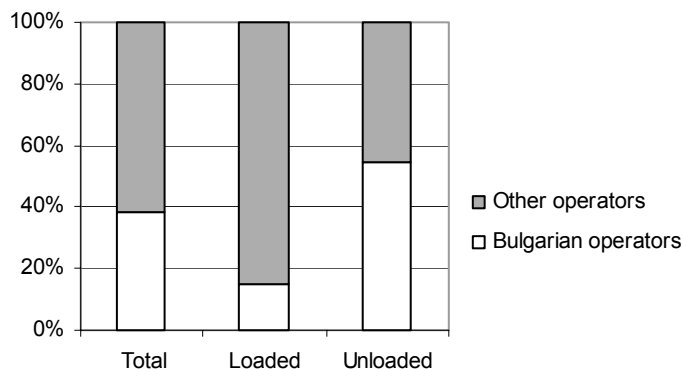
In 1999 the share of goods transported by Bulgarian operators was lower, as it was around 45% when considering goods unloaded and 12% with regards to goods loaded (Table BG10 and Figure BG11).

Table BG10: Gross weight of goods transported by type of operator - thousand of tonnes

	2000			1999		
	Total	Loaded	Unloaded	Total	Loaded	Unloaded
Total	17 394.00	7 157.00	10 237.00	15 756.00	6 602.00	9 154.00
Bulgarian Operators	6 681.00	1 077.00	5 604.00	4 883.00	775.00	4 108.00
Other Operators	10 713.00	6 080.00	4 633.00	10 873.00	5 827.00	5 046.00

Source: Bulgarian NSI, Ports reporting form

Figure BG11: Share of the gross weight of goods transported by Bulgarian operators and by other operators in 2000-thousand of tonnes



Source: Bulgarian NSI, Ports reporting form

From 1995 to 2000, 100% of the traffic performed by the public Bulgarian maritime operator is international traffic i.e. traffic between a Bulgarian port and a foreign port or between two foreign ports. In 2000, the goods transport performance of the “Bulgarian Maritime Fleet” was 74 391 Mio tkm with an average distance of 3 995 km travelled (Table BG12).

Table BG12: Maritime transport activity - self-propelled cargo ships

	1995	1996	1997	1998	1999	2000
Number of cargo ships	102	98	106	107	97	94
DWT (tonnes)	1 808 609	1 754 656	1 835 521	1 859 075	1 812 964	1 786 149
Distance travelled (1000 km)						
total	6 418	6 091	6 530	6 461	6 893	6 478
of which international	6 418	6 091	6 530	6 461	6 893	6 478
Goods carried (1000 t)						
total	18 089	17 070	19 623	16 446	16 822	18 619
of which international	18 089	17 070	19 623	16 446	16 822	18 619
Transport performance (Mio tkm)						
total	75 468	69 919	77 206	68 281	73 169	74 391
of which international	75 468	69 919	77 206	68 281	73 169	74 391
Average distance travelled (km)	4 172	4 096	3 934	4 152	4 350	3 995

Source: Bulgarian NSI, maritime operators reporting form

In 2000 the most important part of cargo transported to and from the Bulgarian ports consists of bulk cargo and liquid cargo representing respectively 42% and 36% of the total gross weight of goods. The Ro-Ro units and the containers play only a small role with a share of respectively 1% and 2% of the total gross weight of goods forwarded to and from the Bulgarian ports (Table BG13).

Table BG13: Gross weight of goods transported by type of cargo - tonnes

Cargo type	2000
10 - liquid cargo	7 354 523
11-crude oil	5 353 919
13-oil products	1 442 643
19-other liquid	557 961
20- bulk cargo	8 388 296
21- ore	2 107 168
22- coal	2 554 491
23- agricultural products	862 518
24- coke	249 854
29- other bulk	2 614 265
30- containers	384 627
50 ro-ro units	235 729
wagons	222 330
54 - motor units	0
56 live stock	13 399
90 - general cargo	3 948 558
91- wood	60 846
92- metals	1 687 204
99- other general	817 193
fertilisers in bags	186 315
various	
Total sum	19 284 563

Source: Bulgarian Ministry of Transport and Telecommunications

Note: The total in this table differs from the data provided in table BG/ because of the larger coverage of the data reported to the Ministry of Transport and Communications.

As concerns vessel traffic (Table BG14), between 1996 and 2000 the total number of vessels calling at Bulgarian ports dropped from 3 652 in 1995 to 2 412 in 2000 (-34%). Passenger vessels faced the most important decrease (-82,4%), followed by Ro-Ro vessels (-46,7%), general cargo vessels (-44%) and container vessels (-42,6%).

In 2000, 70.6% of the ships having entered or left the Bulgarian ports were general cargo vessels (895 vessels) or bulk cargo vessels (807 vessels).

Tab BG14: Number of ships calling at Bulgarian ports, by type of vessel

	1996	1997	1998	1999	2000	2001 - 9m
Total number	3 652	3 553	3 454	2 938	2 412	2 018
Liquid cargo vessels	412	397	491	419	413	267
Bulk cargo vessels	1 016	1 212	1 156	952	807	660
General cargo vessels	1 598	1 601	1 392	1 196	895	861
Container vessels	141	84	105	99	81	45
Ro-ro vessels	366	227	282	255	195	165
Passenger vessels	119	32	28	17	21	20

Source: Ministry of transport

Aviation

Bulgaria features 5 international airports: Sofia, Varna, Burgas, Plovdiv and Gorna Orjahovitza as well as 3 domestic airports: Vidin, Rousse and Targovitshe. However the domestic airports do not at present handle any commercial traffic.

Sofia, Varna and Burgas are the only three airports handling more than 100 000 passengers yearly and therefore included over the threshold defined by the EC draft regulation for the provision of detailed statistics. The tables and graphs hereafter refer to the total Bulgarian air traffic, including the traffic to and from Gorna Orjahovitza and Plovdiv airports.

According to the information on licenses, Bulgarian air enterprises comprise 18 passengers and/or freight commercial transport operators, 4 training aviation operators and 27 special purpose aviation operators.

Equipment

At 31/12/2000 the Bulgarian fleet was composed of Antonov, ATR, Beechcraft, Boeing, Cessna, Falcon, Kamov, Let, Tupolev, MIL OKB, Piaggio and Yakovlev aircraft. At the end of January 2001, the Boeing and ATR aircraft disappeared from the Bulgarian fleet (Table BG15). On the 31st December 2000 there were 76 aircraft in the Bulgarian fleet dedicated to passengers or freight transport. Apart from the 232 aircraft dedicated to special purpose aviation, and mainly agricultural activities, 63.2% of the Bulgarian fleet are passenger aircraft with less than 250 seats (Table BG16). About 57% of the cargo and passenger aircraft are older than 15 years, of which 33.7% over 25 years (Table BG17).

Table BG15: Aircraft fleet

	31/12/00
AN-12	16
AN_24	8
AN-26	6
ATR-42-300	1
Beechcraft-SK200	1
Boeing-737-300	3
Boeing-737-500	2
Cessna-421C	1
Falcon-2000	0
Falcon-50	1
KA-25PST	1
KA-32	7
L-410	6
MI-26	1
MI-8	17
Piaggio-180	0
TU-134	7
TU-154M	17
YAK-40	7
Total	102
Total without helicopters	76

source: CAA

Table BG16: Aircraft fleet by size of aircraft (year 2000)

	2000
Passenger aircraft - less than 50seats	18
Passenger aircraft -51 to 150 seats	13
Passenger aircraft - 151 to 250 seats	17
Passenger aircraft - 251seats and over	0
Cargo aircraft	28
convertible and combe aircraft	
Special purpose/ambulance aircraft	232

source: CAA

Table BG17: Aircraft fleet by age (year 2000)

	2000
<=5 years	1
5-10 years	12
10-15 years	24
15-20 years	9
20-25 years	11
Over 25 years	29
Total	86

source: CAA

Note: data including helicopters

Transport of passengers

From 1995 to 2000 air traffic in Bulgarian airports increased in terms of the number of passengers with an average annual growth rate of 0.34%. The traffic actually decreased between 1995 and 1996 but it increased again from 1996 to 1998. A new decline was faced between 1998 and 1999. Finally, the number of passengers increased by 6.11% between 1999 and 2000 (Table BG18).

Between 1999 and 2000 traffic to and from Sofia airport decreased by 8.71% but in the meantime the number of passengers increased at Varna and Burgas, respectively 35.1% and 17.3% (Tables BG19, BG20, BG21 and Figure BG22).

Tab. BG18: Evolution of air traffic in Bulgarian airports-number of passengers

	1995	1996	1997	1998	1999	2000
Departure	1 122 002	1 101 128	1 133 761	1 143 624	1 072 141	1 133 353
Arrival	1 094 758	1 102 679	1 127 354	1 140 760	1 053 166	1 121 707
Total	2 216 760	2 203 807	2 261 115	2 284 434	2 125 307	2 255 060
Transit				777	17 561	30 278

Note: Including Gorna and Plovdiv airports

Tab. BG19: Evolution of air traffic at Sofia airport-number of passengers

	1995	1996	1997	1998	1999	2000
Departure	622 404	549 642	547 718	623 449	629 631	572 498
Arrival	590 336	546 120	537 182	626 442	605 584	555 082
Total	1 212 740	1 095 762	1 084 900	1 249 941	1 235 215	1 127 580
Transit				759	1 395	286

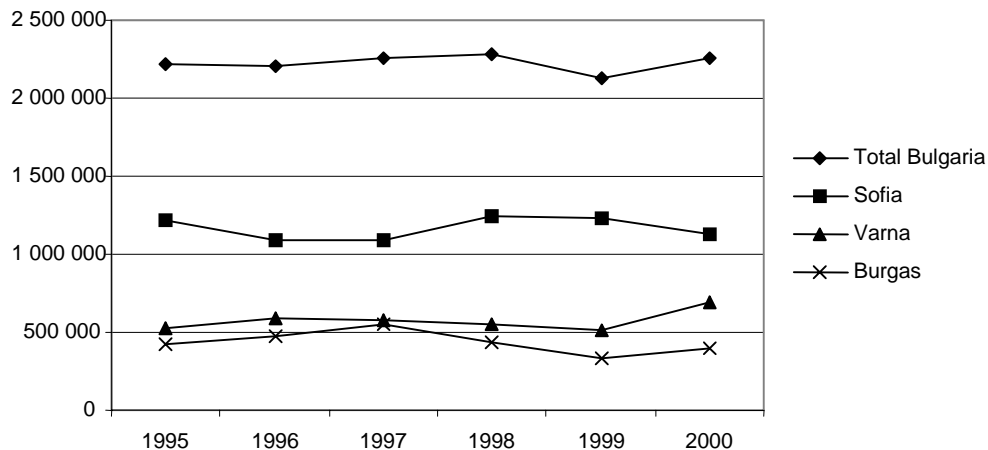
Note: Including commercial services and other services

Table BG20: Evolution of air traffic at Varna airport - number of passengers

	1995	1996	1997	1998	1999	2000
Departure	263 543	291 117	287 468	275 012	253 766	343 872
Arrival	263 016	292 748	287 128	273 678	258 053	347 817
Total	526 559	583 865	574 596	548 690	511 819	691 689
Transit					422	18 785

Table BG21: Evolution of air traffic at Burgas airport - number of passengers

	1995	1996	1997	1998	1999	2000
Departure	210 189	235 474	275 484	216 901	169 104	199 143
Arrival	215 605	238 524	278 692	216 123	170 193	198 872
Total	425 794	473 998	554 176	433 024	339 297	398 015
Transit				0	14 610	10 084

Figure BG22: Evolution of air traffic in Bulgaria and in its main airports - number of passengers


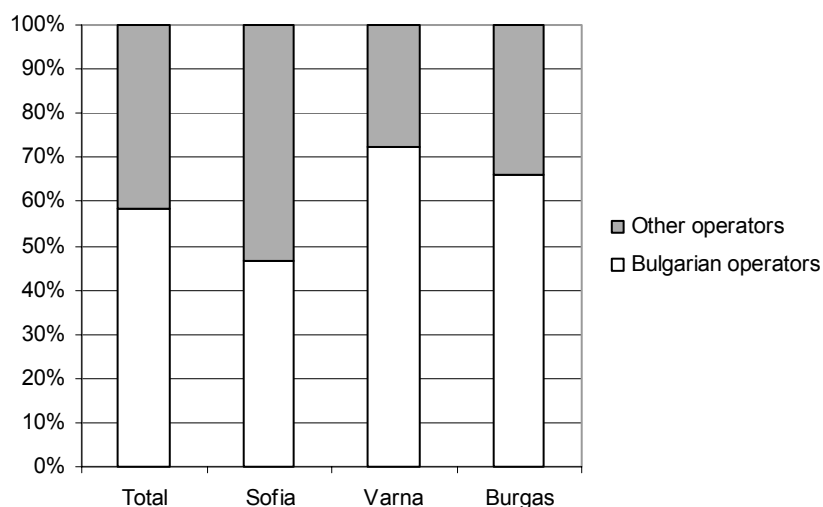
In 2000, in each of the three main airports, domestic traffic did not represent more than 10% of the total passenger traffic. Only 7% of the passengers arriving to or departing from Sofia airport have a Bulgarian destination, and domestic traffic represents about 9.8% of the passengers flying to Varna and 2.3% of those at Burgas (Table BG23)

Table BG23: Share of scheduled and non-scheduled passengers in 2000

	Total			Scheduled			Non-Scheduled		
	Intern.	Domestic	Total	Intern.	Domestic	Total	Intern.	Domestic	Total
Sofia	1 043 565	78 077	1 121 642	1 009 063	54 520	1 063 583	34 502	23 557	58 059
Varna	624 181	67 508	691 689		67 508	67 508	624 181		624 181
Burgas	389 051	8 964	398 015	36 458	8 711	45 169	352 593	253	352 846

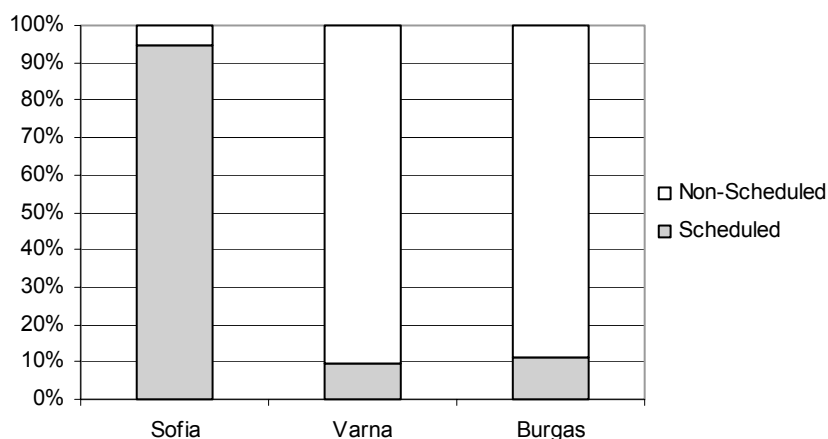
In 2000 the share of Bulgarian operators was 58.4% of total number of passengers carried to and from the international Bulgarian airports. The share of the passenger traffic realised by Bulgarian operators to and from Sofia airport represents 46.7% of the total traffic at Sofia airport but it is 72% in Varna and 66% in Burgas (Figure BG24).

Figure BG24: Number of passengers carried by national and other air operators in 2000



In 2000 scheduled traffic represented nearly 95% of the passenger traffic to and from Sofia airport. On the contrary, most of the traffic at Varna and Burgas, that are situated on the Black Sea coast, is non-scheduled, totalling to 90% of the total passenger transport in Varna and close to 89% in Burgas (Table BG23 and Figure BG25).

Figure BG25: Share of scheduled and non-scheduled passengers in 2000



Monthly Figures for 2000 (Tables and Figures BG26 to BG31) show that in Sofia, scheduled traffic is highest during the summer with a peak of 116 569 passengers in August. In Varna and Burgas a strong seasonal effect can be noticed as well. In Varna non-scheduled traffic started growing in April and culminates in August, increasing from 3 650 to 176 506 passengers. In Burgas the peak season was between April and July with the number of passengers increasing from 104 to 111 004. In June and July traffic in Varna airport is even higher than in Sofia airport, and the same occurs for Burgas in July and August.

Table BG26: Monthly traffic in Sofia airport in 2000

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Scheduled	79 848	67 061	79 406	76 880	81 470	94 974	109 026	116 569	103 642	93 935	76 654	84 118
International	76 388	63 466	75 438	73 534	78 839	89947	102392	109027	97264	88397	73169	81202
Domestic	3 460	3 595	3 968	3 346	2 631	5027	6634	7542	6378	5538	3485	2916
Non-Scheduled	8 434	7 579	5 494	2 695	3 528	5 213	5 084	6 033	4 859	2 173	1 664	5 303
International	7 404	6 415	3 917	820	507	1893	1753	2886	2699	835	771	4602
Domestic	1 030	1 164	1 577	1 875	3 021	3320	3331	3147	2160	1338	893	701

Table BG27: Monthly traffic in Varna airport in 2000

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Scheduled	4 053	4 264	5 073	4 891	4 966	7 113	8 086	8 552	7 274	5 960	3 838	3 438
International	0	0	0	0	0	0	0	0	0	0	0	0
Domestic	4053	4 264	5073	4891	4966	7113	8 086	8552	7 274	5 960	3 838	3 438
Non-Scheduled	170	136	507	3 650	27 576	104 844	168 125	176 506	111 907	25 805	2 296	2 659
International	170	136	507	3650	27576	104844	168 125	176506	111 907	25 805	2 296	2 659
Domestic	0	0	0	0	0	0	0	0	0	0	0	0

Table BG28: Monthly traffic in Burgas airport in 2000

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Scheduled	496	333	324	291	568	4 529	6 510	27 664	3 173	719	333	229
International	0	0	0	0	0	3 588	4 991	25 790	2 089	0	0	0
Domestic	496	333	324	291	568	941	1 519	1 874	1 084	719	333	229
Non-Scheduled	84	20	201	104	10 900	59 460	111 004	104 576	57 293	7 378	1 000	826
International	78	20	171	89	10900	59 415	110 997	104 553	57 267	7 322	961	820
Domestic	6	0	30	15	0	45	7	23	26	56	39	6

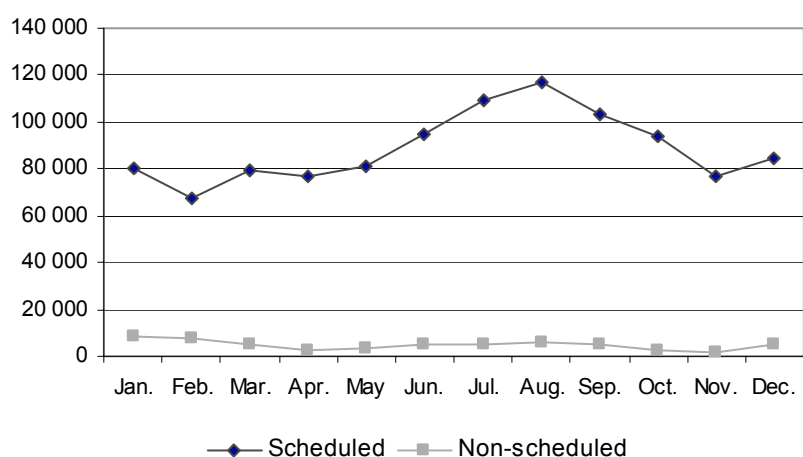
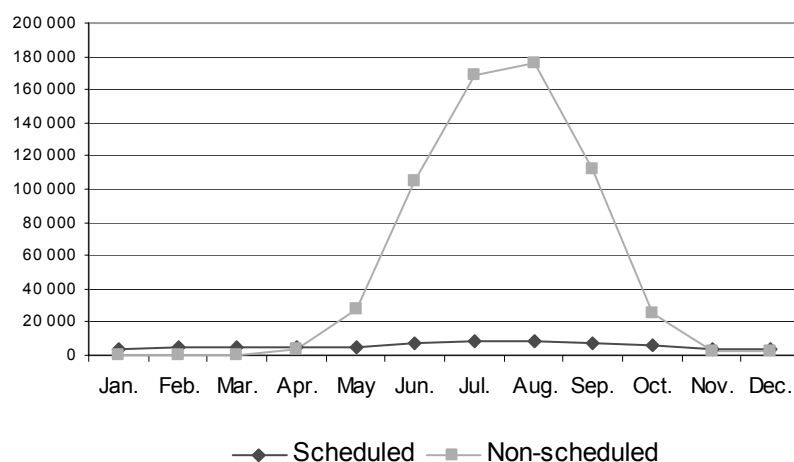
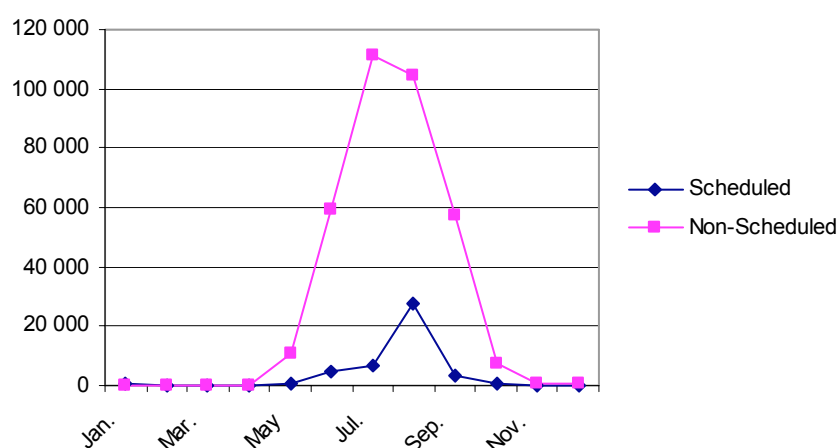
Figure BG29: Monthly traffic in Sofia airport in 2000
Sofia airport - Year 2000


Figure BG30: Monthly traffic in Varna airport in 2000**Varna airport - Year 2000****Figure BG31: Monthly traffic in Burgas airport in 2000****Burgas airport - Year 2000****Transport of goods**

From 1995 to 1998 freight and mail transport to and from Bulgarian international airports decreased by 55%. The most important decrease occurred between 1997 and 1998, with freight and mail dropping from 19 972 to 11 839 tonnes (Table BG32).

Table BG32: Evolution of air traffic in Bulgarian airports - tonnes of freight and mail

	1995	1996	1997	1998	1999	2000
Departure	13 078	11 998	12 985	6 267	8 336	8 058
Arrival	13 355	8 690	6 987	5 572	8 977	9 241
Total	26 433	20 688	19 972	11 839	17 313	17 299
Transit				2 304		

Note: Including Gorna and Plovdiv airports

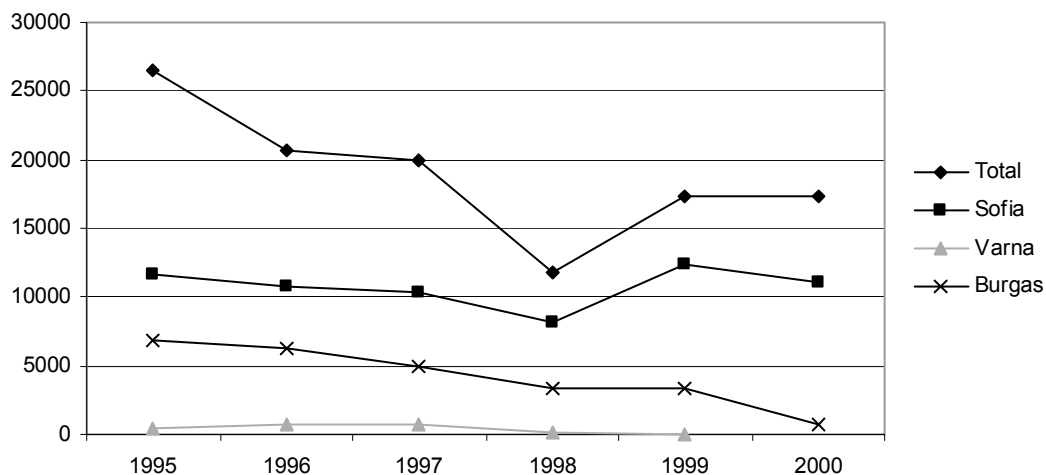
Between 1998 and 1999 freight and mail carried by air registered an overall 46.24% growth rate. A small decrease in traffic was faced the following year and the volume amounted to of 17 299 tonnes of freight and mail in 2000.

In Sofia and Burgas freight and mail transport also decreased between 1995 and 1998, by 30.2% and 50.6% respectively. Freight and mail carried to and from these two airports increased between 1998 and 1999 but it also faced a new decline between 1999 and 2000 (Table BG33 and Figure BG34).

Tab. BG33: Evolution of air traffic at Sofia airport-tonnes of freight and mail

	1995	1996	1997	1998	1999	2000
Departure	5 155	4 923	5 082	3 170	5 018	4 019
Arrival	6 470	5 872	5 298	4 946	7 361	7 017
Total	11 625	10 795	10 380	8 116	12 378	11 036
Transit				2 304		

Figure BG34: Evolution of air traffic in Bulgaria and in its main airports-tonnes of freight and mail



In 2000 freight and mail transport in Sofia airport represented 63.8% of the total traffic of freight and mail carried to and from Bulgarian international airports.

In 2000, 57% of the freight and mail carried to and from the Bulgarian airports was transported by Bulgarian air operators (Table BG35). At Sofia airport the share of freight and mail transported by national operators represents 44.3% of the total tonnage while in Burgas this share is only 16.8%. However, Bulgarian operators dominate the transport of freight and mail in the two other international airports - Gorna Orjahovitza and Plovdiv – thus resulting in the national figure stated above. In 2000 no freight and mail traffic was operated in Varna airport.

Table BG35: Tonnes of freight and mail carried by national air operators or other operators in 2000

	Total Bulgarian operators	Other operators
Total	17299.1	7432.1
Sofia	11036	6152
Varna	0	
Burgas	748	622

Note: Total including Gorna and Plovdiv airports

Aircraft Movements

From 1995 to 2000 the number of aircraft movements to and from the Bulgarian airports has decreased in average by 0.31%. During the same period the three main airports experienced a different evolution of traffic in terms of aircraft movements (Table BG36). In Sofia the number of aircraft movements decreased between 1995 and 1997 (-7.08%), but then increased between 1997 and 1999 (9.5%) while a new decrease was faced between 1999 and 2000 (-1.56%).

Table BG36: Evolution of air traffic in Bulgarian airports - number of aircraft movements

		1995	1996	1997	1998	1999	2000
Total	Total	41 377	40 755	40 510	41 570	41 828	40 747
	Take-offs	20 666	20 367	20 237	20 802	-	-
	Landings	20 711	20 388	20 273	20 768	-	-
Sofia	Total	24 742	23 642	22 990	24 726	25 178	24 785
	Take-offs	12 371	11 821	11 495	12 363	-	-
	Landings	12 371	11 821	11 495	12 363	-	-
Varna	Total	8 393	8 844	8 963	8 946	9 223	9 425
	Take-offs	4 176	4 421	4 471	4 477	-	-
	Landings	4 217	4 423	4 492	4 469	-	-
Burgas	Total	6 378	6 907	7 275	6 431	6 148	5 443
	Take-offs	3 189	3 453	3 633	3 216	-	-
	Landings	3 189	3 454	3 642	3 215	-	-

Note: Total including Gorna and Plovdiv airports

In general there was a growth in the number of aircraft movements in Varna airport during the five year period, except between 1997 and 1998 where it decreased by 0,19%. In Burgas airport the number of aircraft movements increased between 1995 and 1997 (14.1%) and then started decreasing until 2000 (-25.2%).

3.2 CZECH REPUBLIC

The Czech Republic is a landlocked country. Its area of 78 866 km², population 10 292 933 (as at 1 March 2001) and population density 130 per km² rank the Czech Republic at the 21st, 12th and 13th places among European countries, respectively. The state borders with Poland (761.8 km) to the north, Germany (810.3 km) to the northwest and west, Austria (466.3 km) to the south and Slovak Republic (251.8 km) to the east. The Capital is Prague with 1 178 576 inhabitants (as at 1 March 2001). The national currency is Czech crown (1 CZK = 100 hellers).

Economic Development

The long expected economic recovery took place in the second half of 1999. At its beginning, it was accepted with caution (although industry, exports and construction grew). Increasing GDP in all quarters of 2000 and its year on year growth rate of 3.1% make us infer that the 1999 tendencies of growth indicated the beginning of stronger recovery processes. The Czech economy in 2000 reached the stages of recovery and stimulation; all this in the conditions of low-inflation environment and monetary stability. In spite of growing deficit of the current account, massive inflow of foreign capital and seriously growing deficit of public finance, the central bank did not intervene in support of the currency and exchange rate. Aggregate money supply developed smoothly and the exchange rate of CZK slightly appreciated during the year. Industry and the tertiary sector contributed most to the GDP produced; on the other hand, the influence of construction and agriculture is on the decline.

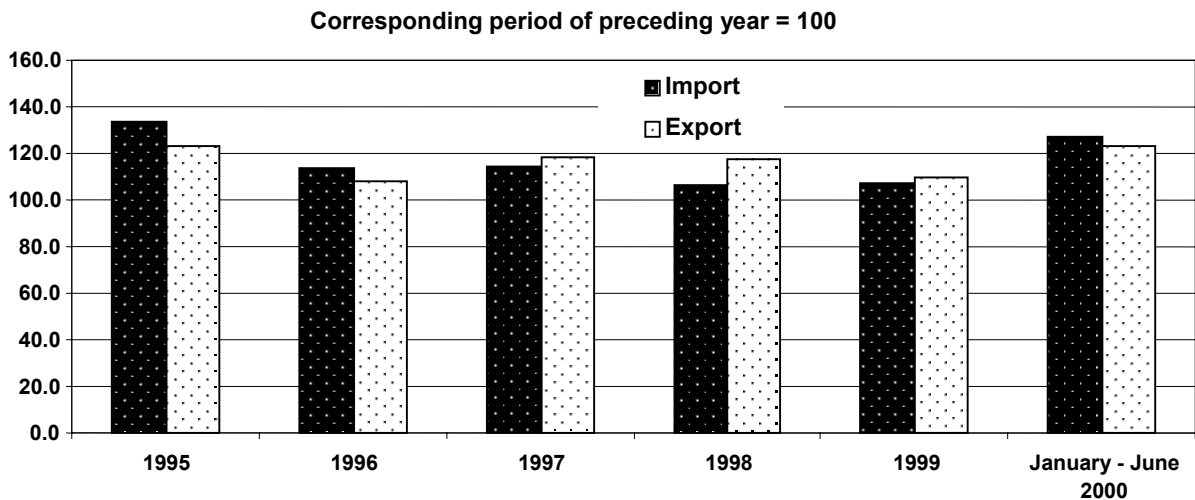
Table CZ1: GDP by kind of activity (at current prices) in %

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP (at basic prices)	100	100	100	100	100	100	100	100	100	100	100
Agric., forestry, fish.	8.2	5.6	4.6	5.3	4.9	4.7	4.7	4.7	4.6	3.7	3.8
Industry	36.7	37.9	39.4	33.3	33.6	33.3	32.4	34.3	35.3	34.3	34.8
Construction	10.8	8.1	6.9	7.8	7.4	8.7	8.4	8.6	8.0	7.5	7.1
Trade, repairs	12.2	13.5	14.2	13.6	13.9	15.0	16.3	14.0	13.8	14.5	14.5
Transp. & communic.	3.7	4.1	6.1	8.6	8.4	8.1	8.0	7.8	9.3	9.7	9.4
Financ. intermed.	4.5	7.5	6.6	6.4	5.8	4.7	4.1	4.1	4.7	4.1	4.2
Business serv. act.	11.8	11.0	10.5	11.9	12.3	11.6	11.6	12.3	11.0	11.6	11.7
Non-bus. serv. act.	12.1	12.3	11.6	13.0	13.7	13.9	14.5	14.1	13.3	14.6	14.5

High inflation rate (10.7%) in 1998 went down sharply to 2.1% in 1999. The underlying cause among internal factors was the trend in unit costs of labour, owing to accelerated rise in output and productivity of labour, with only slightly increasing wages. The fact that inflation rate went up to 3.9% in 2000 was due to higher prices of world commodities, particularly crude oil, and the continuing deregulation of prices.

External trade increased in the conditions of economic recovery in 2000. The value of external trade rose by 25.8% year on year; exports grew by 44% and imports by 56%. There were the following causes for the growing trade gap: a sharp increase in prices of fuel and energy sources, the high exchange rate of USD towards CZK, and the inflow of foreign investments. The share of inward and outward processing in exports is on the increase.

Figure CZ2: External Trade



Transport

Transport in the Czech Republic is, similarly as in other developed European countries, an integrated part of daily life. Its functionality is a necessary condition for economic growth and the overall country's prosperity. According to statistical surveys more than one million people in the Czech Republic are engaged in activities connected with the movement of persons, materials and products, including transport on own account and storage management. There are about 200 000 employees working in the transport sector, which is approximately 6.5% of the total number of employees in the Czech Republic.

Table CZ3: Number of employees in transport sector

(enterprises with 20 or more employees)

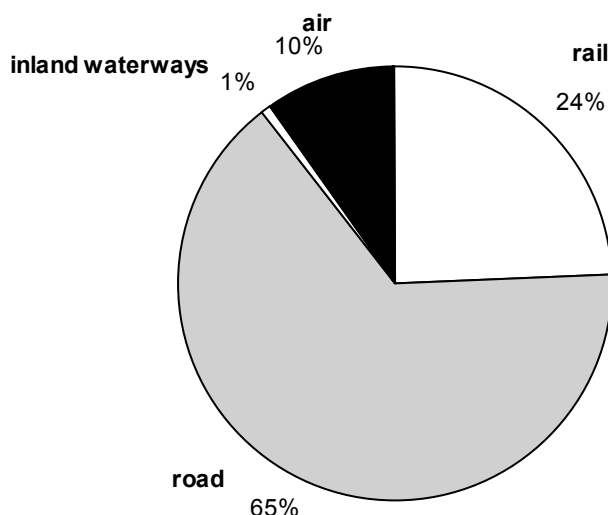
	1995*	1996	1997	1998	1999	2000
Land transport	177 912	185 199	180 388	172 240	170 268	163 286
of which rail	103 662	103 946	100 374	95 013	92 772	87 215
other land transport	74 140	79 059	77 906	75 570	75 633	76 071
Inland waterways	2 628	2 586	1 839	1 584	1 427	1 296
Air	4 509	4 723	4 502	4 574	4 515	4 645
In adjacent and supporting activities	9 615	9 854	13 178	15 266	15 989	27 784
of which: activities of the travel-agencies	2 397	2 431	2 984	2 841	2 592	2 545
Transport total	194 664	202 361	199 908	193 963	192 199	197 011

* enterprises with 25 or more employees

Total share of the transport sector was 3.3% of the GDP in 1999, of which rail transport constituted about 0.81%; road transport 2.14%, air transport 0.32% and inland waterway transport 0.034%.

Tab. CZ4: Gross Domestic Product in Transport at current prices (CZK mio)

	1995	1996	1997	1998	1999
rail (NACE 601)	15 505	16 946	19 914	22 779	15 268
road (NACE 602)	33 067	37 467	44 897	46 795	40 469
inland waterways NACE 61)	1 485	715	655	634	650
air (NACE 62)	3 224	3 221	4 363	5 211	5 994

Figure CZ5: Breakdown of the Gross Domestic Product by Transport Mode in the 1999**Infrastructure**

As far as the railway network density (length of 944 km and density of 0.12 km/km²) in the Czech Republic is concerned it is very much above the EU average and individual member states as well, and moderately above the average as regards the density of electrified lines, which have a length of 2 843 km and density of 0.036 km/km². Of the total length of railway lines there are 1 929 double-track and multiple-track lines. The comparable density indicators of the overall road network roughly correspond to that of the EU countries. However, in the case of motorways they are substantially lower when compared with the EU states (the road network density amounts to 0.70 km/km², and if the local roads are considered the density is even 1.44 km/km²; the density of motorways and expressways is however approximately 0.0102 km/km² only). At the end of 2000, there were 127 708 km of roads and local roads in operation in the Czech Republic; of which 499 km were motorways, 304 km expressways and 54 605 km other national roads. For the purpose of civil air transport there are 12 international airports with international authorisation and 57 national public airports designed mainly for public passenger transport. The inland waterway navigation is operated on the continuous Elbe-Vltava waterway with total length on the Czech Republic's territory of 303 km. Altogether 9 public ports and a number of factory ports and transshipment yards (numbering 28 in total) have been constructed on this waterway. Due to the split of Czechoslovakia in 1993 the Czech Republic has lost its access to the Danube river. It can be stated that the combined transport has, in terms of the transport infrastructure, relatively good conditions for its development. They are given by a dense rail network, by waterways and 14 terminals and transshipment yards which are predominantly privately owned. Direct container trains connect Czech terminals particularly with ports in northern Germany and with the Rotterdam port.

Financial cover for the transport infrastructure development needs is limited by the capability of the national economy to produce adequate financial resources. In 2000 the total volume of investment funds put into the transport infrastructure was about 26 700 million CZK, which equals to about 1.36% of GDP. Of this 0.67% were invested into the rail infrastructure, 0.6% into the road infrastructure, 0.02% into the waterway infrastructure and 0.05% into the infrastructure of airports. The modernisation of main railway lines in national transit corridors have been determined as basic priority in the development of the Czech Republic's transport infrastructure. The investment schemes were also derived from international obligations regarding the putting of transport ways into conditions corresponding to European agreements on transport networks (AGC, AGTC, AGR, AGN etc.). In the field of the road network the main development policy rests on the modernisation of the road network, while the maintenance and repairs will be given preference over new construction. The development of transport networks at airports is especially focused on the reconstruction and modernisation of the handling area of the Praha/Ruzyne International Airport, the construction of additional buildings for CARGO terminal and for the adjustment of runways. The development of waterways is focused on the improvement of navigation conditions on the Elbe-Vltava waterway.

Table CZ6: Total investment expenditure in transport infrastructure in current prices (in mio. CZK)

Infrastructure type	1995	1996	1997	1998	1999	2000
Railway	3 897.0	5 507.0	10 058.0	10 938.0	9 909.9	13 200.3
Road*	9 802.0	10 537.0	13 720.0	14 466.0	12 217.0	11 737.0
Inland Waterways	47.8	15.5	87.4	202.4	114.8	402.2
Air	2 523.2	2 769.0	2 565.9	802.4	613.8	992.8
Pipeline	1 308.0	1 989.0	374.0	171.9	425.0	399.2
Total	17 578.0	20 817.5	26 805.3	26 580.7	23 280.5	26 731.5

* concerning the state road only

Table CZ7: Total investment in transport infrastructure from the State Budget (SB) and from the State Fund of the Transport Infrastructure (SFTI) in mio. CZK

Infrastructure type	1995	1996	1997	1998	1999	2000
Railway - SB	2 321.2	2 456.1	3 201.5	3 928.5	5 553.9	3 813.4
Railway - SFTI						1 460.8
Road* - MDS	8 957.0	9 596.0	10 689.0	6 434.0	9 230.2	4 938.0
Road* - SFTI						2 774.9
Inland Waterways - MDS	0.0	0.0	87.4	170.9	106.2	93.0
Inland Waterways - SFTI						161.8
Air - MDS	297.6	387.3	314.5	125.4	93.1	200.0
Air - SFTI						0.0
Total - MDS	11 575.8	12 439.4	14 292.4	10 658.7	14 983.4	9 044.4
Total - SFTI						4 397.5

* concerning the state road only

National Freight Transport

After 1990, new laws have been adopted which liberalised the access to the market to a maximum degree. In the transport field, this manifested itself particularly in the road transport (in the goods transport sector more than 45 000 carriers have been established) and in the inland waterway transport (the transport market has been extended from originally a single state owned enterprise to about 100 operators today).

In the period 1990-1997, the total transport performance of goods slightly increased (by about 5%), but the share of road transport in the total transport performance increased significantly. Its performance increased approximately 2.5 times to the detriment of the rail transport where the performance was reduced to the half. Inland waterway transport performance also fell by nearly 50% during this period (however the share of this transport mode is less than 2%). Permanent stable increase is evident in the air transport where transport performance grew in 2000 compare to the year 1993 by nearly 50%. The share of combined transport which annually increases by 15 – 20% is however in the Czech Republic relatively small (about 7% of total rail transport contrary to the share of about 10% - 30% of the rail transport in the western countries).

Table CZ8: Freight Transport

	1995	1996	1997	1998	1999	2000
Transport of goods - total (in 1000s tonnes)	686 429	805 206	643 920	586 582	548 978	523 249
Rail transport	108 871	107 235	111 379	104 788	90 734	98 253
Road transport for hire or reward	356 591	325 817	222 642	201 933	207 763	199 565
Road transport for own account	209 426	359 927	298 840	268 954	240 537	215 159
Inland waterway transport	4 441	3 214	1 828	1 678	1 877	1 906
Air transport	18	14	14	13	17	19
Oil pipeline transport	7 083	8 999	9 217	9 217	8 050	8 346
Transport performance - total (in mil.tonnes-km)	40 977	55 802	64 566	55 669	56 415	58 955
Rail transport	22 623	22 338	21 010	18 709	16 713	17 496
Road transport for hire or reward	10 555	24 470	30 781	24 489	26 039	31 363
Road transport for own account	4 142	5 582	9 859	9 423	10 925	7 673
Inland waterway transport	1 348	1 115	783	915	913	773
Air transport	33	26	27	56	30	38
Oil pipeline transport	2 276	2 271	2 106	2 078	1 795	1 612

Table CZ9: Passenger Transport

	1995	1996	1997	1998	1999	2000
Passenger transport (in mil.)	4 982.0	4 934.5	4 925.3	4 868.7	4 982.6	4 925.8
Rail transport*	222.6	212.0	195.2	174.2	168.4	174.1
Public road bus transport	644.2	527.4	465.0	456.0	446.9	451.0
Air transport	1.8	2.0	2.2	2.4	2.9	3.5
Inland waterway transport	0.9	0.7	0.7	0.7	0.6	0.8
Urban public transport	2 412.5	2 397.5	2 412.2	2 350.4	2 433.8	2 320.5
Total public transport	3 282.0	3 139.5	3 075.3	2 983.7	3 052.6	2 949.8
Individual road passenger transport*	1 700.0	1 795.0	1 850.0	1 885.0	1 930.0	1 976.0
Passenger transport performance (in mil. passenger-km)	90 880.2	93 588.2	93 727.3	94 733.7	97 147.6	101 521.7
Rail transport*	8 022.9	8 110.8	7 720.8	7 017.8	6 956.8	7 299.4
Public road bus transport	10 963.0	9 735.0	8 804.0	8 680.9	8 649.0	9 552.3
Air transport	2 857.5	3 170.0	3 524.5	3 680.0	4 335.2	5 854.7
Inland waterway transport	11.9	7.8	7.8	7.6	7.5	7.7
Urban public transport	14 524.9	14 664.6	14 670.2	14 547.5	14 949.1	14 967.5
Total public transport	36 380.2	35 688.2	34 727.3	33 933.7	34 897.6	37 681.7
Individual road passenger transport**	54 500.0	57 900.0	59 000.0	60 800.0	62 250.0	63 840.0

* integrated public transport not included ** estimated

In the period 1990 - 2000 public passenger transport declined by approximately 50% while urban transport decreased by about 13%. During 1990 - 2000 number of passenger cars in the Czech Republic increased by nearly 50% and reached today almost 3,5 million. The situation in Prague, where there is one passenger car registered per two inhabitants, is especially critical. The increasing trend can be found only in the air transport, number of passengers increased more than twice compared to the year 1993. The aim of government transport policy is to maintain and keep enhancing the quality of passenger transport and the public transport network in order to prevent private transport from getting out of hand.

Transport and Environment

Transport in the Czech Republic has, just as in other advanced countries, negative environmental impact as it is developed. Road transport carries the heaviest burden of guilt in this respect. The negative impact comes through mainly in the emissions that pollute the atmosphere, the noise level and land take during reconstruction or construction of road and motorway network. The priority task now and in the future in the transport sector is to ensure the stabilisation and gradual reduction of these negative impacts that are connected with the transport infrastructure and traffic. The section on transport and environment following the above mentioned principles was incorporated into the Transport Policy of the Czech Republic approved by the Czech Government in 1998.

Table CZ10: Total transport emissions (thous. tonnes)

	1995	1996	1997	1998	1999	2000
CO ₂	9 535.0	9 236.0	10 163.0	9 948.0	10 944.0	11 181.0
CO	258.6	244.6	269.4	266.1	245.4	243.1
NO _x	190.0	174.7	192.7	179.1	180.9	180.6
C _x H _x	72.3	69.3	76.7	73.4	73.7	70.8
SO ₂	7.4	5.7	6.3	4.9	4.4	4.2
particulates	6.7	5.2	5.7	4.6	3.7	3.1
Pb	0.1	0.1	0.1	0.1	0.1	0.1

Share of transport sector on total air polluting emissions in the Czech Republic is approximately 27% as regards CO, approx. 40% as regards Nox, approx. 39% as regards CxHy, and 68% as regards Pb. Increasing emissions share of CO, Cx Hy, SO₂ and particulars from transport are mainly caused by decrease of total emission values of mentioned pollutants. On the contrary, increasing emission values shares of CO₂ correspond to energy consumption increase in transport especially in road freight and passenger car transport

Table CZ11: Air transport emissions (g / inhabitant)

	1995	1996	1997	1998	1999	2000
Lead (Pb) emissions	581	679	582	485	826	824
Other hydrocarbon emissions	29	36	30	33	37	39
Methan (CH ₄) emissions	*	*	*	4	1	1
Sulphur oxide (SO ₂) emissions	3	3	3	3	3	4
Nitrogen oxide (without N ₂ O) emissions	134	168	142	152	167	156
Nitrogen oxide (N ₂ O) emissions	*	*	*	62	2	2

Air transport

In 1920 the Czechoslovak Government, having already in mind the civil aviation perspectives, concluded a contract with a French-Romanian Airline on the operation of a regular Paris-Strasbourg-Praha and Praha-Warsaw air line. At the same time, the Ministry of Public Works took the decision to use for such purposes the Kbely military airport which created together with the Brno/Cernovice (1926) and Bratislava/Vajnory (1923) the basis of the aviation network in the Czechoslovak Republic. Kosice (1924), Marianske Lazne (1927), Uzhorod (1929), Hradec Kralove (1935), Ostrava (1935), Pieštany (1935) and other airports were added later on. Some of them now cease to exist and new were built. Despite considerable imperfections of airliners of that time the civil air traffic expanded. In 1921 the Kbely airport already registered 650 flights, 671 passengers were carried, 1800 kg of airmail and 30.5 tonnes of cargo were transported. Average loading of aeroplanes amounted to 124.5 kg. The year 1921 saw the launching of the construction of final structures of the civil part of the Kbely airport. The Czechoslovak Airlines, established in October 1923, commenced operations on Kbely airport on the 28th of October 1923. This date represents in fact the official beginning of the Czechoslovak civil air service.

Praha/Ruzyne International Airport. The beginnings of the construction of the Praha/Ruzyne Airport date back to 1929. The selected space between the adjacent communities along with a moderately undulating terrain provides even today resources for a future development of the airport. However, the worldwide economic crisis postponed the completion of its construction until 1933. At that time the implementing projects were already at disposal. They resulted in a final project published in the American publication „Airports“ with a very positive appraisal.

Final adjustments of the airport area started in 1933 and were finished after mere 11 months. The entire main construction was completed at the beginning of 1937. After completing its construction, Ruzyne Airport became one of the most up-to-date airports in Europe, also according to the views of most respectable foreign experts. The passenger terminal was regarded very highly in particular. At the International

Exhibition of Arts and Technology, held in 1937 in Paris, the building was awarded a gold medal. A ceremonial launching of operations was held on 5 April 1937 when the first aeroplane of the Czech Airlines flying the Piešťany-Zlín-Brno-Praha route landed on the new Praha/Ruzyne Airport.

In the course of the Second World War the majority of active pilots withdrew to foreign countries as resistance fighters. After the end of the War the airport operations were started by a Czechoslovak Military Transportation Group. As from August 1945, the airport was capable of operations, although under certain restrictions, and non-scheduled flights have started. During the period between 1945 and 1946 many thousands of repatriates were carried by air because at that time the Praha airport was one of the few operable airports in Europe.

A scheduled air service was restored by the Czechoslovak Airlines in the spring of 1946. The crisis period of 1948 up to 1952 is characterised by a stagnation of the Czech international air transport. At that time the Ruzyne Airport lost its position as an equivalent to European airports. Certain release in international relations up until second half of 1950s was also reflected in the airport performance. Between 1960 and 1967 air transport in foreign countries also registered a year-by-year increase of passengers by 18%. However, such increase has revealed, to a full extent, the lack of preparation of Ruzyne airport in respect to the coming jet aircraft era. Major shortcomings were addressed by means of a so-called Extraordinary Construction during the period between 1957 and 1958. Tenders were invited for an optimum architectural design of a new handling space, and the passenger terminal in particular. The tender substantially contributed to the quality of the resulting design. The handling area was put into operation in mid-1968. The architectural and aesthetic standard of the handling area and the quality of construction work were highly appreciated also by foreign experts. Again, the Praha/Ruzyne Airport became a respectable entry gate into the former Czechoslovakia. In the following period, between 1968 and 1978, a slowdown in the growth of the number of passengers on foreign routes took place. The stagnation lasted until 1962. In the mid-1970s aircraft having a large capacity were gradually put into service. This was the reason why an increase the airport capacity was decided, and in the mid-1980s the extension and reconstruction of the existing passenger terminal was planned. At the same time an approval was given in respect of the construction of a new building for boarding services. The phased reconstruction of the passenger terminal was launched in 1989. At present the airport disposes of a capacity of about 5.3 million passengers per year in international transport.

The development of other international airports. In addition to Praha, airports in Brno, Karlovy Vary and Ostrava have been playing, both in the past and at present, an important role in the development of civil air transport and in the prosperity of individual regions of the Czech Republic. Such airports are part of the commercial airports network which, was, however, substantially more extensive in the past, because it was designed for the operation of a greater number of former airliner types less demanding in terms of operating requirements.

The Czech civil aviation today shows its long-term tradition continuing since the pre-war period when its standard was comparable with that of developed European countries. After the Second World War the Czechoslovak and Czech aviation

continued to follow the trend of successful pre-war traditions, and it succeeded in maintaining this trend up to the present time despite unfavourable conditions. Czechoslovakia was a founding member of the International Civil Aviation Organisation (ICAO), and such traditions are successfully followed by the Czech Republic.

In this history an important role was played by the Czech aeronautical industry which particularly excelled in the production of low capacity aircraft designed for sports purposes, civil air service and military purposes. An outstanding success was achieved in the manufacture of large series of sail-planes of which the Blanik is unforgettable and, further, acrobatic aeroplanes, large series of L 410 aeroplanes, L 29 and L 39 aeroplanes for training purposes and their successors, agricultural aeroplanes, etc.

In general, air traffic control systems and air traffic management also constitute an important part of aviation. For certain specific operations, apart from imported large systems, partial systems developed and manufactured in the Czech Republic are also made use of. Contrary to the aeronautical equipment, it is a case, in general, of the equipment or systems manufactured in pieces or in small numbers, while being designed „to measure“ for a particular customer.

The basic aspect of the civil aviation industry, i.e. compliance with the specified degree of safety, is considered as a fundamental criterion in all the fields referred to above. This implies a categorical requirement to use only technology and systems after an appropriate assessment certifying them for such use. Such requirement has been very clearly provided for in the new Civil Aviation Act, and it is in compliance with the requirements of international regulations of foreign partners.

By joining the founding Member States of the International Organisation for Civil Aviation and acceding to the Convention on International Civil Aviation (1944 Chicago Convention) Czechoslovakia continued and completed the pre-war development. After the split of the Federation in 1993 a new entry into the ICAO was formally necessary. However, the factual activity of the Czech Republic fully followed previous activities and traditions. Furthermore, the Czech Republic is a member of the European Organisation for the Air Traffic Safety (EUROCONTROL), member of the European Civil Aviation Conference (ECAC) and member of the Joint Aviation Authorities (JAA).

Not long ago the transport and communications sector had to face the uneasy task of creating a new aviation act, which is now in force since 1997. According to the new legislation the majority of decision-making powers is coming under the Civil Aviation Authority, the Ministry of Transport and Communications of the Czech Republic having within this context the tasks of a body of repeal. The decision-making powers have been left to the Ministry of Transport and Communications only in the fields where wider interests are necessary to be enforced like, for instance, licensing of the commercial air transport operations, authorising foreign air carriers to operate commercial air transport in the Czech Republic's territory, negotiating international aviation agreements, managing certain inter-departmental routines and co-ordination of the Czech Republic's membership in international governmental organisations (ICAO, EUROCONTROL, ECAC).

The process of accession of the Czech Republic to the EU, including the consequences resulting from such action, inevitably impacts on all spheres of social, economic, political and cultural life of the Czech Republic. The field of aviation is no exception. Czech air carriers expect from entry into the EU a chance of standing up to the competitive environment of the EU market and becoming its part. Due to the basic preparedness of the Czech Republic's infrastructure as regards airports, air traffic control and equipment of airlines with aircraft meeting technical parameters as required for the entry on the European air transport market (the CSA, Fisher Air and Travel Service aircraft fleet may be included among the most up-to-date and youngest fleets in Europe) it is beneficial that the Czech Republic joins through its potential of mere ten million of population many times greater and richer Community's market.

In case of the signature the Czech Republic will become an associated state to multilateral agreement on the European common airspace (ECAA) the meaning and objective of which is to create for the air transport operations and development conditions corresponding to the EU legislation and create in this way a common air transport market. in the geographical area covering the territory of EU states, associated states of Central and East Europe, Norway and Iceland.

Transport infrastructure equipment

Infrastructure.

In 2000 there were 69 international and national airports designed for passenger transport in the Czech Republic. The most important is the Praha/Ruzyne International Airport which accounted for 96.4% in 2000, 96.2% in 1999 and 96.7% in 1998 of all passengers transported by air.

Equipment.

Towards end of 2000 there were in the Czech Republic six commercial air transport operators having at their disposal 44 aircraft with a maximum take-off weight higher than 9 tonnes. The total number of air transport operators, including those involved in aviation work (i.e. extinguishing of fires, aerial survey, civil engineering, etc.), is more than 100.

Table CZ12: Number of aircraft (of max. take-off weight 16 tonnes and more) by age group in the year 2000

Age	Number
<=5 years	11
5-10 years	11
10 – 15 years	15
TOTAL	37

Table CZ13: Number of aircraft by maximum take-off weight in tonnes in 2000

Maximum take-off weight in tonnes	Number
16	5
20	4
60	26
150	2
TOTAL	37

Table CZ14: Number of aircraft with a certificate take-off weight of 9 000 kg and over

	1995	1996	1997	1998	1999	2000
Aircraft - total number	47	41	49	47	47	44
Fixed Wing Aircraft- total	41	33	41	42	41	38
Turbo-jets						
4 motors	8	8	6	1	1	1
3 motors	5	6	7	6	5	0
2 motors	19	13	16	21	22	26
Propeller-driven (turbine)						
2 motors	9	6	12	14	13	11
Rotary Wing Aircraft - total	6	8	8	5	6	6
Turbine engines						
2 motors	6	8	8	5	6	6

Traffic and transport measurement (Passengers and Freight)

Passengers

The demand for air transport substantially increased over the past 10 years and, therefore, an extension of the Ruzyně area with the total passenger clearance capacity of 6.4 million passengers per year is planned to be built by 2002.

Table CZ15: Commercial passenger air transport (Czech commercial air operators only)

	1995	1996	1997	1998	1999	2000
International transport						
Passenger carried (in 1000s)	1 805.00	1 916.00	2 104.00	2 328.00	2 850.00	3 450.00
Passenger - kilometres performed (millions)	3 028.89	3 148.23	3 501.53	3 670.52	4 335.17	5 854.72
Domestic transport						
Passenger carried (in 1000s)	52.00	66.00	62.00	49.00	54.00	34.00
Passenger - kilometres performed (millions)	3.85	21.80	22.92	9.69	18.43	9.95
Total international and domestic transport						
Passenger carried (in 1000s)	1 857.00	1 982.00	2 166.00	2 377.00	2 904.00	3 484.00
Passenger - kilometres performed (millions)	3 033.00	3 170.03	3 524.45	3 680.22	4 353.60	5 864.67

Table CZ16: Airport traffic – passenger air transport (all commercial carriers)

	1995	1996	1997	1998	1999	2000
International traffic						
Aircraft movements (number)	74 938	78 696	86 933	86 434	92 886	95 979
of which: under 5,7 tonnes certificated take-off weight	2 043	801	1 987	1 140	3 982	2 444
Passengers (number)	3 278 324	3 919 074	4 508 193	4 715 699	4 945 371	5 696 082
of which: embarked	1 639 963	1 906 809	2 116 467	2 243 684	2 471 687	2 873 692
disembarked	1 630 075	1 905 736	2 113 256	2 180 489	2 437 768	2 788 859
direct transit	63 758	106 714	278 470	291 526	35 916	33 531
International traffic - Praha						
Aircraft movements (number)	63 117	68 583	73 728	76 505	80 872	85 912
of which: under 5,7 tonnes certificated take-off weight	0	0	0	0	0	0
Passengers (number)	3 172 414	3 731 715	4 287 353	4 560 289	4 757 301	5 498 850
of which: embarked	1 570 212	1 819 294	2 011 854	2 171 481	2 386 497	2 781 001
disembarked	1 558 385	1 818 753	2 005 268	2 108 692	2 350 944	2 695 066
direct transit	43 817	93 668	270 231	280 116	19 860	22 783
Domestic traffic total						
Aircraft movements (number)	370 438	296 337	314 539	250 076	343 208	334 380
of which: under 5,7 tonnes certificated take-off weight	352 642	258 499	292 879	228 704	290 863	311 232
Passengers (number)	148 536	157 295	170 831	148 904	154 086	130 649
of which: embarked	77 592	73 175	74 775	65 809	69 146	61 615
disembarked	68 270	82 169	82 000	61 315	70 445	59 953
direct transit	2 674	9 578	14 056	21 780	14 495	9 081
Domestic traffic - Praha						
Aircraft movements (number)	5 506	5 241	3 606	6 325	8 743	5 658
of which: under 5,7 tonnes certificated take-off weight	0	0	2 430	3 140	3 085	2 627
Passengers (number)	39 046	67 144	72 609	68 724	65 462	54 682
of which: embarked	18 940	28 167	28 611	27 224	28 946	25 917
disembarked	20 028	34 406	31 974	28 451	34 046	25 540
direct transit	78	4 571	12 024	13 049	2 470	3 225
Total international and domestic traffic						
Aircraft movements (number)	445 376	375 033	401 472	336 510	436 094	430 359
of which: under 5,7 tonnes certificated take-off weight	352 642	259 300	294 866	229 844	294 845	313 676
Passengers (number)	3 872 236	4 076 369	4 679 024	4 864 603	5 099 457	5 821 614
of which: embarked	1 717 555	1 979 984	2 191 242	2 309 493	2 540 833	2 935 307
disembarked	1 698 345	1 987 905	2 195 256	2 241 804	2 508 213	2 848 812
direct transit	66 432	116 292	292 526	313 306	50 411	42 612
Praha - international and domestic traffic						
Aircraft movements (number)	68 623	73 824	77 334	82 830	89 615	91 570
of which: under 5,7 tonnes certificated take-off weight	0	0	2 430	3 140	3 085	2 627
Passengers (number)	3 211 460	3 798 859	4 359 962	4 629 013	4 822 763	5 553 532
of which: embarked	1 589 152	1 847 461	2 040 465	2 198 705	2 415 443	2 806 918
disembarked	1 578 413	1 853 159	2 037 242	2 137 143	2 384 990	2 720 606
direct transit	43 895	98 239	282 255	293 165	22 330	26 008

In the Czech Republic air transport is the only transport mode which proved a permanent growth over recent years. The number of passengers carried by Czech Republic's carriers increased from 1993 more than 2.5 times, and the growth of performance in passenger kilometres was even higher (2.6 times) over the same period. The air cargo service registered only a modest growth as compared to passenger transport. The situation in respect of the airport performance is rather different. The growth of the volume of the handled cargo was almost fourfold over the above-mentioned period. The number of passengers handled increased twice over the same period.

Table CZ17: Air passenger movements in the main airport of the Czech Republic, year 2000 (Praha / Ruzyne)

Year 2000

Month	Kind	International			Domestic scheduled and non- scheduled	Total
		scheduled	non-scheduled	total		
January	departures	134 951	21 385	156 336	3 189	159 525
	arrivals	112 953	19 182	132 135	3 297	135 432
	total	247 904	40 567	288 471	6 486	294 957
February	departures	128 381	17 679	146 060	3 581	149 641
	arrivals	130 718	18 004	148 722	3 043	151 765
	total	259 099	35 683	294 782	6 624	301 406
March	departures	171 513	30 786	202 299	2 083	204 382
	arrivals	180 345	31 243	211 588	1 870	213 458
	total	351 858	62 029	413 887	3 953	417 840
April	departures	179 631	42 273	221 904	1 799	223 703
	arrivals	184 178	30 816	214 994	1 551	216 545
	total	363 809	73 089	436 898	3 350	440 248
May	departures	200 804	50 461	251 265	1 211	252 476
	arrivals	197 524	29 596	227 120	969	228 089
	total	398 328	80 057	478 385	2 180	480 565
June	departures	196 550	82 808	279 358	1 747	281 105
	arrivals	193 416	45 296	238 712	1 943	240 655
	total	389 966	128 104	518 070	3 690	521 760
July	departures	202 709	91 174	293 883	1 558	295 441
	arrivals	199 498	69 943	269 441	1 677	271 118
	total	402 207	161 117	563 324	3 235	566 559
August	departures	212 143	96 232	308 375	1 574	309 949
	arrivals	208 739	95 663	304 402	1 645	306 047
	total	420 882	191 895	612 777	3 219	615 996
September	departures	201 896	82 404	284 300	1 824	286 124
	arrivals	200 461	84 047	284 508	2 200	286 708
	total	402 357	166 451	568 808	4 024	572 832
October	departures	206 213	45 691	251 904	2 168	254 072
	arrivals	204 183	57 409	261 592	2 327	263 919
	total	410 396	103 100	513 496	4 495	517 991
November	departures	173 015	28 269	201 284	2 781	204 065
	arrivals	168 598	29 428	198 026	2 775	200 801
	total	341 613	57 697	399 310	5 556	404 866
December	departures	154 581	29 452	184 033	2 402	186 435
	arrivals	172 268	31 558	203 826	2 243	206 069
	total	326 849	61 010	387 859	4 645	392 504
Year 2000	departures	2 162 387	618 614	2 781 001	25 917	2 806 918
	arrivals	2 152 881	542 185	2 695 066	25 540	2 720 606
	total	4 315 268	1 160 799	5 476 067	51 457	5 527 524

Freight and Mail

A new cargo service terminal was completed in 1998, and its handling capacity is about 100 000 tonnes per year. To face additional demands the possibility of building another part of the cargo terminal is under consideration, in the same area, and its total capacity would then be three times greater.

Table CZ18: Commercial freight and mail air transport (Czech commercial air operators only)

	1995	1996	1997	1998	1999	2000
International and domestic freight and mail air transport						
Tonnes carried	17 562	13 959	13 585	13 168	17 359	18 950
Tonne-kilometres performed (in 1000s)	33 473	25 920	27 233	55 782	30 326	37 786
of which mail						
Tonnes carried	2 118	3 197	2 420	2 936	6 316	5 200
Tonne-kilometres performed (in 1000s)	5 492	2 183	1 779	2 351	3 850	5 530
International transport						
Tonnes carried	17 252	13 665	12 854	12 532	16 529	18 156
Tonne-kilometres performed (in 1000s)	33 392	25 893	26 940	54 126	30 086	37 587
of which mail						
Tonnes carried	1 875	2 939	1 700	2 306	5 593	4 477
Tonne-kilometres performed (in 1000s)	5 478	2 165	1 489	2 162	3 669	5 350
Domestic transport						
Tonnes carried	81	27	293	1 656	830	794
Tonne-kilometres performed (in 1000s)	310	294	731	636	240	199
of which mail						
Tonnes carried	243	258	720	630	723	723
Tonne-kilometres performed (in 1000s)	14	18	290	189	181	180

Table CZ19: Airport traffic – air freight and mail transport (all commercial air operators)

	1995	1996	1997	1998	1999	2000
International traffic - total						
Freight total (tonnes)	33 938	25 837	27 675	32 501	31 985	36 371
of which: loaded (tonnes)	19 087	10 398	11 572	15 256	14 731	18 133
International traffic - Praha						
Freight total (tonnes)	30 226	22 441	24 545	29 313	29 733	34 801
of which: loaded (tonnes)	16 176	7 941	10 031	12 960	13 424	16 952
Domestic traffic - total						
Freight total (tonnes)	867	980	1 778	1 124	1 503	1 436
of which: loaded (tonnes)	410	581	1 052	555	752	724
Domestic traffic - Praha						
Freight total (tonnes)	77	147	62	47	68	91
of which: loaded (tonnes)	42	15	39	19	33	75
International and domestic traffic - total						
Freight total (tonnes)	34 805	26 817	29 453	33 625	33 488	37 807
of which: loaded (tonnes)	19 497	10 979	12 624	15 811	15 483	18 857
International and domestic traffic - total Praha						
Freight total (tonnes)	30 303	22 588	24 607	29 360	29 801	34 892
of which: loaded (tonnes)	16 218	7 956	10 070	12 979	13 457	17 027

Final remarks

The need to implement international JAA and EUROCONTROL regulations encouraged the preparation of the so-called "small amendment" to the civil aviation act, which was adopted on 10 May 2000. This amendment enables a direct application of JAA and EUROCONTROL aviation regulations and recommendations, besides the ICAO recommendations.

In this context it is necessary to stress that the main task of the Ministry of Transport and Communications is to fully ensure the activities of the Czech civil aviation, including international air transport, in compliance with international safety standards, and at the same level as in other developed countries. This holds in particular for airports, air traffic control and air traffic management, airspace use and aviation agreements.

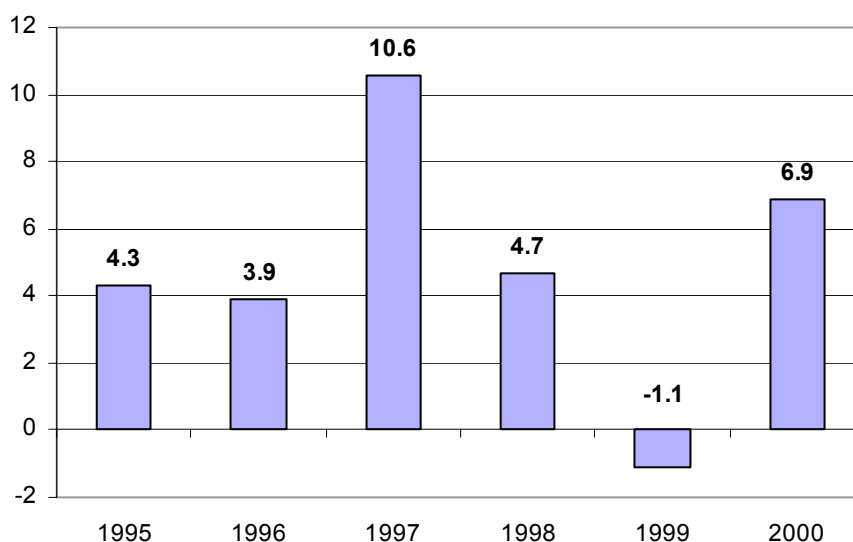
No less important task, is the execution of the state technical supervision which mainly relates to the certification of the airworthiness of aircraft and their parts and other aeronautical equipment for the use in the aviation sector. It should also be said that the support to the air industry as well as to manufacturers of the aeronautical equipment and systems proceeds in compliance with established competencies.

3.3 ESTONIA

Estonia, the northern-most of the Baltic countries, lies between the Gulf of Finland and Gulf of Riga at the crossroads between East and West. This small country of 45 277 square km and a population of 1.4 million has a remarkable coastline nearly 3 780 km long.

The Estonian economy has experienced remarkable growth rates since the country regained independence in 1991. Short-term growth prospects have dimmed in the last few years within the framework of the wider international situation, but the conditions of the Estonian economy appear relatively robust. According to the adjusted data, although the annual growth rate dropped by 0.7% in 1999, quarterly growth rates have stayed positive since the last quarter of 1999 and the preliminary result for the year 2000 was 6.9% (Figure EE1).

Fig. EE1: Growth rate of GDP at 1995 constant prices over previous year (in %)



As shown in Table EE2, Estonia's main trading partners are Finland, which accounts for 32.3% of the total import value and 27.5% of export value, Sweden (20.5% and 9.8%), and Germany (8.6% and 9.5%).

Table EE2: Estonia's main trading partners in terms of value (in%)

	Exports		Imports	
	1999	2000	1999	2000
Finland	23.4	32.3	26.0	27.5
Sweden	22.7	20.5	10.7	9.8
Germany	8.5	8.6	10.4	9.5
Other countries	45.4	38.6	52.9	53.2

Source: Estonian Statistical Office

In 2000, value added in the transport, storage and communication sector was approximately 15% of GDP and this sector employed as a whole about 60.5 thousand people (close to 10% of the total).

As compared to other modes of transport, Estonian maritime and aviation enterprises deal essentially with international transport of goods. Moreover, maritime transport represents by far the major mode for international conveyance of passengers (Table EE3).

Table EE3: Transport of passengers and goods carried by Estonian enterprises, 2000

	Passengers (millions)		Freight (thousand tonnes)	
	Total	of which international traffic	Total	of which international traffic
Road transport	187.80	0.80	13 800	2 600
Railway transport	7.30	0.10	63 700	32 300
Maritime transport	4.80	3.60	2 000	2 000
Inland waterway transport	0.01	-	130	-
Air transport	0.33	0.32	5.8	5.7

* preliminary data

Source: Estonian Statistical Office

Estonia is a member of the ECMT (European Conference of Ministers of Transport), IMO (International Maritime Organisation), ICAO (International Civil Aviation Organisation), IATA, ECAC (European Civil Aviation Conference) and has a tradition of good co-operation with Eurocontrol.

AIR TRANSPORT

Transport Infrastructure and Equipment

Infrastructure

With tourism starting to revive in the region and foreign investment attracting businessmen, aviation also has a significant task in opening Estonia to international communication. Although the majority of Estonian air traffic consists of over flights, passenger and cargo transport at the country's major airport in Tallinn is growing at a rapid pace and the total capacity offered in Estonian airports is prepared for further traffic to develop in the close future.

There are five modern-equipped airports for international traffic in Estonia: Tallinn, Tartu, Pärnu, Kuressaare and Kärdla.

The airport of Tallinn is by far the largest, handling about 97% of the annual passenger transport and offering services to over 230 destinations among which about 20 are scheduled international destinations. Tallinn airport has a 3070 meters long and 65 meters wide runway and an estimated capacity of 1.4 million passengers per year. It also hosts a well-developed cargo terminal.

Tartu airport is located near Estonia's second most inhabited city and hosts an aviation training school, while the country's major seaside resort is served by Pärnu airport. These two airports are mostly used for domestic traffic and they service some charter flights. Kuressaare and Kärdla airports connect the two largest Estonian islands to the mainland and, in the high season, they have flights to/from some foreign countries. A large part of the Estonian air traffic is made of over flights, mostly on an East-West direction.

Equipment

The Estonian aircraft register includes 82 aircraft (as of January 1st, 2000), among which four AN-72/74, four MIKAIL MI-8, two Boeing 737-500, two Fokker F27, a Douglas DC3, a TU-154M and a TU-134A. The number of aircraft in the register is nearly two times larger than it was 1995, when there were only 47 aircraft.

Traffic and transport measurement (Passengers and Freight)

Passengers

In 2000 over 30 thousand aircraft movements were operated in Estonian airports transporting a total of 577 thousand passengers, approximately 6% more than the previous year. International passengers accounted for about 97% of the total and were transported by 15 different airline companies. The average amount of regular flights per week was 161 (Table EE4).

Table EE4: Passengers and aircraft movements in Estonian airports, 1999-2000

	International traffic		Domestic traffic		Total	
	1999	2000	1999	2000	1999	2000
Total passengers*	546 472	558 482	22 567	19 132	569 039	577 614
embarked	270 750	275 724	10 787	9 371	281 537	285 095
disembarked	275 722	282 758	11 780	9 761	287 502	292 519
Aircraft movements	21 735	21 213	9 648	9 021	31 383	30 234
Number of regular flights per week	170	148	23	13	193	161
Number of airlines	17	15	8	7	25	22

*including direct transit passengers counted once (direct transit is negligible)

Source: Estonian Statistical Office

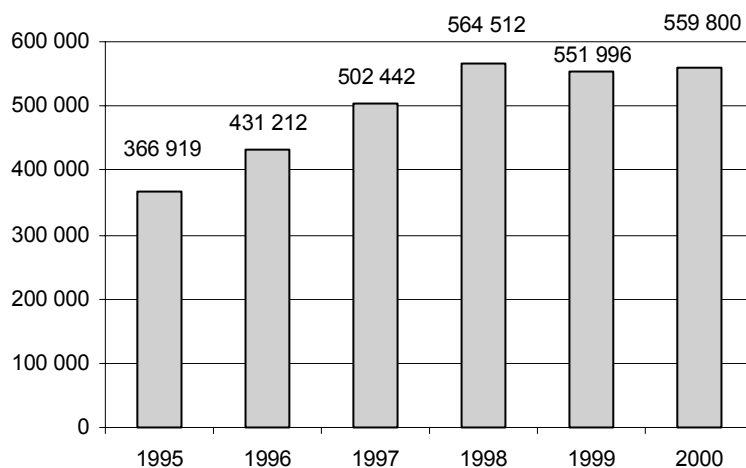
Tallinn airport alone dealt with about 23 thousand aircraft movements (77% of the total), of which over 18 thousand were commercial flights. It handled about 560 thousand passengers, of which 554 thousand were on international relations. This represents a 53% increase in passenger traffic since 1995. The rapid development of passenger traffic by air experienced a drawback in 1999, decreasing by 2.3% as compared to the previous year (Table EE5 and Figure EE6).

Domestic passenger transport is a minor part of the overall volume (only 1%). It has increased significantly since 1995 from 2.9 thousand passengers to 5.7 thousand, reaching a peak of 7.5 thousand in 1998. However, there has been no major change in the overall composition of air traffic in the last five years. Direct transit passengers are a negligible amount.

Table EE5: Passengers, freight and mail, and aircraft movements in Tallinn Airport, 1995-2000

	Year					
	1995	1996	1997	1998	1999	2000
Total passengers	366 919	431 212	502 442	564 512	551 996	559 800
International	363 989	427 516	497 454	556 358	544 276	553 931
Domestic	2 930	3 696	4 988	7 588	6 471	5 727
Direct transit	n.a.	n.a.	n.a.	566	1 249	142
Total air cargo	2 488	3 997	5 590	5 992	5 325	4 689
Freight (tonnes)	558	686	702	807	1 030	1 236
Mail (tonnes)	1 930	3 311	4 888	5 185	4 295	3 453
Aircraft movements	13 784	16 695	21 455	24 951	23 594	23 358
Commercial movements	11 381	13 781	17 246	19 954	18 926	18 647
Other movements	2 403	2 914	4 209	4 997	4 668	4 711

Source: Tallinn Airport Traffic Report

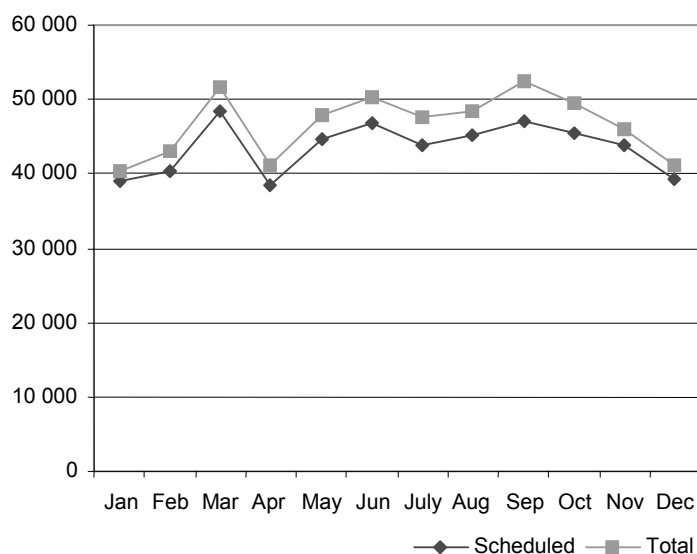
Figure EE6: Total number of passengers in Tallinn Airport, 1995-2000


The great majority of the passenger traffic is scheduled, charter passengers representing only 5.7% of the total. The distribution of passengers throughout the year is rather stable and peak months do not seem connected to an increased number of charter flights. On the contrary, the typical air passenger profile appears to be by business oriented, with passenger volumes dropping at the beginning of the summer season and of the end of the year (Table EE7 and Figure EE8).

Table EE7: Number of scheduled / charter / other passengers in Tallinn Airport by month, 2000

	Scheduled	Charter	Others	Total
Jan	38 936	1 328	129	40 393
Feb	40 466	2 350	159	42 975
Mar	48 524	2 776	426	51 726
Apr	38 441	2 191	584	41 216
May	44 542	2 687	619	47 848
Jun	46 908	2 865	551	50 324
July	43 909	3 184	593	47 686
Aug	45 262	2 706	484	48 452
Sep	47 014	4 721	663	52 398
Oct	45 352	3 774	336	49 462
Nov	43 967	1 998	113	46 078
Dec	39 288	1 593	219	41 100
Total	522 609	32 173	4 876	559 658

Source: Tallinn Airport Traffic Report

Figure EE8: Scheduled and total passenger traffic in Tallinn Airport, by month

Among the regular destinations, air travel to and from Helsinki represents the largest share (27.8%), followed by Stockholm (21.2%), Copenhagen (17.8%), London (4.9%), Frankfurt (4.3%) and Vilnius (3.5%). As shown in table EE7, in the last few years regular air connections have also been established with Vienna, St. Petersburg and Warsaw. As compared to 1999, passengers travelling to and from these new destinations have increased significantly as well as those flying between Tallinn and Frankfurt (+23%) and Tallinn and Stockholm (+14%). On the other hand, air traffic with Minsk has decreased (-31%), as well as with Moscow (-18%). Tallinn Airport is also facing competition on its most frequent route since a helicopter pad operated by a private company has started to provide air connections to and from Helsinki daily with an 18-minute journey. The helicopter service is transporting approximately 30 thousand passengers a year.

Table EE9: Passenger transport on regular routes at Tallinn Airport, 1995-2000

Partner airport	Year				
	1996	1997	1998	1999	2000
Helsinki	147 774	164 072	190 964	162 479	155 547
Stockholm-Arlanda	63 627	80 111	87 027	104 228	118 387
Copenhagen	68 313	75 506	98 342	93 345	99 704
London-Gatwick	16 016	23 506	28 492	26 452	27 323
Frankfurt	29 076	24 951	7 290	19 476	24 028
Vilnius	11 471	16 727	22 348	21 073	19 537
Vienna	0	773	8 223	10 725	18 077
Moscow-Sheremetyev	12 051	17 061	21 381	18 046	14 728
Riga	5 350	10 271	12 870	13 486	13 856
Kiev-Borispol	11 464	12 190	13 307	12 969	12 252
Hamburg	10 241	10 570	13 196	13 621	10 602
Minsk	4 177	4 587	4 422	3 566	2 458
St.Petersburg	0	0	599	164	1 623
Warsaw	0	0	0	0	809
Others	51 652	62 117	55 485	51 117	40 727
Total	431 212	502 442	563 946	550 747	559 658

Source: Tallinn Airport Traffic Report

Freight and Mail

Freight and mail transported by air through Tallinn Airport reached 4.7 thousand tonnes in 2000, increasing by 88% as compared to 1995, but decreasing by nearly 12% respect to the previous year. The volume of freight carried by air started declining in 1998 and this is mainly attributed to the closure of the scheduled cargo operations between Tallinn and Örebro in Sweden (Table EE5).

A total of 8 Estonian air transport companies are licensed for flight activities (as of January 1st, 2001). Among these the most important is Estonian Air. In 2000 Estonian air enterprises carried 332.9 thousand passengers (81% more than in 1995) and 5.7 thousand tonnes of freight (about 8 times more than in 1995). This corresponded to a turnover of 302.5 million passenger-km and 5.4 million tonne-km.

MARITIME TRANSPORT

Maritime transport plays an important role in Estonia's foreign trade and economy. Transit trade, particularly of oil and oil products, is the major share of maritime transport and has contributed to approximately 10% of the country's GDP in 2000. This makes Estonia a potential transit hub for the East-West trade corridor, which is today still dependent on a sole supplier country, Russia. From this point of view Estonia must face the competition of Latvia and Lithuania, which are similarly well located, and from some Finnish and some Russian ports. A competitive advantage for Estonian ports is their close co-operation with the Estonian railways that provide the shortest and most cost-effective connection to Russia and same track gauge as the Russian and other CIS railway systems. Estonia also stands out for the relevance of the maritime passenger traffic it attracts within the Baltic region.

Infrastructure

Estonia's ports boast simple navigational accessibility, deep waters, and better ice conditions as compared to those in other ports in the Baltic Sea. A total of 31 ports, all open to foreign ships, are to smaller or bigger extent involved in international cargo or passenger transport. However only 5 ports are above the threshold of 1 million tonnes of cargo or 200 thousand passengers per year.

By far the largest, the Port of Tallinn handles through its four constituent harbours over 70% of the total maritime cargo loaded and unloaded in Estonia and practically all international passenger traffic. The Port of Tallinn is a public limited company, with the state being the sole owner of its shares. It is a landlord port where the Port Authority is in charge the reception of vessels, safe navigation and port infrastructure while private operators handle cargo and the related equipment. The Port of Tallinn is member of the BPO (Baltic Ports Organisation), IAPH (International Association of Ports and Harbours) and Cruise Europe.

Today, the Old City harbour in Tallinn Port is one of the largest passenger terminals in the Baltic Sea, with over 6 million passengers transported in 2000 by rapidly growing ferry and cruise services and high-speed vessel lines operating in the summer season. The main destinations are to/from Helsinki and Stockholm and, during the summer season, on the Helsinki-Tallinn-Rostock route. The harbours of Tallinn Port (Old City, Muuga, Paldiski South and Paljassaare) are equipped with

specialised oil terminals, container and ro-ro terminals and services for dry and liquid bulk, as well as other general cargo. Regular cargo liners link Tallinn to Helsinki, Stockholm, Copenhagen, Oslo, Kiel, Antwerp, Rotterdam, Hamburg and Felixstowe.

The other major cargo ports are Vene-Balti, Kunda, Pärnu and Miiduranna. As compared to Tallinn, these ports tend to be rather specialised by specific cargo or commodity types. In Vene-Balti and Miiduranna transit traffic of petroleum products is the major activity of the port, while Pärnu handles mostly timber and wood products for exports and Kunda is specialised in both wood and cement for exports.

Equipment

In accordance with the Law of Ship Flag and Registers of Ships Act (1998) Estonia has three registers:

- A ship register;
- A small craft register (for vessels with length less than 12 meters);
- A register of bareboat chartered ships, including foreign owners' vessels temporarily chartered without crew.

As of January 1st, 2000 there were 542 ships with total gross tonnage 559 930 registered under the Estonian Registers. Among these, 155 ships had gross tonnage over 100 accounting for about 27% of the total gross registered tonnage (Table EE10). About 7.7% are passenger ships and 18.7% merchant ships, while the remaining are fishing ships and technical and auxiliary vessels. The register of bareboat chartered ships included 47 vessels with gross tonnage 283 556. Most of these vessels are merchant ships (70%).

Tab. EE10: Ships registered in the Estonian shipping register, 1st January 2000

	Number	Gross Tonnage	Net Tonnage	Deadweight (t)
Entered in the register of ships*	155	127 266.58	44 576.54	90 862.30
passenger ships	12	17 569.58	5 804.65	3 965.50
merchant ships	29	56 263.00	21 060.00	51 960.00
fishing vessels	68	35 356.00	11 059.00	15 999.80
technical and auxiliary ships	46	18 078.44	6 652.89	18 937.00
Entered in the register of bareboat chartered ships	47	283 556.00	119 496.00	220 946.30
passenger ships	10	104 491.00	42 017.00	24 959.40
merchant ships	33	176 757.00	76 788.00	194 862.00
fishing vessels	1	1 531.00	459.00	835.00
technical and auxiliary ships	3	777.00	232.00	289.90

* Ships with gross tonnage of 100 and above

Source: Estonian Statistical Office

Traffic and Transport Measurement (Passengers and Freight)

Passengers

Over 2.6 million passengers embarked and about 3.5 million disembarked in Estonian ports, the main relations being with Finland (90%), Sweden (7.7%) and Germany (about 1%). Excluding cruises, the overall increase in international passengers by sea has been approximately 45% in the last five years.

Cruises with stops in Estonia have also increased at a steady rate, carrying close to 770 thousand passengers in 2000 as compared to the 553 thousand carried in 1996 (Table EE11).

Table EE11: International passenger traffic through Estonian ports, 1995-2000

	1995	1996	1997	1998	1999	2000
Passengers disembarked	2 141 558	2 533 955	2 836 246	3 163 238	3 454 392	3 508 897
from Sweden	109 450	137 756	165 188	200 250	232 823	248 752
from Finland	2 004 663	2 361 264	2 623 990	2 879 154	3 102 576	3 130 149
from Germany	1 678	2 037	519	14 402	48 723	48 718
from other countries	25 767	32 898	46 549	69 432	70 270	81 278
Passengers embarked	2 131 317	1 978 063	2 189 750	2 425 729	2 617 945	2 682 549
to Sweden	105 907	130 776	158 729	184 998	216 556	230 827
to Finland	1 999 024	1 846 447	2 027 698	2 230 691	2 394 121	2 441 232
to Germany	1 211	353	479	9 774	6 905	9 954
to other countries	25 175	487	2 844	266	363	924
TOTAL	4 272 875	4 512 018	5 025 996	5 588 967	6 072 337	6 191 834
Cruise passengers coming by ship from foreign countries	n.a.	553 390	664 598	745 418	771 367	769 922

Source: Estonian Statistical Office

Domestic ferry traffic between the mainland and West-Estonian islands serviced 1.24 million passengers in 2000, an increase of about 16% as respect to the 1.07 million transported in 1995. These ferries are all operated by Estonian enterprises. Domestic traffic represents about 26% of their overall passenger transport performed by Estonian enterprises (Table EE12).

Table EE12: Passengers and goods carried by Estonian maritime transport enterprises, 1995-2000

Year	Passengers			Freight	
	number of passengers, millions	of which domestic passengers	million passenger-km	million tons	million tonne-km
1995	3	1.07	244	3.1	* 5,855
1996	3	0.99	272	4.4	28 918
1997	3.3	1.11	302	4.4	26 524
1998	4	1.17	372	5.2	24 764
1999	4.7	1.27	433	4.5	19 221
2000	4.8	1.24	246	2	4 304

*Data on freight turnover of the Estonian Seashipping Ltd. are partly missing.

Source: Estonian Statistical Office

Freight

The volume international freight handled in Estonian ports has more than doubled in the last five years, rising to 39.8 million tonnes in 2000 (153.5% more than in 1995) at a steady average growth rate close to 19% per year. The share of incoming and outgoing transit traffic is about 68%, while exports are 24% and imports represent only 8% of the total cargo loaded/unloaded. Maritime transit traffic has increased by over 173% since 1995 and it is mostly composed by cargo being transported outwards (Table EE13 and Figure EE14).

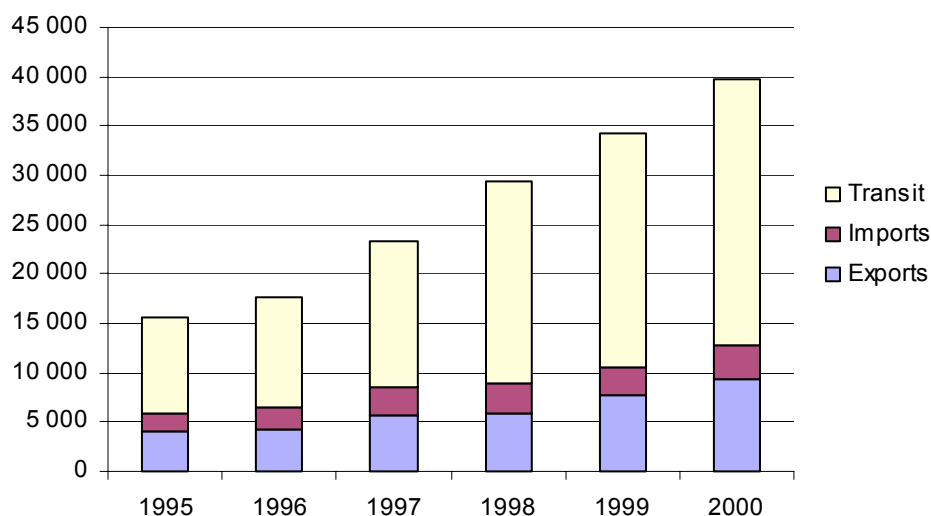
Table EE13: Gross weight of goods loaded and unloaded in Estonian ports (in thousand tons)*, 1995-2000

Year	Export goods	Import goods	Transit goods			TOTAL
			outwards	inwards	total	
1995	3 966	1 842	8 406	1 494	9 900	15 708
1996	4 168	2 245	9 296	1 979	11 275	17 694
1997	5 622	2 860	13 141	1 616	14 757	23 253
1998	5 856	3 137	18 869	1 495	20 364	27 357
1999	7 631	3 001	20 957	2 766	23 723	34 355
2000	9 358	3 323	25 997	1 119	27 116	39 797

*including the tare-weight of containers and ro-ro units

Source: Estonian Statistical Office

Figure EE14: Goods transported through Estonian ports, 1995-2000

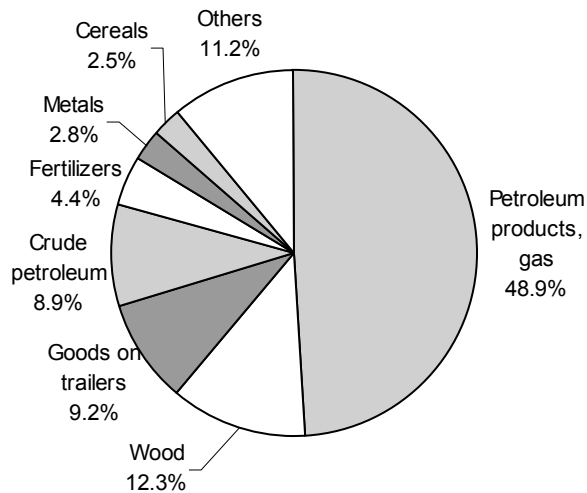


Crude oil and petroleum products make up for more than half (approximately 58%) of the cargo transported by sea through Estonia. Other major commodity categories include forestry products (wood, 12.3%), fertilisers (4.4%) and cereals (2.5%). Ro-ro traffic also has a significant share in maritime traffic given that trailer units carried about 9% of the total goods. While food products in general, chemicals and metal materials have been on decrease, the transportation of raw mineral materials (excluding ores), fertilisers, manufactured metal articles, machinery and transport equipment, petroleum products and solid fuels are increasing. Goods in containers and ro-ro units have also increased but at a slower pace (Table EE15 and Figure EE16).

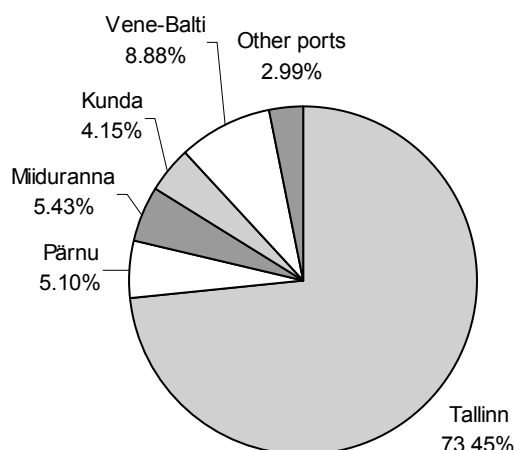
Table EE15: Transport of goods through Estonian ports by NSTR categories (in thousand tonnes), 1997-2000

	1997	1998	1999	2000
Cereals	1 040	1 353	2 078	985
Fresh fruits and vegetables	12	1	1	-
Other food products, beverages; tobacco products	589	657	570	309
Fats, vegetable oil	7	54	16	2
Wood	3 063	2 938	4 537	4 879
Fertilizers	554	697	1 590	1 762
Mineral raw materials (exc. ore)	113	268	57	460
Iron ore, scrap iron	687	826	746	581
Non-ferrous metals	73	113	22	43
Other crude materials	196	186	3	11
Solid fuels	470	372	402	781
Crude petroleum	...	...	2 479	3 533
Petroleum products, gas	11 182	14 064	15 540	19 462
Chemicals	88	41	75	7
Cement, lime, manufac-tured building materials	785	978	997	689
Metals	1 007	1 019	1 171	1 096
Manufactured metal articles	9	10	16	34
Machinery and transport equipment	150	177	103	412
Miscellaneous manufactured products	16	16	10	19
Container goods	553	580	629	755
Goods on trailers	2 599	2 936	3 231	3 642
Miscellaneous articles	60	71	134	340
TOTAL	23 253	27 357	34 357	39 802

Source: Estonian Statistical Office

Figure EE16: Main commodities transported through Estonian ports, 2000


As shown in Figure EE17, Tallinn Port accounts for about 73% of the overall maritime cargo traffic, followed by Vene-Balti (8.9%), Miiduranna (5.4%), Pärnu (5.1%) and Kunda (4.2%).

Figure EE18: Share of cargo transported in Estonian ports, 2000

In Tallinn Port liquid bulk (and particularly petroleum products) represented the largest share of outwards cargo (70%), while general cargo accounted for the majority of inwards cargo (67.5%). About 77 thousand containers were handled in TEU, of which close to 27 thousand were empty containers mostly unloaded. Tallinn Port also handled 172,898 trailers and trucks (Table EE18, Table EE19, Figure EE20 and Figure EE21).

Table EE18: Gross weight of goods* loaded / unloaded in Tallinn Port by type of cargo, 2000

	Unloaded	Loaded	Total
Liquid bulk	180 297	17 632 027	17 812 324
Dry bulk	1 135 798	2 274 787	3 410 585
General cargo	2 731 841	5 275 383	8 007 224
TOTAL	4 047 936	25 182 197	29 230 133

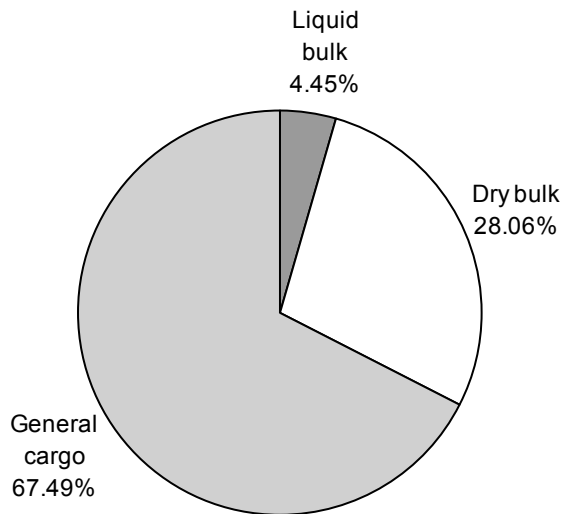
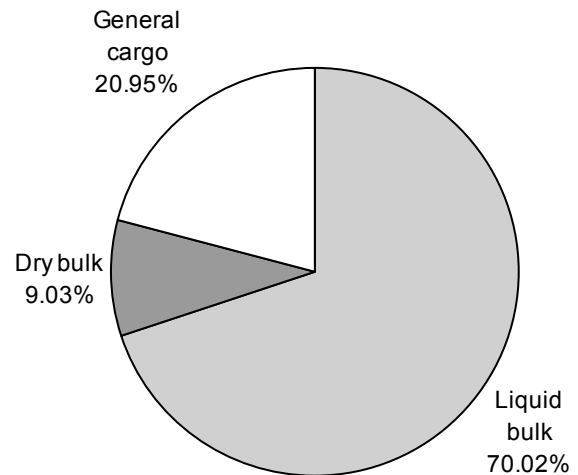
*including the tare-weight of containers and ro-ro units

Source: Tallinn Port

Table EE19: Containers and ro-ro units handled in Tallinn Port, 2000

	Unloaded	Loaded	Total
Number of containers (in TEU)	37 321	39 371	76 692
whereof empty	19 688	7 006	26 694
whereof loaded	17 633	32 365	49 998
Number of trailers and trucks	n.a.	n.a.	172 898

Source: Tallinn Port

Figure EE20: Goods unloaded in Tallinn Port by type of cargo, 2000

Figure EE21: Goods loaded in Tallinn Port by type of cargo, 2000


Maritime transport of goods carried out by Estonian enterprises has been decreasing since 1998 and in 2000, the total volume they transported was of 2 million tonnes, that is about 56% less than the previous year (Table EE22).

Table EE22: Passengers and goods carried by Estonian maritime transport enterprises, 1995–2000

Year	Passengers			Freight	
	number of passengers, millions	of which domestic passengers	million passenger-km	million tons	million tonne-km
1995	3	1.07	244	3.1	* 5,855
1996	3	0.99	272	4.4	28 918
1997	3.3	1.11	302	4.4	26 524
1998	4	1.17	372	5.2	24 764
1999	4.7	1.27	433	4.5	19 221
2000	4.8	1.24	246	2	4 304

* Data on freight turnover of the Estonian Seashipping Ltd. are partly missing.

Source: Estonian Statistical Office

Vessels

In 2000 over 14 thousand vessels called at Estonian ports. About 37% carried the Estonian flag, followed by Finnish ships (13%), Russian ships (9%), German ships (2.7%), Swedish ships (2.2%) and others. Incoming vessels increased by 69% in the last five years. The flags that have most increased their presence in Estonian ports are however those representing other countries as respect to those mentioned above. As a whole, the number of foreign vessels passed from 5233 in 1995 to 8918 in 2000 (Table EE23, Table EE24 and Figure EE25).

Table EE23: Vessel traffic through Estonian ports by flag, 1995-2000

	1995	1996	1997	1998	1999	2000
Incoming vessels	8 405	8 683	11 506	11 744	13 692	14 159
Estonian	3 172	3 065	4 460	4 285	5 208	5 241
Finnish	1 669	1 957	2 124	2 074	2 292	1 846
Swedish	229	310	428	264	210	314
German	180	191	247	239	424	381
Russian	1 072	1 131	1 622	1 228	1 287	1 219
Other flags	2 083	2 029	2 625	3 654	4 271	5 158
Outgoing vessels	8 642	8 701	11 410	11 822	13 782	14 229
Estonian	3 226	3 067	4 386	4 301	5 208	5 233
Finnish	1 676	1 956	2 096	2 086	2 306	1 851
Swedish	277	310	423	261	211	316
German	189	197	237	237	415	382
Russian	1 153	1 140	1 643	1 246	1 336	1 270
Other flags	2 121	2 031	2 625	3 691	4 306	5 177

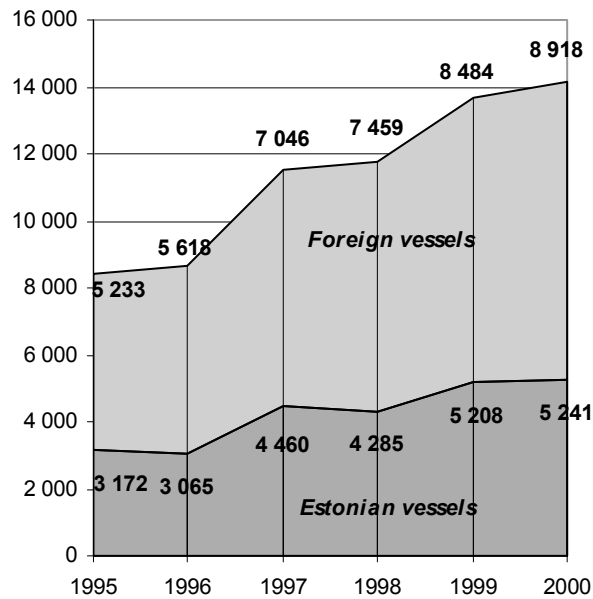
Source: Estonian Statistical Office

Table EE24: Vessel traffic in the main Estonian ports, 1995-2000

		1995	1996	1997	1998	1999	2000
Tallinna Sadam	Inwards	6 489	6 901	7 167	8 085	9 541	9 863
	Outwards	6 631	6 891	7 122	8 061	9 541	9 851
	Total	13 120	13 792	14 289	16 146	19 082	19 714
Pärnu Sadam	Inwards	388	331	541	304	880	1 085
	Outwards	393	342	669	304	880	1 085
	Total	781	673	1 210	608	1 760	2 170
Miiduranna Sadam	Inwards	121	111	272	345	360	359
	Outwards	125	114	274	338	360	361
	Total	246	225	546	683	720	720
Kunda Sadam	Inwards	235	266	484	499	523	592
	Outwards	234	278	503	541	539	605
	Total	469	544	987	1 040	1 062	1 197
Vene-Balti Sadam	Inwards	...	...	563	436	340	389
	Outwards	...	...	562	434	343	383
	Total	...	...	1 125	870	683	772
Other ports	Inwards	1 172	1 074	3 042	2 511	2 388	2 260
	Outwards	1 259	1 076	2 842	2 578	2 462	2 327
	Total	2 431	2 150	5 884	5 089	4 850	4 587
Total Estonia	Inwards	8 405	8 683	11 506	11 744	13 692	14 159
	Outwards	8 642	8 701	11 410	11 822	13 782	14 229
	Total	17 047	17 384	22 916	23 566	27 474	28 388

Source: Estonian Statistical Office

The Estonian Maritime Board registered 23 ship accidents involving Estonian flag vessels, of which 9 accidents occurred within Estonian territorial waters. Another 9 foreign ships were involved in accidents within Estonian territorial waters, the main cause being crashing on the rocks (Table EE26).

Figure EE25: Ships calling at Estonian ports, 1995-2000

Table EE26: Ship accidents, 2000

	All accidents with Estonian ships	In Estonian territorial waters			Estonian ships outside of Estonian territorial waters
		Total	Estonian ships	Foreign ships	
On the rocks	8	9	5	4	3
Collision	1	1	-	1	1
Contact	2	1	-	1	2
Leakage	1	-	-	-	1
Other accidents	11	7	4	3	7
TOTAL	23	18	9	9	14

Source: Estonian Statistical Office

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3.4 LATVIA

Latvia lies on the western edge of the East European Plain along the southeastern coast of the Baltic Sea. It borders with Estonia to the north, Russia to the east, Belarus to the southeast and Lithuania to the south. The length of the Baltic Sea coastline is 500 hundred kilometres. The territory of Latvia covers 64.6 thousand km². Forests are the country's main natural resource and cover 45% of the total surface area, while 39% is agricultural land. There are raw building materials and peat of industrial importance.

At the beginning of 2001 the population of Latvia was 2 366 thousand. Of the total population, 68% are urban residents while 32% live in the countryside. There are 77 cities and towns and 481 civil parishes (pagasts). Population density is 37.5 inhabitants per square kilometer with the largest part concentrated in and around the capital city Riga and the other major cities.

Since the restoration of independence in 1990 many changes in social and economic life have taken place in Latvia. Due to the implementation of a consistent policy in 1995 the country achieved a basic level of macroeconomics stability with a relatively low inflation rate for a transition economy (25% in 1995 compared with 1994), a fairly small budget deficit (2.4% of GDP) and a balance of payments surplus. Economic activity was going up from 1996 to 1998 when average growth rates of GDP equalled to 6%. The economic crisis of Russia in the second half of 1998 and in 1999 influenced the development rate of the Latvian economy, especially manufacturing, agriculture, export, etc. At the same time the growth of activity in construction and several sectors of services compensated the industrial and agricultural decline due to the crisis. In 2000 GDP went up by 6.6% (Table LV1) proving that Latvia had overcome difficulties caused by external circumstances. Growth at the moment is observed in almost all basic sectors of the national economy.

Table LV1: Gross domestic products

	(mln lats)					
	1995	1996	1997	1998	1999	2000
At current prices						
Gross domestic product	2349.2	2829.1	3275.5	3589.5	3897.0	4333.0
Gross value added at basic prices	2033.8	2468.8	2854.8	3095.8	3410.8	3820.1
of which kind of activities - services	1139.6	1479.1	1770.3	2025.4	2326.1	2682.7
of which transport, storage and communications	324.7	419.8	480.2	515.5	522	617.2
At average prices of 1995						
Gross domestic product	2349.2	2427.7	2636.8	2739.1	2768.6	2950.7
Gross value added at basic prices	2033.9	2101.6	2289.3	2379.7	2405.5	2563.4
of which kind of activities - services	1139.7	1197.0	1287.4	1344.7	1413.8	1513.7
of which transport, storage and communications	324.7	368.9	396.2	385.1	386.0	413.7

The development of transport depends to a great degree on the economic stability in the country. Under the difficult conditions of the transition period in early 1990s, the transport industry experienced a marked economic slow-down. A certain stabilisation occurred in 1995 when coupled with the increasing volumes of transit flows through oil and oil products pipelines and by rail, cargo turnover in ports rose considerably (Table LV2). Stabilisation occurred in all means of passenger traffic as well (Table LV3).

Table LV2: Cargo traffic by mode of transport

Year	(1000 tons)				
	Rail	Road	Pipelines	Airports	See ports
1995	28 840	25 026	18 122	4	38 864
1996	35 264	29 499	20 737	4	44 955
1997	41 019	25 169	22 561	4	50 669
1998	37 857	33 765	24 095	5	52 165
1999	33 208	33 401	21 607	4	48 937
2000	36 413	32 911	24 506	5	51 769

Table LV3: Passenger traffic

	(million passengers)					
	1995	1996	1997	1998	1999	2000
Rail	42.3	34.1	33	30.1	24.9	18.2
Bus	184.5	148.7	151.4	164.2	167.4	165.9
Trolley-bus	98.7	75.9	83.8	96.1	92.2	86.5
Tram	101.2	79.5	88.4	98	93.8	88.9
Airports	0.5	0.5	0.5	0.6	0.6	0.6

The advantageous geographical position of Latvia has always been a contributing factor for broadening the economic ties among the neighbouring countries, Russia and Western European countries. It has also facilitated the development of the transport industry in the country.

Political and economic developments in Europe in the 1990s had a great impact on the Latvian transport policy. As a result, rapid changes occurred in the transport flows as well as in the transport infrastructure of Latvia. A certain amount of non-financial investments have been invested in the transport activity (Table LV4). Transport is one of the key economic sectors in the country. Many other economic sectors are closely linked with transport. A modern transport system has a particular national importance.

Table LV4: Non-financial investment in transport, storage and communications

	(at constant prices of 2000; mln lats)			
	1997	1998	1999	2000
Total	190.4	258.7	208.4	261.0
of which:				
land transport, transport via pipelines	48.3	75.8	47.0	74.5
water	7.9	1.2	1.4	2.4
air	2.2	6.0	2.0	3.3
supporting and auxiliary transport activities	47.4	72.7	69.6	85.4
post and communications	84.6	103.0	88.4	95.4

In 2000, the transport industry provided employment to 69 thousand people representing 8.7% of the total employment. The contribution of transport and communications industry to the value added in 1990 was 6.6 million lats, or 10.9%, but in 1995 – 324.7 million lats, or 16.0%, in 2000 it was 617.2 million lats or 16.2% of gross value added. This is an indication of growing importance of transport in the national economy of Latvia.

The Latvian transport infrastructure includes roads, railway, seaports, airport, and oil and gas pipelines as well as streets, tramway and trolley bus lines.

The overall length of public roads at the end of 2000 was 20.3 thousand km; the length of railway lines was 2331 km, density was 315 and 36.1 km per 1000 square km, respectively.

Ports have always played a specific role in the economy of Latvia. There are 3 big ports with a total annual freight turnover of nearly 40 million tonnes and 7 minor ports on the shores of the Baltic Sea and the Gulf of Riga. The leader port among them all is the ice-free port of Ventspils that handles three quarters of the total freight turnover in Latvian ports.

The Riga International Airport provides the largest passenger and cargo flows in the Baltic States at present. Several airlines operate daily to and from the airport. There are three small international airports in Liepaja, Ventspils and Daugavpils (since November 2001), and 13 certified airfields.

The territory of Latvia is intersected by a crude oil pipeline of 437 km in length and by an oil product pipeline of 329 km, and gas pipeline of 1 223 km. The operations of these pipelines ensure the transit of oil and oil products to the port of Ventspils from Russia to Western Europe as well as transport to the Mazeikeiai Oil Refinery in Lithuania. The average amount of transported oil and oil products exceeds 20 million tonnes. The volume of gas transported by the 1 223 km gas pipeline is about 4 000 million cubic meters.

The favourable geographical position of Latvia in Europe and its location on the Baltic Sea provide a number of advantages for the development of the transport industry. With regard to gross domestic product, transport is likely to be one of the most important contributing factors also in the future. International transactions and related transport operations will create a development potential for Latvian international transport (exports, imports, transit) and the "West-East" and "North-South" transport corridors. Latvian integration into the European and global economic systems and the flows of people, cargoes, and capital and information to/from and through Latvia, as well as co-operation with the neighbouring countries in the field of transport and integration into the European transport system will to a great extent intensify the development of transport. Today an important role is attached to the integration of transport systems. The necessity to develop a multi-modal transport sector is based directly on the general transport policy of the government, that is, to make Latvia a transit country with good infrastructure. Concerning transit cargoes and the mode of transport, the currently effective legislative acts outline only the general requirements. In 1995 the Cabinet accepted a National Transport Development Programme for the 1996-2010 period. This is a long-term programme determining goals of transport development.

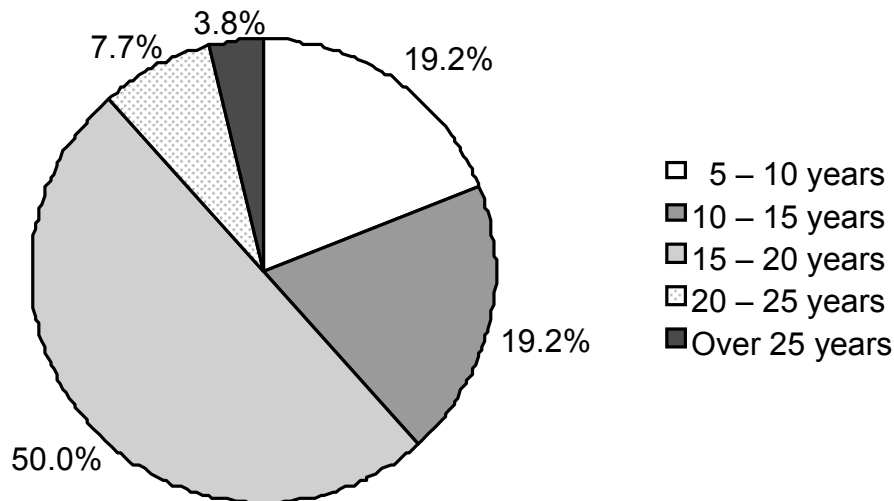
AIR TRANSPORT

Transport Infrastructure and equipment

Latvian airline companies perform regular and charter flights. 13 Latvian airlines offered their services in 2000, of which 2 on regular routes (since the beginning of 2001 only one - "Air Baltic") and 11- charter flights. Transportation of passengers is the main type of services of airlines. At the moment there is no demand for domestic air transport therefore all flights are international.

The national commercial airfleet includes 26 aircraft with an average age of 15 years each (Figure LV5). Twelve of them are small and have less than 50 seats (by type: 1 is An-24, 3 are F27MK050, 2 are L-410, 1 Jak-40, 2 HS-125, 3 An-28), while 6 aircraft have a capacity of 51-150 seats (by type: 1 is IL-18, 3 are TU-134, 2 AVRO RJ70), 1 has 164 seats (TU-154B). There are 7 cargo aircraft in this fleet (3 IL-76, 4 An 26). Out of the total number of 26 aircraft, 21 have a take-off weight over 9 000 kg.

Figure LV5: National commercial airfleet by age at the end of 2000



The biggest national air company performing regular flights - "Air Baltic" - was established in 1995 as a joint stock company by 51.02% of state share of capital and 38.16% share of SAS. A cost-efficiency programme was introduced in 1999, and 2000 turned out to be the year of consolidation for the airline. "Air Baltic" enjoyed the turnover of LVL 25 million (EUR 45 million.) in 2000. The number of passengers in 2000 increased by 12% as compared to 1999 and reached 218 thousand. "Air Baltic" operated 7 999 flights in 2000. The number of employees has increased significantly since 1995: from 64 to 268 employees in 2000. The number of passengers flying with "Air Baltic" increased in 2000 by 18% as compared to the previous year and it was 218.3 thousand or 80.6% of the total number of passengers transported by air. At present "Air Baltic" covers a network of eight destinations with a fleet of six aircraft.

Traffic and transport measurement

Freight Transport

Cargo mail turnovers are small and are attended to only in Riga Airport. In 2000 the cargo traffic at Riga Airport amounted to 3.6 thousand tonnes – by 5.5% more than in 1999. The mail turnover was 1.0 thousand tonnes and the increase as compared to the previous year was 6.1% (Table LV6).

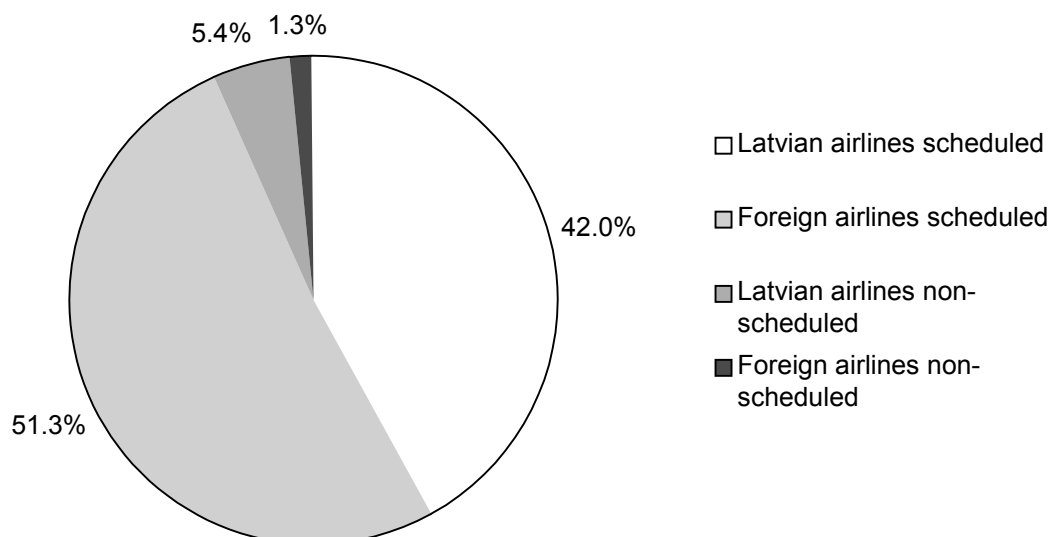
Table LV6: Freight traffic at the Riga airport

	(tons)					
	1995	1996	1997	1998	1999	2000
Total	3918	3912	4281	4907	4408	4658
Cargoes loaded	425	424	463	757	687	836
Mail loaded	190	188	193	262	318	305
Cargoes unloaded	2931	2885	3195	3333	2741	2782
Mail unloaded	372	415	430	555	662	735

Passengers Transport

Transportation of passengers is the main type of services of airlines. All regular flights are performed from Riga International Airport. The main part of passenger turnover in this airport (93.3% in 2000) is represented by scheduled passengers carried by foreign and Latvian airlines (Figure LV7).

Figure LV7: Passenger turnover at the Riga airport in 2000



The number of passengers in Riga Airport steadily increases for several years. In 2000 the passenger turnover in Riga Airport was 574.9 thousand persons, which is by 2.1% greater than in the preceding year, only the number of direct transit passengers declined. An increasingly bigger share of passengers flies with aeroplanes of the Latvian airlines. Out of the total number of arrivals and departures, 47.4% passengers flew by planes of Latvian companies (Figure LV8). The peak season for flights for all airlines was in May-September in 2000 as well as in the previous years (Table LV9). About 10 000 aircraft land and take off from this airport each year (Table LV10). The most popular directions where passengers arrive from

and depart to are Denmark, Sweden, Finland, Germany and the UK (Table LV11). For non-scheduled flights the most popular destinations are countries such as Turkey, Greece, Spain, Bulgaria, Italy and Tunisia (Table LV12). The passenger turnover at Riga Airport by groups of countries shows that most passenger relations are with EU countries (72%), other European countries (14.6%) and CIS countries (9.7%) (Figure LV13).

Fig. LV8: Passenger turnover at the Riga airport by months in 2000 (thsd)

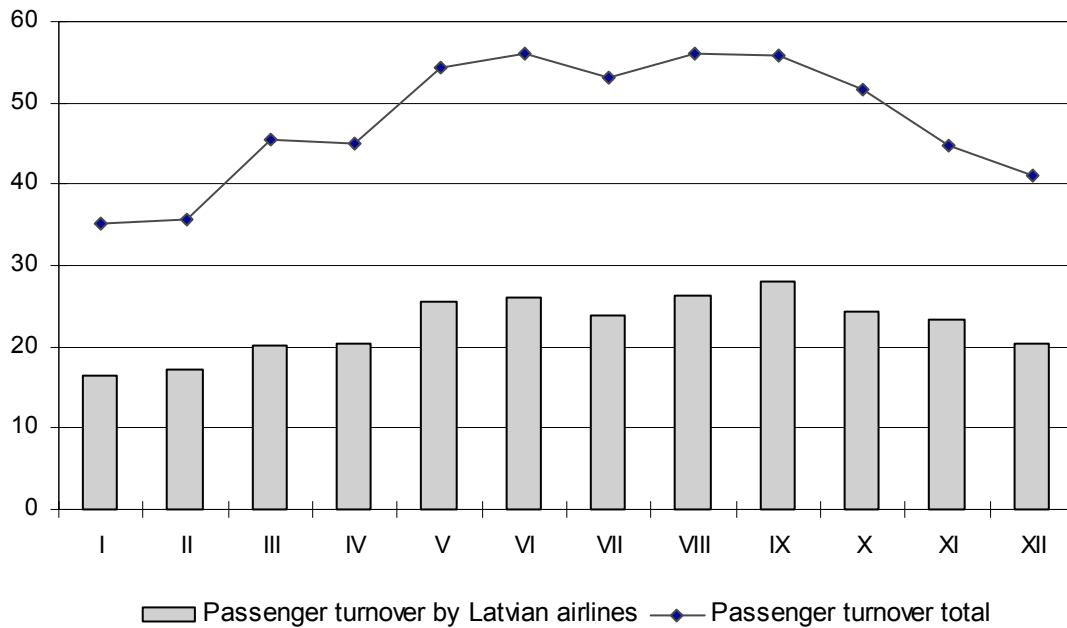


Table LV9: Passenger departures at the Riga airport by months in 2000

Month	Passenger arrivals			Of which by aircraft of Latvian airlines		
	total	scheduled	non-scheduled	total	scheduled	non-scheduled
I	17 708	17 235	473	7 745	7 304	441
II	18 140	17 566	574	8 547	8 042	505
III	23 236	22 379	857	10 169	9 734	435
I-III	59 084	57 180	1 904	26 461	25 080	1 381
IV	21 740	21 006	734	9 814	9 356	458
V	27 032	25 470	1 562	12 789	11 665	1 124
VI	28 819	26 121	2 698	13 393	11 095	2 298
IV-VI	77 591	72 597	4 994	35 996	32 116	3 880
VII	26 257	23 800	2 457	11 540	9 196	2 344
VIII	29 009	25 754	3 255	13 846	10 954	2 892
IX	29 058	25 855	3 203	14 512	11 730	2 782
VII-IX	84 324	75 409	8 915	39 898	31 880	8 018
X	25 545	23 494	2 051	12 002	10 416	1 586
XI	22 604	22 254	350	11 997	11 826	171
XII	20 380	19 522	858	9 945	9 368	577
X-XII	68 529	65 270	3 259	33 944	31 610	2 334
Year 2000	289 528	270 456	19 072	136 299	120 686	15 613

Table LV10: Aircraft movements at the Riga airport

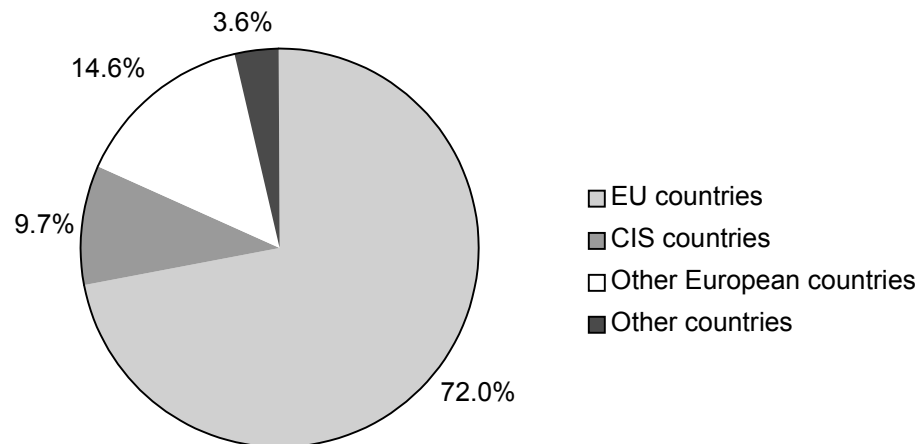
	1995	1996	1997	1998	1999	2000
Total aircraft movements	...	16 301	16 964	19 483	19 387	18 070
Number of aircraft arrivals	...	8 148	8 478	9 739	9 691	9 038
Number of aircraft departures	...	8 153	8 486	9 744	9 696	9 032

Table LV11: Passenger arrivals and departures at the Riga airport

	1995	1996	1997	1998	1999	2000
Passengers - total	490 607	497 124	531 199	554 628	562 383	574 356
of which arrived from (departed to):						
Denmark	77 478	80 928	91 471	99 112	120 056	138 357
Sweden	53 350	57 180	58 338	73 565	68 503	76 751
Finland	34 561	47 931	51 898	58 703	60 342	65 861
Germany	74 298	65 974	56 876	57 434	49 414	52 079
United Kingdom	53 264	52 083	63 911	68 318	63 378	50 295
Russian Federation	85 192	66 390	62 263	50 709	47 761	44 339
Czech Republic	13 434	13 860	12 615	16 359	25 886	34 741
Austria	6 607	10 579	11 530	12 247	14 053	20 407
Estonia	5 830	9 177	11 484	12 888	13 556	14 155
Ukraine	14 603	17 078	16 585	15 237	13 475	11 414
Turkey	10 813	3 854	3 026	6 191	9 293	10 774
Poland	13 802	13 013	13 791	14 284	11 528	10 354
Israel	9 790	8 780	8 905	7 880	9 446	8 643
Lithuania	283	3 878	5 619	8 854	9 989	7 004
Hungary	1 889	76	-	155	3 500	4 198
Greece	-	-	5 080	3 609	3 384	4 114
Spain	1 333	7 335	5 306	5 289	3 934	2 849
Bulgaria	3 927	4 058	3 441	2 475	1 344	2 179
Italy	3 068	3 232	4 803	2 638	2 331	1 723
Tunisia	-	-	-	1 445	1 147	1 002
Egypt	597	227	61	-	1 135	862
France	2 423	8 163	13 846	8 778	752	691
Norway	1 578	676	77	567	530	379
Netherlands	3 921	558	286	740	305	368
Cyprus	4 138	-	-	-	101	229
Switzerland	48	6 606	15 018	13 295	13 849	72
Belarus	421	1 995	1 496	2 830	1 896	63
Portugal	582	570	241	52	84	44
other countries	13 377	12 923	13 232	10 974	11 411	10 409

Table LV12: Passenger arrivals and departures at the Riga airport by non-scheduled flights

	1998	1999	2000
Passengers - total	40 167	41 533	38 710
of which arrived from (departed to):			
Turkey	6 191	9 393	10 774
Greece	3 609	3 384	4 114
Spain	5 289	3 934	2 849
Bulgary	2 475	1 344	2 179
Italy	2 638	2 331	1 723
Tunisia	1 445	1 147	1 002
other countries	18 520	20 000	16 069

Figure LV13: Passenger turnover at the Riga airport by countries in 2000


The international airport in "Liepaja" attended 0.2% of total passengers and 1.9% of aircraft movements in Latvia (Tables LV14 and LV15). All of them were non-scheduled flights.

Table LV14: Passenger traffic at the Liepaja airport

	1995	1996	1997	1998	1999	2000
Total passengers	439	529	1 052	983	1 486	1 417
Passenger arrivals	247	285	457	552	916	635
Passenger departures	192	186	552	375	567	726
Direct transit passengers	-	58	43	56	3	56

Table LV15: Aircraft movements at the Liepaja airport

	1995	1996	1997	1998	1999	2000
Total aircraft movements	...	110	306	684	322	356
Number of aircraft arrivals	...	55	153	342	161	178
Number of aircraft departures	...	55	153	342	161	178

MARITIME TRANSPORT

Transport infrastructure and equipment

There are 10 ports in Latvia: three big ports in Riga, Ventspils, Liepaja and seven smaller ones. Ports are an important part of transit. The geographical situation, ice-free ports and developed infrastructure create good pre-conditions for port activities. The bigger ports mainly handle the reloading of transit cargo. The main direction of flows of transit cargo is from CIS to the West. The Riga and Ventspils ports operate in the free port regime, and the Liepaja port is in the Liepaja special economic zone.

The Port Authorities established as a local governmental institution that is port's landowner and responsible for the reception of vessels, safe navigation and port infrastructure are in charge of all three big ports. At the same time numerous

enterprises handle cargo and the related equipment. Trade, manufacturing and service enterprises do their activities in the territory of ports. The minor part of them is represented by transport branch enterprises. There are 35 stevedore companies out of 153 enterprises and their units operate on the territory of Riga port, in Ventspils port 9 of 130 establishments are stevedores, and in Liepaja port 11 of 28 are stevedores.

The Port of Ventspils is the 15th largest port in Europe and the largest port on the Baltic Sea in terms of its cargo throughput (its capacity is 75 million tonnes per year). It is the biggest ice-free port around the Baltic Sea with a well developed infrastructure, including deep-water (17.5m) berth for "Aframax" type of ships with up to 120 000 DWT for oil and oil products. The free port of Ventspils has transport connections with Belarus and Russia not only by rail and road, but also, and that is very essential, by trunk oil and oil products pipelines. Reloading of oil and oil products constitute 75% of the port turnover.

The Port of Riga ranks in the eighth place on the Baltic Sea (with a capacity of 20 million tonnes annually). The main type of cargo it handles is timber. The largest container terminal in the Baltic countries is situated in Riga port which is also one of the nearest ports to the Moscow Container Terminal and there are regular container block trains between them.

The port of Liepaja (with a capacity of 7 million tonnes annually) used to be a naval port which is now being developed into a multifunctional commercial port. General cargo dominates here, especially RO-RO services, metals and wood materials. Timber makes up near to one third of the whole cargo turnover in Liepaja port.

Seven smaller ports are of local importance. In 2000 their share the in total cargo turnover was 1.5% or 735 thousand tonnes.

There are no "statistical" passenger ports in Latvia. The passenger turnover at the Passenger Port of Riga was 60.6 thousand passengers in 2000. More than a half (34.4 thousand) of them was cruise passengers (Table LV16). During 2001 new ferry services were started from Liepaja and Ventspils, but the number of passengers is not thought to be high and it certainly would not reach the level where any port becomes a statistical passenger port according to the thresholds adopted in the EC Maritime Statistics Directive.

Table LV16: Passenger turnover at the passenger port of Riga

Year	Passengers departures	Passengers arrivals	Cruise passengers	Total
1996	16 299	16 887	344	33 530
1997	29 840	31 026	-	60 866
1998	47 453	48 082	5 298	100 833
1999	33 966	33 245	7 936	75 147
2000	13 178	13 056	34 352	60 586

At the end of 2000 Latvia had 271 sea-going vessels of 100 or over gross registered tonnage, of which 91 were fishing vessels, 19 tankers, 14 were dry cargo (Table LV17). The main part of Latvian commercial vessels registered in our Ships Register operated in offshore under flags of convenience.

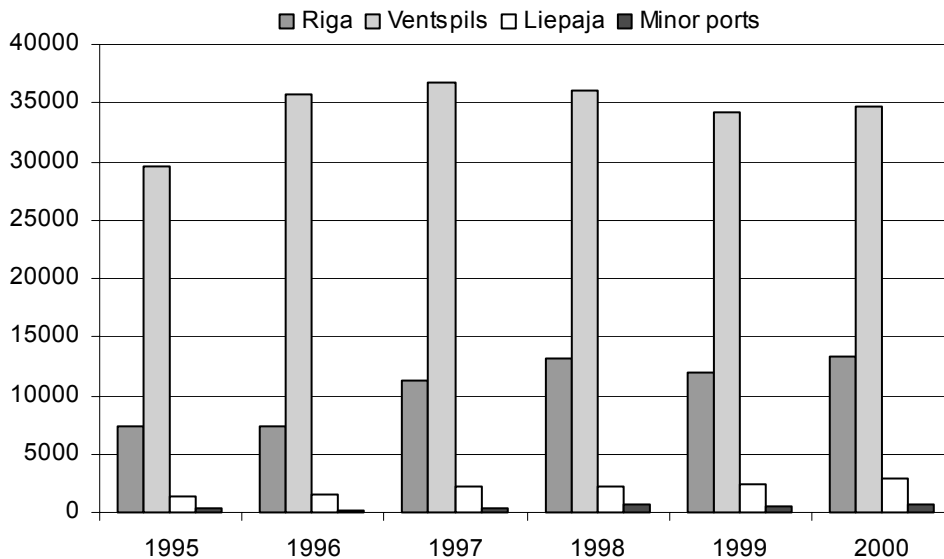
Table LV17: Vessels of 100 or over gross registered tonnage registered in the Latvian Shipping Register at the end of 2000

	Number of vessels	DWT, thsd tons
Total	271	670.9
of which:		
dry cargo	14	26.0
of which:		
ro-ro	1	5.5
refrigerator	24	132.2
tanker	19	404.7
fishing	91	17.0
passenger	6	0.1
tug	28	1.9
auxiliary	88	84.0
ice-breaker	1	5.0

Traffic and transport measurement

There were 6 801 merchant ships calling at three bigger Latvian ports in 2000. Most of the transit shipment took place at Riga port (59%). The biggest part of freight turnover comes from Ventspils port (Figure LV18).

Figure LV18: Freight turnover at ports (thsd tonnes)



In 2000 the cargo turnover reached 51.8 million tonnes presenting an increase by 5.8% over the preceding year (Table LV19). The main directions of port activities have not changed very much during last years. Transit cargo clearly dominates in the total reloaded cargo. The ports continue to function as senders of cargo; the share of sent cargo equals to 95%. This indicator is different in different ports. The share of loaded cargo in Ventspils port was 98.8%; a bigger share of unloaded cargo was in the Riga and Liepaja ports (the share of loaded cargo in these ports was 87.3% and 86.4%, respectively).

Table LV19: Cargo loaded and unloaded on / from domestic and foreign vessels at Latvian ports

(1000 tons)

Year	Total	of which in ports			
		Riga	Ventspils	Liepaja	minor ports
Goods loaded					
1995	36 321.0	5 433.0	29 215.3	1 287.8	384.9
1996	41 807.8	5 266.8	35 102.2	1 252.4	186.4
1997	46 706.6	8 332.7	36 216.4	1 803.4	354.1
1998	48 478.5	10 456.9	35 629.0	1 803.8	588.8
1999	45 095.5	9 208.5	33 394.0	1 969.8	523.2
2000	49 242.0	11 616.6	34 330.3	2 559.9	735.2
Goods unloaded					
1995	2 543.4	1 964.0	407.8	151.9	19.7
1996	3 145.7	2 109.7	642.4	353.6	40.0
1997	3 961.9	2 890.8	564.1	485.1	21.9
1998	3 686.3	2 751.2	417.4	489.9	27.8
1999	3 841.8	2 731.9	742.5	352.4	15.0
2000	2 527.2	1 688.0	424.9	404.5	9.8

Orientation of ports towards transit cargo is also proved by the distribution of cargo according to types of cargo in 2000. More than a half of the total cargo was liquid bulk that mainly was oil and oil products from Russia (Figure LV21). The second important group was other general cargo (19%) where the main part was forestry products and iron and steel products (Table LV20). The third biggest type was dry bulk cargo (18.1%) where fertilisers dominated.

By type of commodity groups in 2000 crude oil and oil products made 29.5 million tonnes, timber 6.1 million tonnes, fertilisers 6.6 million tonnes of loaded goods (Table LV22). The leading place in unloaded goods belonged to cargo in containers, they made 0.5 million tonnes (Table LV23).

The main part of containerised cargo was loaded and unloaded in the Riga port (Table LV24). The cargo turnover in Riga port in 2000 reached 13.3 million tonnes or 25.7% of turnover in the Latvian ports (Figure L25). Traditionally ports handle the incoming cargo (the two thirds of the total cargo unloaded in the Latvian ports). The most significant groups of reloaded cargo were dry bulk, liquid bulk and containers (Table LV26).

Table LV20: Cargo loaded and unloaded on / from domestic and foreign vessels at Latvian ports by type of cargo in 2000

		(thsd tons)		
		Loaded	Unloaded	Total
Liquid bulk	total	30 446.3	313.3	30 759.6
	liquefied gas	808.3	1.8	810.1
	crude oil	13 630.9	-	13 630.9
	oil products	15 821.8	145.1	15 966.9
	other liquid bulk goods	185.3	166.4	351.7
Dry bulk	total	8 507.0	869.6	9 376.6
	ores	23.3	-	23.3
	coal	399.9	-	399.9
	agricultural products	51.7	577.4	629.1
	other dry bulk goods	8 032.1	292.2	8 324.3
Other general cargo	total	9 649.6	547.0	10 196.6
	forestry products	6 097.8	2.3	6 100.1
	iron and steel products	3 231.9	53.1	3 285.0
	other general goods	319.9	491.6	811.5
Non-unitised cargo	total	48 602.9	1 729.9	50 332.8
Containers	total	365.3	498.9	864.2
Roll-on/roll-off (self-propelled)	total	156.1	166.9	323.0
Roll-on/roll-off (non-self-propelled)	total	117.7	131.5	249.2
Total		49 242.0	2 527.2	51 769.2

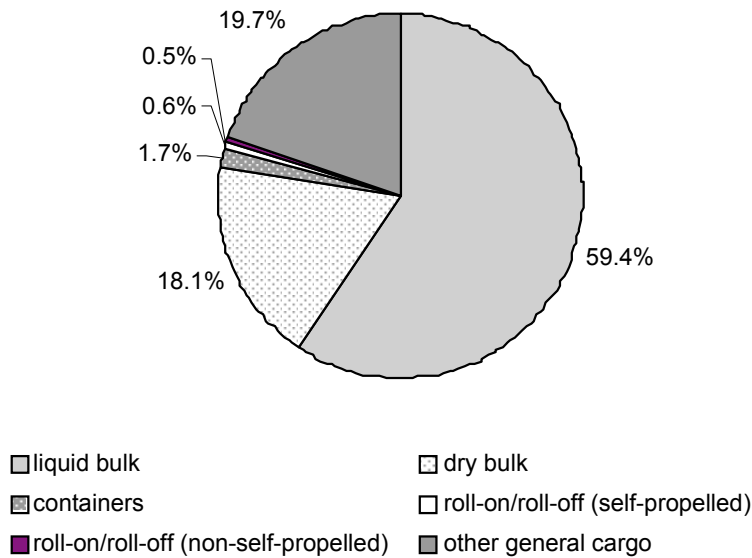
Figure LV21: Freight turnover at ports by type of cargo in 2000


Table LV22: Goods loaded on domestic and foreign vessels at Latvian ports by commodity in 2000

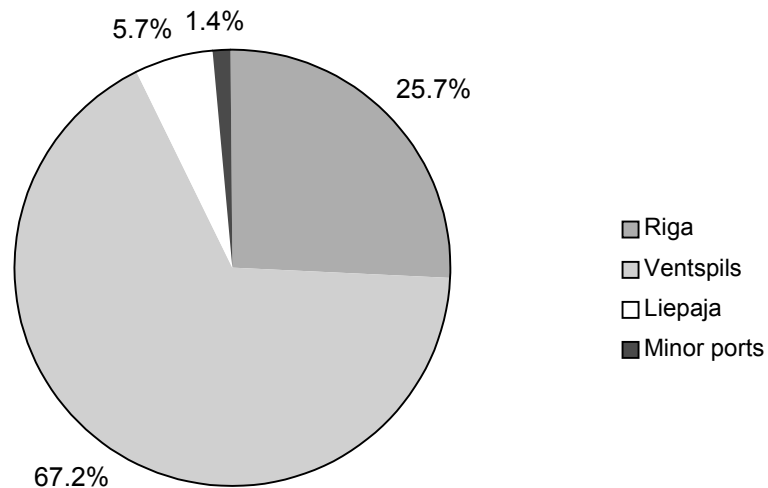
	(1000 tons)				
	Total	Of which in port			
		Riga	Ventspils	Liepaja	minor ports
Goods loaded, total	49 242.0	11 616.6	34 330.3	2 559.9	735.2
of which:					
Dry bulk	8 507.0	2 553.3	5 556.4	365.1	32.2
of which: fertilizers	6 553.8	1 558.9	4 980.9	14.0	-
building materials	338.6	309.3	-	29.3	-
Liquid bulk	30 446.3	2 721.7	27 253.9	470.7	-
of which: crude oil	13 630.9	-	13 625.7	5.2	-
oil products	15 821.8	2 709.9	12 724.3	387.6	-
liquid gas	808.3	3.9	804.4	-	-
General cargo	10 288.7	6 341.6	1 520.0	1 724.1	703.0
of which: cargo in containers	365.3	334.1	2.0	29.2	-
timber	6 097.8	4 150.6	511.3	732.9	703.0
metals and scrap	3 310.0	1 744.4	981.6	584.0	-

Table LV23: Goods unloaded from domestic and foreign vessels at Latvian ports by commodity in 2000

	(1000 tons)				
	Total	Of which in port			
		Riga	Ventspils	Liepaja	minor ports
Goods unloaded, total	2 527.2	1 688.0	424.9	404.5	9.8
of which:					
Dry bulk	869.6	469.9	356.4	43.3	-
of which: grain and grain produkts	124.8	122.2	-	2.6	-
sugar	452.6	175.8	276.8	-	-
building materials	279.6	169.8	78.3	31.5	-
Liquid bulk	313.3	278.9	21.1	13.3	-
of which: oil products	145.1	121.5	21.1	2.5	-
General cargo	1 344.3	939.2	47.4	347.9	9.8
of which: cargo in containers	498.9	477.9	-	21.0	-
roll on / roll off	298.3	71.7	4.5	222.1	-
food stuffs	255.7	205.6	0.2	49.9	-

Table LV24: Containerised cargo turnover at Latvian ports in 2000

	Loaded		Unloaded		Total	
	thsd tons	number	thsd tons	number	thsd tons	number
Containerized cargo, total	365	16 257	499	25 007	864	41 264
20'containers	77	4 163	189	10 380	265	14 543
40'containers	289	12 094	310	14 627	599	26 721
>20'&<40'containers	-	-	-	-	-	-
>40'containers	-	-	-	-	-	-
Of which containerized cargo at Riga port, total	334	15 322	478	24 133	812	39 455
20'containers	74	4 029	185	10 226	259	14 255
40'containers	260	11 293	293	13 907	554	25 200
>20'&<40'containers	-	-	-	-	-	-
>40'containers	-	-	-	-	-	-

Figure LV25: Freight turnover at Latvian ports in 2000

Table LV26: Cargo loaded and unloaded on / from domestic and foreign vessels at Riga port by type of cargo in 2000

	(1000 tons)		
	Loaded	Unloaded	Total
Total	11 616.6	1 688.0	13 304.6
of which:			
liquid bulk	2 721.7	278.9	3 000.6
dry bulk	2 553.3	469.9	3 023.2
containers	334.1	477.9	812.0
roll-on/roll-off (self-propelled)	17.8	36.9	54.7
roll-on/roll-off (non-self-propelled)	22.5	34.8	57.3
other general cargo	5 967.2	389.6	6 356.8

The Ventspils port is the leader in terms of the reloaded cargo. The port handles reloading of considerably more cargo than other ports of Latvia. Liquid bulk products made 78.5% of the total cargo turnover of this port (Table LV27). It had an essential importance in the total cargo turnover in Latvia. In 2000 27.3 million tonnes of these products were reloaded. Beside oil and oil products which were the main part of liquid bulk (97%). The second biggest group of commodity was fertilisers loaded at the Ventspils port (in 2000 - 5.0 million tonnes) as a dry bulk cargo. In 2000 the Liepaja port reloaded 3.0 million tonnes (5.7% of totally reloaded in Latvia ports) of cargo (Table LV28). The main commodity group of turnover was wood materials - 733 thousand tonnes.

Table LV27: Cargo loaded and unloaded on / from domestic and foreign vessels at Ventspils port by type of cargo in 2000

	(thsd tons)		
	Loaded	Unloaded	Total
Total	34 330.3	424.9	34 755.2
of which:			
liquid bulk	27 253.9	21.1	27 275.0
dry bulk	5 556.4	356.4	5 912.8
containers	2.0	-	2.0
roll-on/roll-off (self-propelled)	7.8	4.5	12.3
roll-on/roll-off (non-self-propelled)	-	-	-
other general cargo	1 510.2	42.9	1 553.1

Table 28: Cargo loaded and unloaded on / from domestic and foreign vessels at Liepaja port by type of cargo in 2000

	(thsd tons)		
	Loaded	Unloaded	Total
Total	2 559.9	404.5	2 964.4
of which:			
liquid bulk	470.7	13.3	484.0
dry bulk	365.1	43.3	408.4
containers	29.2	21.0	50.2
roll-on/roll-off (self-propelled)	130.5	125.5	256.0
roll-on/roll-off (non-self-propelled)	95.3	96.7	192.0
other general cargo	1 469.1	104.7	1 573.8

Since Latvia continues acting as an important link for the developing trade between the East and West, air and especially maritime transport are of great importance.

3.5 LITHUANIA

Lithuania is in the southernmost of the three Baltic republics and lies at the southeastern corner of the Baltic Sea. To the south are Poland and the Kaliningrad oblast of Russia, to the east is Belarus and to the north, Latvia. Lithuania has an area of 65 thousand square kilometres with 3.7 million inhabitants. It also has 1 747 kms of land borders and 99 kms of sea coast (Table LT1).

Table LT1: Key figures for Lithuania 2000

Total Area sq km	65 300
Population mn	3.5
GDP at current prices bn. Lt	45 254
Annual Growth GDP const prices	3.9
Number of Commercial Ports	1
Number of Commercial	5

Note: population figure estimated on the basis of a provisional data of the Population Census 2001.

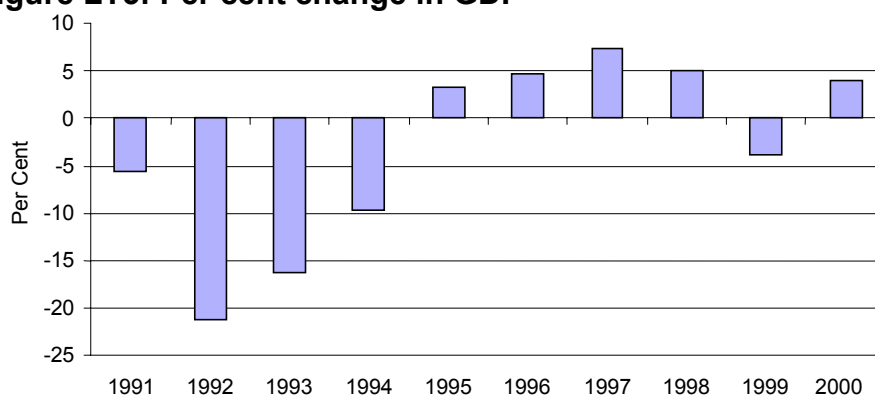
As Table LT2 and Figure LT3 show, Lithuania's GDP declined sharply in the years immediately following independence but has recovered strongly since 1994. In the five years from 1995, the annual growth of GDP at constant prices has averaged a little under 3.5% a year, despite a setback in 1999. Investment figures are available for the aviation and maritime sector. While they cannot be quoted here because of confidentiality, they show a very high level of investment in Lithuania's air and sea transport facilities.

Table LT2: GDP at constant 1995 prices

	GDP bn Lt	%
1990	41.6	.
1991	39.2	-5.7
1992	30.9	-21.3
1993	25.9	-16.2
1994	23.3	-9.8
1995	24.1	3.3
1996	25.2	4.7
1997	27.1	7.3
1998	28.5	5.1
1999	27.4	-3.9
2000 ^P	28.4	3.9

P = provisional

Figure LT3: Per cent change in GDP

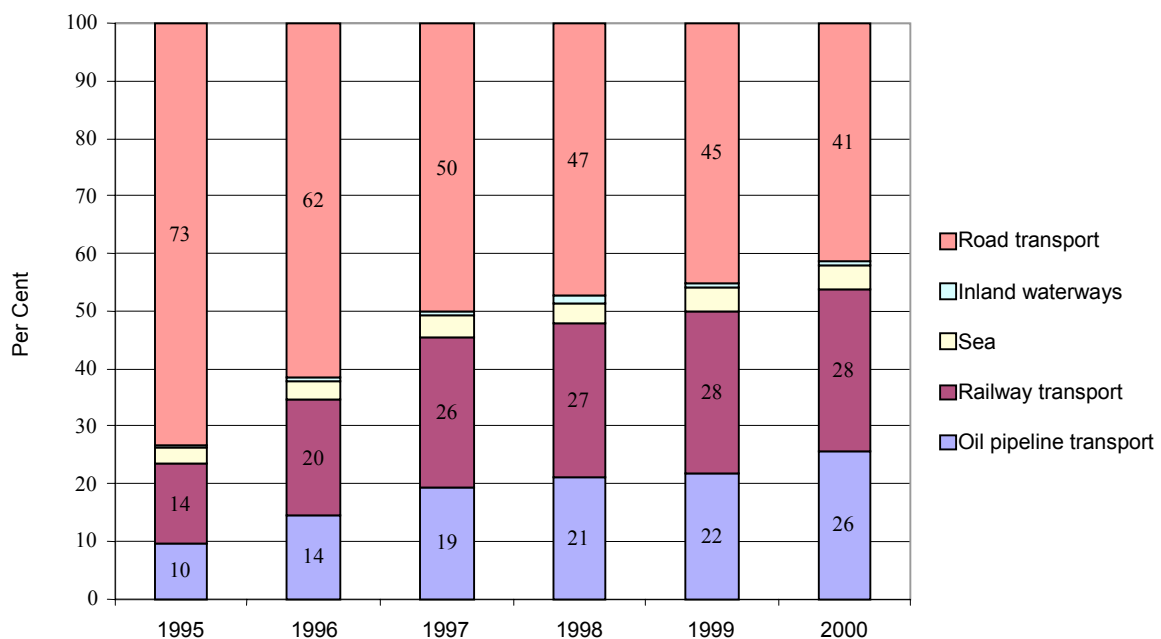


In total, Table LT4 shows that Lithuanian transport enterprises lifted 109 million tonnes of freight in 2000, a substantial decline compared with the figure of 189 million tonnes in 1995. These changes reflected a fall in road transport, partly offset by increases in pipeline and rail traffic. These two modes recorded a marked rise in their share of the freight market (Figure LT5). In terms of tonne-kilometres, no figures are available for sea transport but Table LT4 shows substantial increases in freight moved by rail, road and pipelines between 1995 and 2000 as the economy adjusted to changed circumstances. Given the fall in tonnes lifted, the rise in tonne-kms by road was particularly impressive and reflects the longer distances travelled as the orientation of the sector shifted more to the West.

Table LT4: Goods transport by Lithuanian enterprises

	1995	1996	1997	1998	1999	2000
Goods Lifted (million tonnes)						
Total	188.8	143.8	117.1	115.1	101.3	109.1
Railway transport	26.0	29.1	30.5	30.9	28.3	30.7
Road transport	138.3	88.6	58.8	54.6	45.7	45.0
Oil pipeline transport	18.1	20.7	22.6	24.1	22.2	28.0
Water transport	6.3	5.3	5.2	5.5	5.1	5.4
Sea	5.8	4.7	4.5	4.2	4.3	4.5
Inland waterways	0.5	0.6	0.7	1.3	0.8	0.9
Air transport, 1000 t	2.6	1.9	2.8	2.8	2.5	3.3
Goods Moved (million tonne-kilometres)						
Railway transport	7 220	8 103	8 622	8 265	7 849	8 918
Road transport	5 160	4 191	5 146	5 611	7 740	7 769
Oil pipeline transport	2 006	2 308	2 656	2 964	2 627	3 457
Inland waterways transport	18	7	9	14	3	1
Air transport	4	3	4	3	3	4

Figure LT5: Percentage share of goods lifted by mode

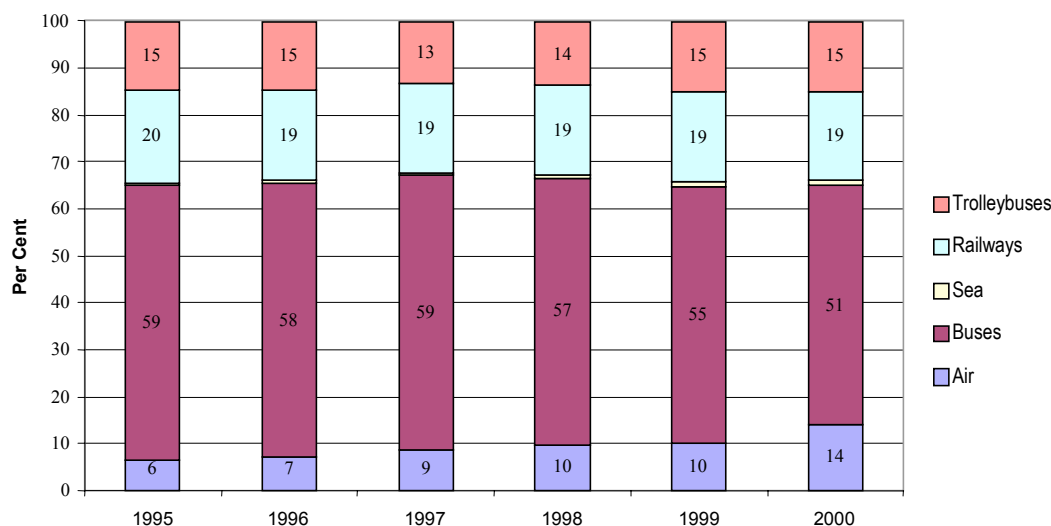


For passenger transport, as Table LT6 illustrates, Lithuanian enterprises carried 380 million passengers in 2000, again a substantial decline compared to the 695 million carried in 1995. Road transport, particularly buses, was a major contributor to this trend but rail also saw its figures fall. Some of this was no doubt a reflection of the growth in cars use, illustrated by the rise in car registrations from some 720 thousand in 1995 to over 1.1 million in 2000. Air and sea transport managed increases but from a very small base in the case of sea transport. Looking at passenger kilometres, Table LT6 records an overall fall from 5.7 000 million in 1995 to 3.3 000 million in 2000. The fall was again concentrated in road and rail, particularly buses. On this measure, air and to a lesser extent sea transport figure more prominently because of the longer average distances travelled by passengers in these two modes. As Figure LT7 shows, air transport's share of total passenger-kms has risen substantially since 1995, particularly in 2000, when it reached 14%, largely at the expense of buses.

Table LT6: Passenger transport by Lithuanian enterprises

	1995	1996	1997	1998	1999	2000
Passengers Carried (million)						
Total	694.7	609.4	551.4	516.2	471.9	383.2
Railway transport	15.2	14.2	12.6	12.2	11.5	8.9
Road transport	678.2	593.5	537.1	502.1	458.3	372.7
buses	405.7	361.6	346.8	316.2	273.5	213.3
trolleybuses	272.5	231.8	190.2	186.0	184.8	159.3
Water transport	1.1	1.5	1.5	1.6	1.8	1.4
sea, thous.	38.7	40.8	36.4	43.7	50.8	64.2
inland waterways	1.0	1.5	1.4	1.6	1.7	1.3
Air transport	0.2	0.2	0.3	0.3	0.3	0.3
Cars registered '000	718.5	785.1	882.1	980.9	1 089.3	1 172.4
Passenger Kilometres (million)						
Total	5 699.0	4 933.0	4 444.0	4 205.0	3 831.0	3 272.0
Railway transport	1 130.0	953.0	842.0	800.0	745.0	611.0
Road transport	4 169.0	3 601.0	3 191.0	2 964.0	2 665.0	2 154.0
buses	3 334.0	2 879.0	2 603.0	2 390.0	2 096.0	1 666.0
trolleybuses	835.0	722.0	588.0	574.0	569.0	489.0
Water transport	30.0	27.0	30.0	31.0	34.0	46.0
sea	28.0	25.0	26.0	28.0	32.0	44.0
inland waterways	2.0	2.0	4.0	3.0	2.0	2.0
Air transport	370.0	352.0	381.0	410.0	387.0	461.0

Figure LT7: Percentage shares of passenger Kms by mode



AIR TRANSPORT

Transport Infrastructure and Equipment

Infrastructure

Lithuania has 4 international airports, of which Vilnius is by far the most important. The others are Kaunas, Palanga and Siauliai, although the last of these is only used for diverted flights. There is also one domestic airport.

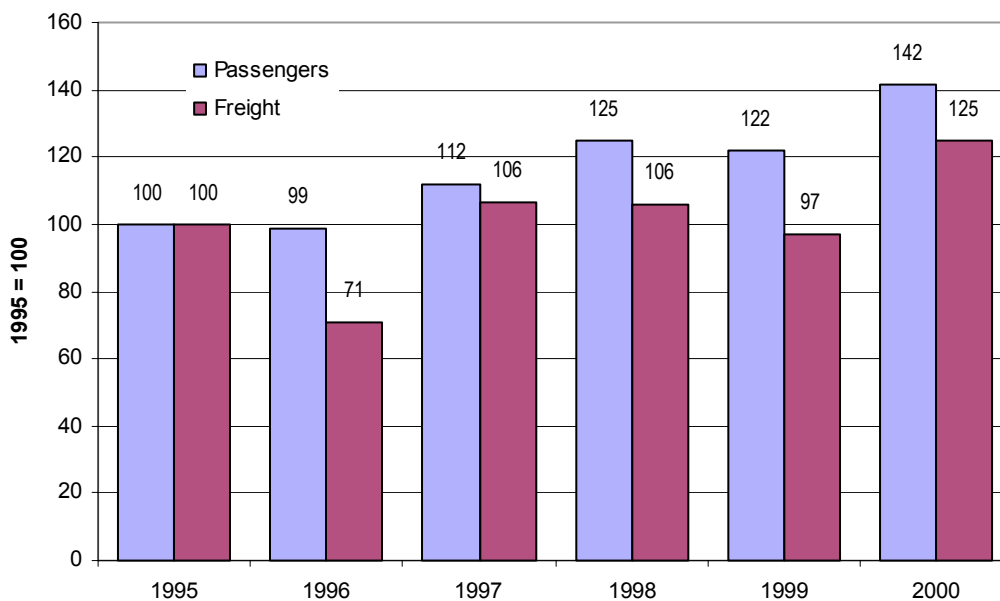
Transport and Transport Measurement (Passengers and Freight)

While the Lithuanian air fleet increased from 485 in 1995 to 624 in 2000, the number of transport aircraft registered has fallen over the same period from 28 to 19 (Table LT8). Figure LT9 shows the trends in freight tonnage and passenger numbers carried by Lithuanian airlines over the period 1995 to 2000. In both cases, the level in 2000 is substantially higher than in 1995 although the paths followed have been somewhat different. In 2000, freight tonnage was 25% higher than in 1995 level while passenger numbers recorded a 42% increase.

Table LT8: Lithuanian air fleet

	1995	2000
Total	485	624
Aeroplanes	205	293
transport aeroplanes	28	19
other	177	274
Helicopters	7	13
Gliders	206	212
Experimental aircraft	22	46
Ultralight aircraft	22	27
Balloons	23	33

Figure LT9: Index of passenger and freight traffic by Lithuanian carriers



Traffic through Lithuanian airports is shown in Table LT10. Passenger numbers have shown a steady increase since 1995 and reached 581 thousand in 2000, with the growth shared between arrivals and departures. Direct transfer passengers, recording of which only began in 1998, are a small component of the total. As Figure LT11 shows, scheduled flights were the dominant element of passenger transport over the period from 1995 to 2000, accounting for about 90% of the total. For freight traffic, non-scheduled movements dominated in 1995 and 1996 but a more balanced position emerged subsequently until 2000, when non-scheduled services again outpaced scheduled movements (Figure LT13). Freight traffic has recorded some erratic movements, falling from 18 thousand tonnes in 1995 to under 10 thousand tonnes in 1998 before recovering to 12.5 thousand tonnes in 2000. Much of variation was the result of changes in the amount of freight unloaded in Lithuanian airports (Figure LT12) and the amount carried on non-scheduled flights (Figure LT13).

Table LT10: Passenger and freight traffic at Lithuanian airports

	1995	1996	1997	1998	1999	2000
Total Passengers '000	421	436	482	544	560	598
of which:						
Disembarked	206	213	239	262	270	287
Embarked	216	223	242	266	273	294
Direct transit passengers				16	17	17
of which:						
scheduled flights	374	394	433	476	487	510
non-scheduled	47	43	49	52	56	70
Total Freight Transported tonnes	18 033	14 450	10 741	9 289	9 651	12 449
of which:						
Unloaded	16 122	12 497	9 016	7 884	7 814	10 241
Loaded	1 911	1 953	1 725	1 405	1 837	2 208
of which:						
scheduled flights	3 147	3 634	4 748	4 388	4 988	4 815
non-scheduled	14 886	10 816	5 993	4 901	4 663	7 634

Excluding transit passengers

Figure LT11: Trends in passengers on scheduled and non-scheduled flights

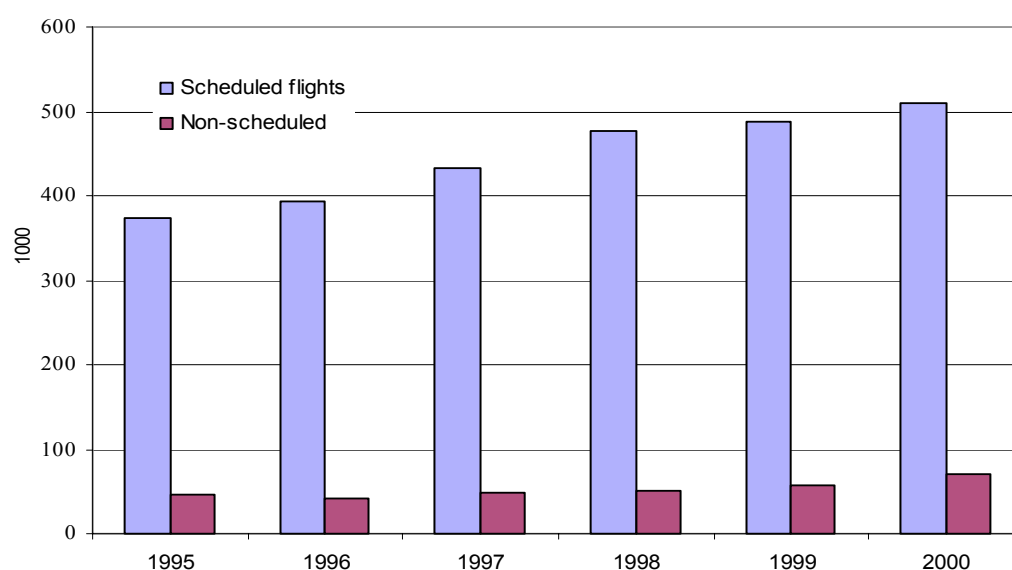


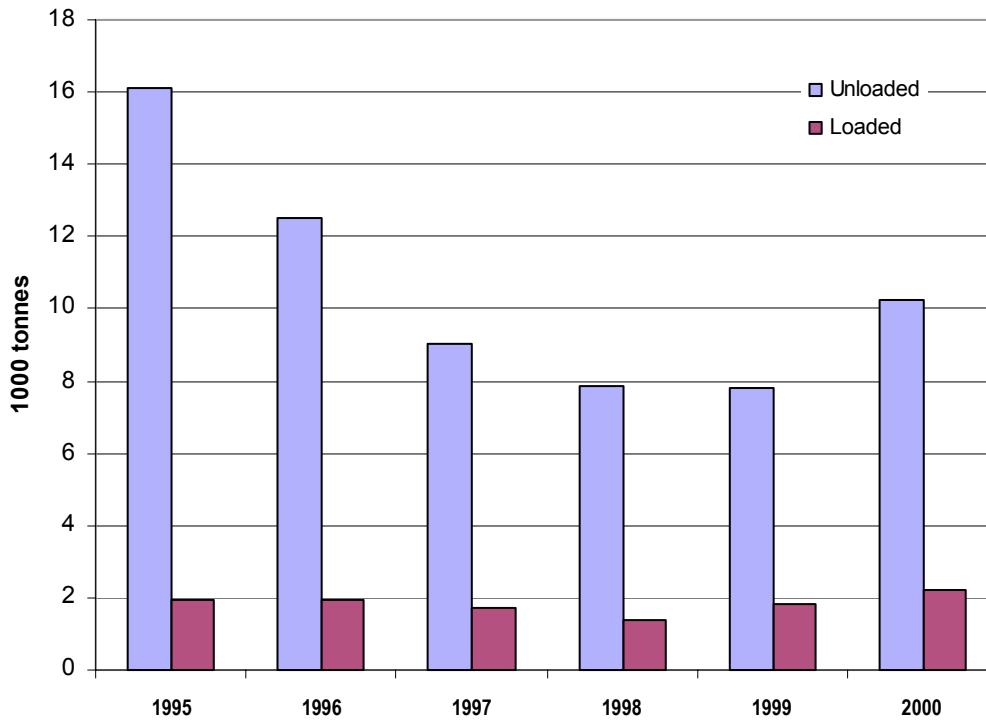
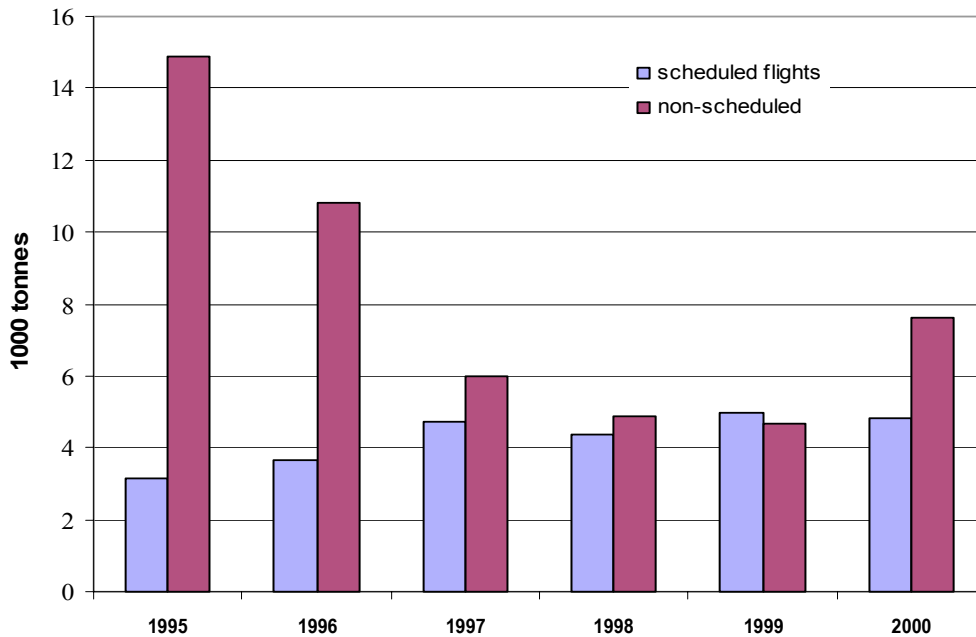
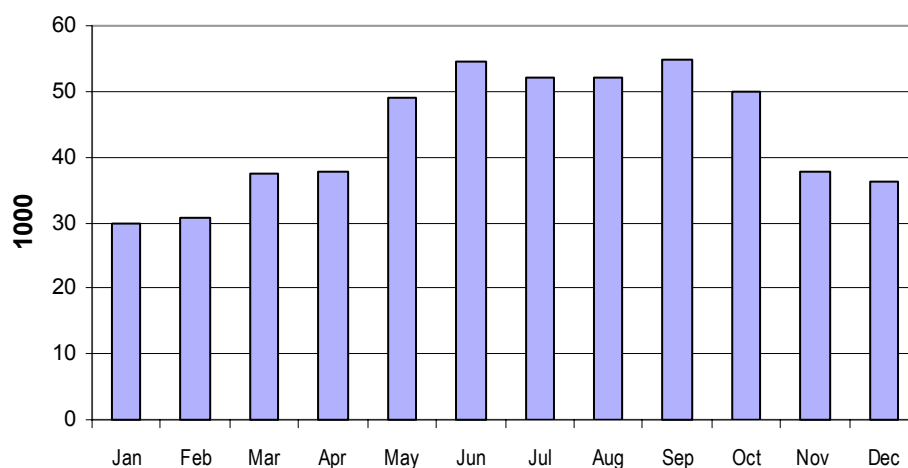
Figure LT12: Trends in freight movements: loaded / unloaded

Figure LT13: Trends in freight movements: scheduled / non-scheduled


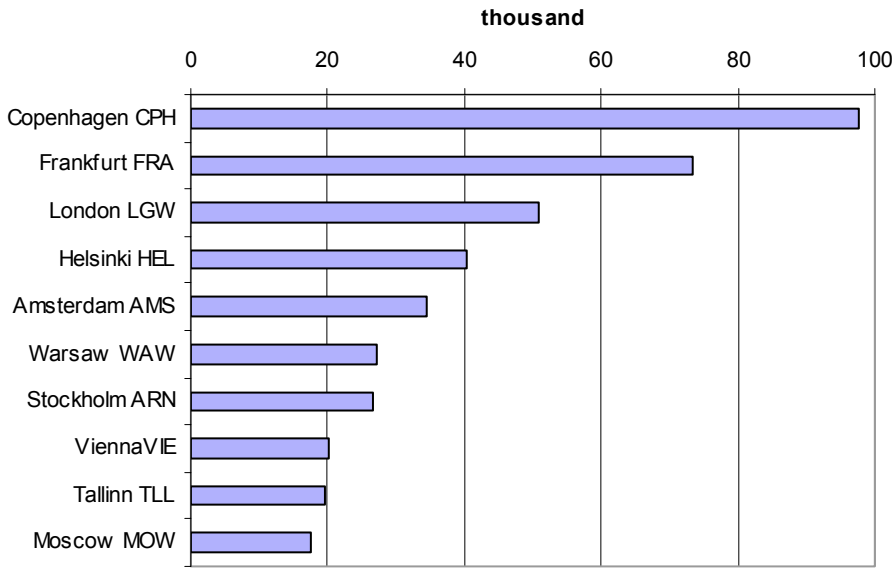
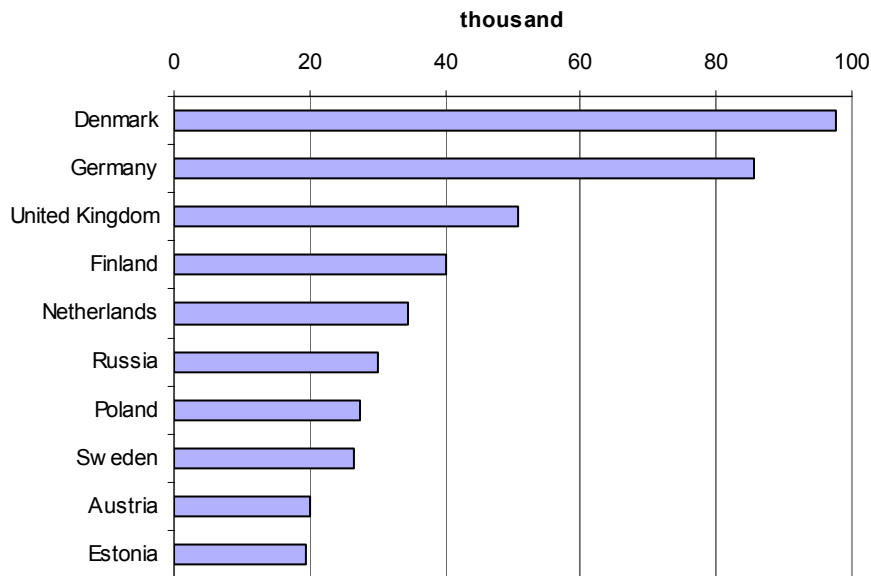
Table LT14 and Figure LT15 show the monthly pattern of passenger movements in 2000. September, the peak month, was 84% above the January minimum. This suggests that there is still considerable room for growth in the summer holiday market in and out of Lithuania. Table LT16 and Figures LT17 and LT18 show the top ten airports and the top ten countries served by scheduled services out of Vilnius International Airport. Denmark (Copenhagen), Germany (Frankfurt), UK (London Gatwick), Finland (Helsinki) and the Netherlands (Amsterdam) were the top five on both counts. Russia served by two airports at Moscow was the next country.

Table LT14: Monthly pattern of passenger at Vilnius airport 2000

	Numbers
January	29 883
February	30 652
March	37 412
April	37 682
May	49 182
June	54 549
July	52 071
August	51 955
September	54 867
October	50 022
November	37 779
December	36 228

Figure LT15: Monthly pattern of passenger movements at Vilnius airport 2000**Table LT16: Top Ten Passenger Routes and Countries for Vilnius Airport 2000**

Route	Number	Country	Number
Copenhagen CPH	97 690	Denmark	97 690
Frankfurt FRA	73 455	Germany	85 421
London LGW	50 824	UK	50 824
Helsinki HEL	40 231	Finland	40 231
Amsterdam AMS	34 379	Netherlands	34 379
Warsaw WAW	27 307	Russia	30 223
Stockholm ARN	26 485	Poland	27 307
ViennaVIE	20 030	Sweden	26 485
Tallinn TLL	19 581	Austria	20 030
Moscow MOW	17 482	Estonia	19 581

Figure LT17: Top ten airports to and from Vilnius 2000

Figure LT18: Top ten countries to and from Vilnius 2000


MARITIME TRANSPORT

Transport Infrastructure and Equipment

Table LT19 and Figures LT20 and LT21 show the development in vessel registrations between 1995 and 2000. In terms of numbers, fishing vessels dominated in both years despite recording a decline from 149 in 1995 to 96 in 2000. Only reefer ships and tugs increased in numbers with reefers doubling from 10 in 1995 to 20 in 2000. Looking at gross tonnes, other dry cargo ships were the major element of the fleet in both years. The fishing vessels category, which had been the second largest in 1995, fell away sharply and was overtaken by Ro-Ro ships and reefers, both of which increased between the two years. Table LT22 shows the distribution of the Lithuanian fleet by size of vessel. While numbers are largest in the 2 000 to 4 999 tonnes size band, the highest gross tonnage figure was recorded in the 5 000 to 9 999 size band. In terms of the age of the fleet, Table LT23 shows a sharp reduction in the number of vessels registered with an age of 25 years or more while there was general growth in all the lower age bands between 1995 and 2000.

Table LT19: Vessels registered by numbers and Gross Tonnes

	Numbers		Gross Tonnes 000 t	
	1995	2000	1995	2000
Total	308	246	569.3	449.3
Cargo carrying ships	95	90	371.6	384.3
tankers	8	3	10.8	3.9
dry cargo ships	87	87	360.8	380.4
reefer ships	10	20	56.7	84.4
Ro/Ro passenger ships	2	3	47.5	59.6
Ro/Ro cargo ships	2	3	28.8	35.7
other	73	61	227.8	200.7
Fishing vessels	149	96	179.8	48.6
Other vessels	64	60	17.9	16.5
tugs	18	22	2.5	3.9

Figure LT20: Numbers of Lithuanian registered vessels by type

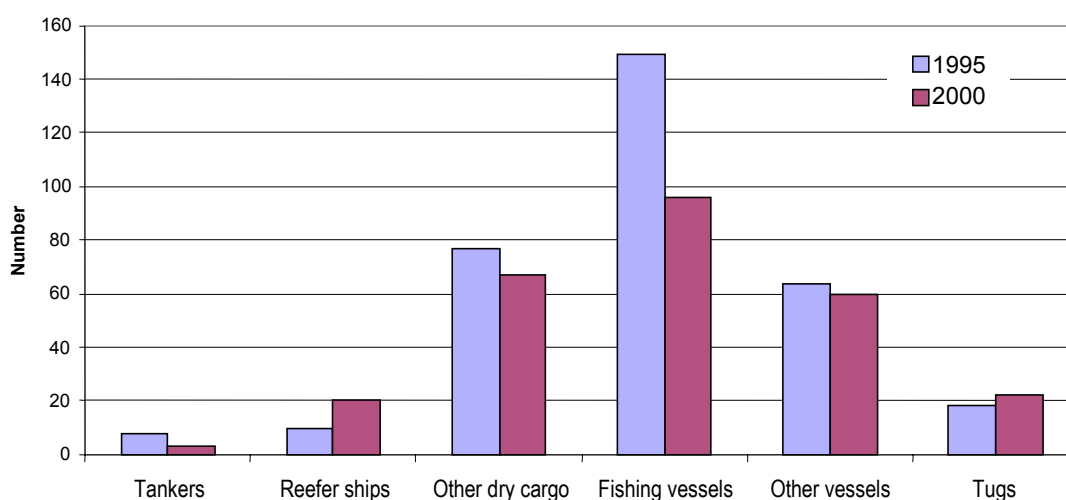
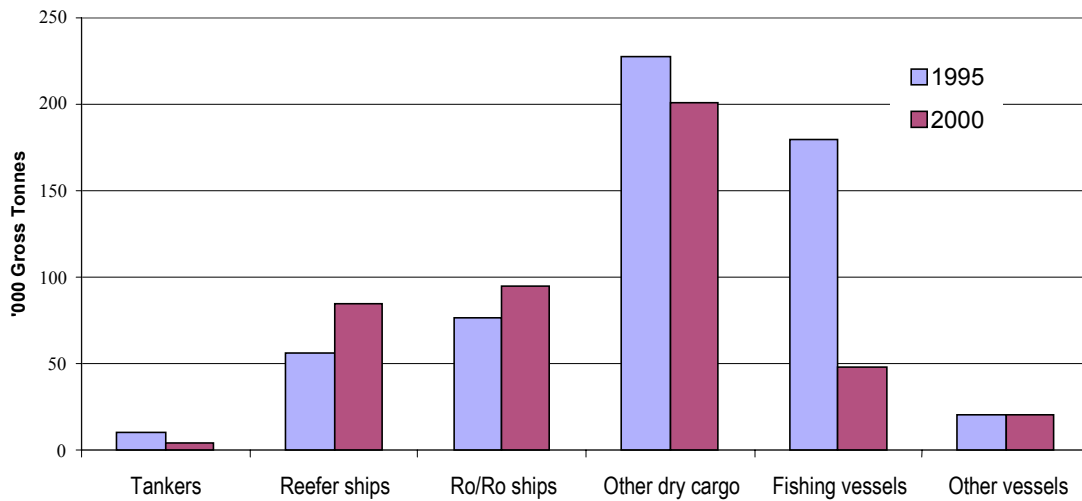


Figure LT21: Gross tonnage of Lithuanian registered vessels by category

Table LT22: Lithuanian registered vessels by size

	Numbers		Gross Tonnes (1000)	
	1995	2000	1995	2000
Total	95	90	371.6	384.3
under 99 tonnes	3	1	0.1	0.0
100 – 499	13	16	3.3	4.2
500 – 999	8	7	6.2	5.4
1000 – 1999	16	14	25.4	22.9
2000 – 4999	35	31	105.8	108.0
5000 – 9999	14	14	128.0	125.1
10 000 – 14 999	3	4	33.3	48.7
15 000 – 19 999	-	-	-	-
20 000+	3	3	69.4	69.8

Table LT23: Numbers of Lithuanian registered vessels by age

	numbers				
	1995	1997	1998	1999	2000
Total	95	99	102	90	90
under 5 years	6	9	11	11	8
5 – 9	8	5	5	5	10
10 – 14	7	13	17	15	9
15 – 19	19	22	17	14	20
20 – 24	22	30	31	24	23
25 – 29	21	7	6	10	10
30+	9	10	12	8	7
year unknown	3	3	3	3	3

Traffic and Transport Measurement

Freight

Table LT24 and Figure LT25 illustrate the trends in goods carried by Lithuanian maritime enterprises. After recording 5.8 million tonnes in 1995, the level fell back in subsequent years, reaching a low point of 4.2 million tonnes in 1998 before recovering to 4.5 million in 2000. Within the total, trade between foreign ports was the major element, indicating the international orientation of the Lithuanian shipping industry. Of the trades into and out of Klaipeda State Seaport, it was the inward trade that held up the better.

Table LT 24: Goods carried by Lithuanian maritime enterprises

	1995	1996	1997	1998	1999	2000
Goods carried	5841	4693	4541	4165	4280	4515
From Klaipeda State Seaport	951	623	466	391	428	540
Into Klaipeda State Seaport	941	792	733	608	517	730
Traffic between foreign ports	3950	3278	3342	3167	3335	3246

1000 Tonnes

Figure LT25: Goods carried by Lithuanian maritime enterprises

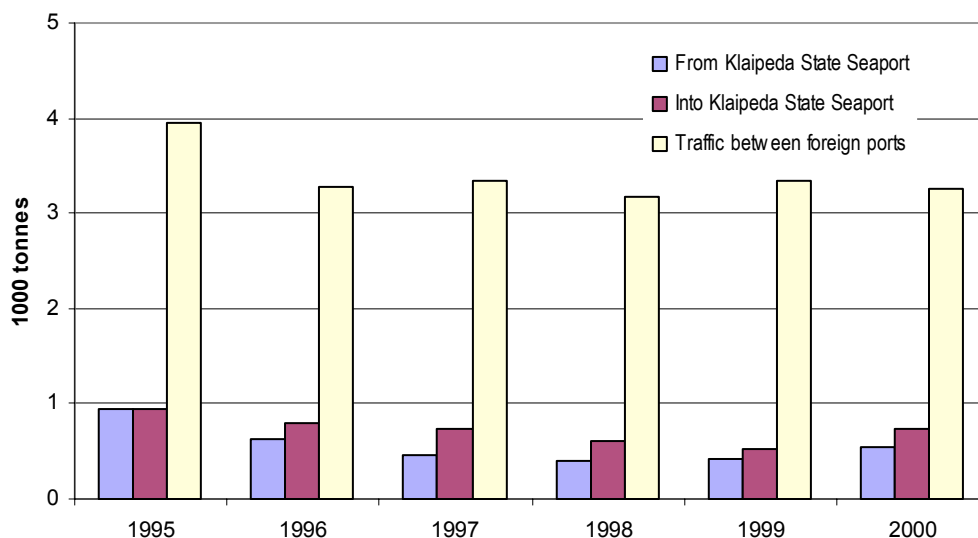
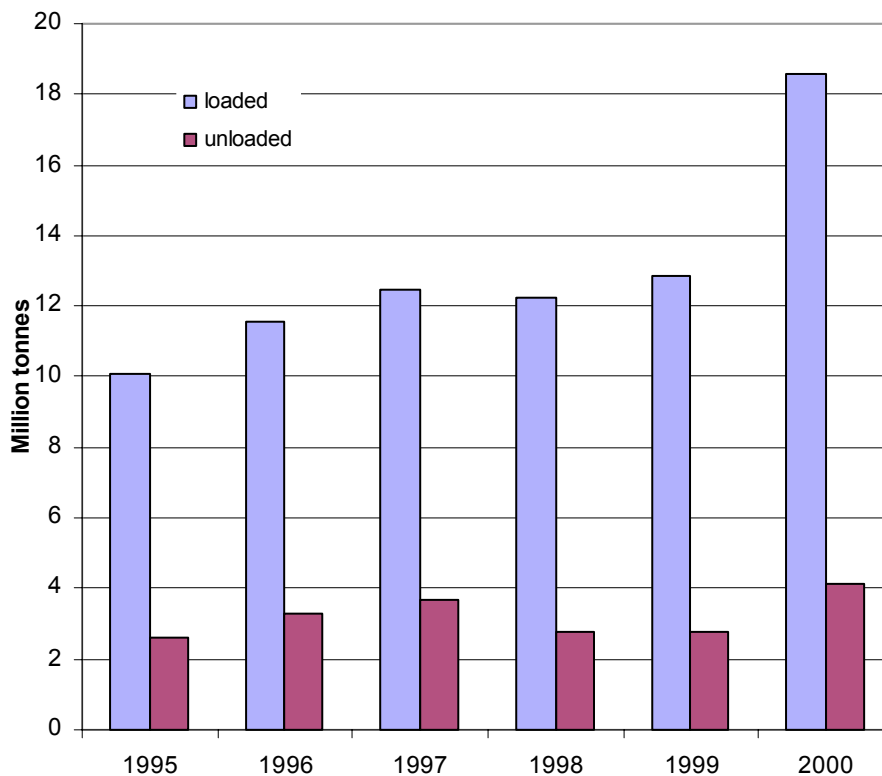


Table LT26 and Figure LT27 give the Lithuanian freight traffic over the years 1995 to 2000. Total traffic increased substantially, rising from 13 million tonnes in 1995 to 23 million in 2000. Goods loaded formed the majority of the traffic, accounting for 18.5 million tonnes in 2000 when it recorded a 44% rise compared with the previous year. Goods unloaded rose by 49% between the same years, reaching 4 million tonnes in 2000.

Table LT26: Traffic at Lithuanian Ports

	1000 Tonnes					
	1995	1996	1997	1998	1999	2000
Total	12 721	14 836	16 131	15 016	15 655	22 724
of which						
loaded	10 099	11 573	12 440	12 227	12 864	18 577
unloaded	2 622	3 263	3 691	2 789	2 791	4 147
		% change year on year				
Total		16.6	8.7	-6.9	4.3	45.2
of which						
loaded		14.6	7.5	-1.7	5.2	44.4
unloaded		24.4	13.1	-24.4	0.1	48.6

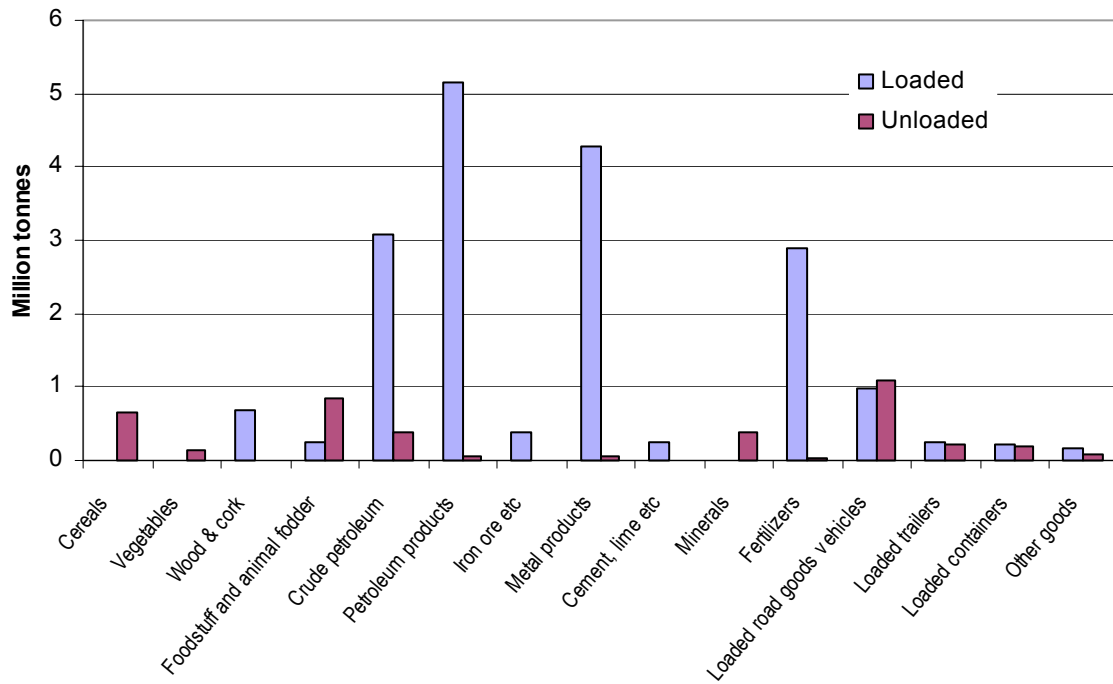
Figure LT27: Traffic at Lithuanian Ports



Traffic by commodity is shown in Table LT28 and Figure LT29. For goods loaded, the major commodity groups in 2000 were Petroleum products (5,1 million tonnes), Metal products (4,3 million tonnes), Crude petroleum (3,1 million tonnes) and Fertilisers (2,9 million tonnes). For goods unloaded, the largest groups were Goods vehicles loaded with goods (1,1 million tonnes), Foodstuffs and animal fodder (0,9 million tonnes) and Cereals (0,7 million tonnes). Traffic by mode of appearance is shown in Table LT30 and Figure LT31 for the years 1998, 1999 and 2000. For loaded goods, liquid bulk was the largest component in 2000. This reflected the very sharp rises in the trade in petroleum products between 1998 and 2000. In 1998, general cargo had been the most important element. Dry bulks were the smallest of the three groups of loaded items. For unloaded goods, while general cargo was consistently the largest of the three groups, both dry bulks and liquid bulks had expanded rapidly between 1998 and 2000 but from a very low level for liquid bulks.

Table LT28: Traffic at Lithuanian ports

Groups of goods NST/R	Tonnes					
	Total		Loaded		Unloaded	
	1999	2000	1999	2000	1999	2000
Total	15 655	22 724	12 864	18 577	2 791	4 147
Cereals	18	664	15	-	3	664
Potatoes, other vegetables, fresh or frozen, fresh fruit	108	131	-	-	108	131
Live animals, sugar beet	5	-	5	-	-	-
Wood and cork	504	682	504	682	-	-
Textiles, textile articles and man-made fibres, other raw animal and vegetable materials	0	-	-	-	0	-
Foodstuff and animal fodder	1 370	1 097	248	238	1 122	859
Oil seeds and oleaginous fruits and fats	18	65	7	52	11	13
Solid mineral fuels	105	106	100	90	5	16
Crude petroleum	690	3 481	607	3 089	84	391
Petroleum products	3 915	5 198	3 890	5 148	25	50
Iron ore, iron and steel waste and blast-furnace dust	211	389	211	389	-	-
Non-ferrous ores and waste	1	-	1	-	-	-
Metal products	3 030	4 348	2 974	4 288	56	60
Cement, lime, manufactured building materials	345	247	340	236	5	11
Crude and manufactured minerals	28	384	-	-	28	384
Natural and chemical fertilizers	2 823	2 904	2 773	2 886	51	18
Coal chemicals, tar	-	-	-	-	-	-
Chemicals other than coal chemicals and tar	0	9	-	1	0	8
Paper pulp and waste paper	1	17	-	10	1	8
Transport equipment, machinery, apparatus, engines, whether or not assembled, and parts thereof	15	16	1	7	13	9
Manufactures of metal	29	14	25	-	5	14
Glass, glassware, ceramic products	0	-	0	-	-	-
Leather, textile, clothing, other manufactured articles	13	26	8	16	5	10
Other goods	2 426	2 948	1 155	1 447	1 271	1 501
goods road vehicles with goods	1 497	2 059	691	973	807	1 087
goods wagons with goods	621	483	313	259	308	224
containers with goods	266	396	138	214	128	183

Figure LT29: Goods Traffic at Lithuanian Ports by Commodity 2000

Table LT30: Goods traffic at Klaipeda by mode of appearance

Year	Total goods	of which:			tonnes
		liquid bulk	dry bulk	general	
Total					
1998	15 016	2 868	3 036	9 113	
1999	15 655	5 476	3 673	6 506	
2000	22 724	9 487	4 188	9 049	
Loaded					
1998	12 227	2 838	2 454	6 935	
1999	12 864	5 355	2 752	4 757	
2000	18 577	9 030	2 600	6 948	
Unloaded					
1998	2 789	30	582	2 178	
1999	2 791	121	921	1 749	
2000	4 147	457	1 589	2 101	

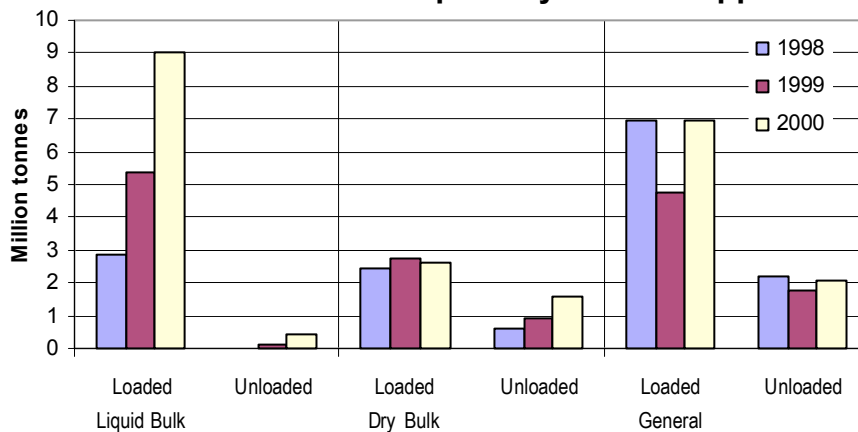
Figure LT31: Goods traffic at Klaipeda by mode of appearance


Table LT32 shows the countries of loading and unloading for traffic passing through Lithuanian ports in 1995 and 2000. For goods loaded, the top five countries in both years were the Netherlands, Germany, USA, UK and Sweden. For goods unloaded, the top five were Germany, Denmark, UK, Russia and Cuba. It is interesting to compare the outcome for maritime shipments with the foreign trade figures for imports and exports, shown in Table LT33 and Figure LT34. For exports (loaded), the Netherlands and Sweden did not figure in the foreign trade list while Latvia, Russia and Poland did. This is a reflection of the role of Rotterdam as the major European hub and transshipment port and the land connections with Latvia, Russia and Poland. For imports (unloaded), only Cuba did not figure in the foreign trade list, probably because most of this is trade in transit to other countries.

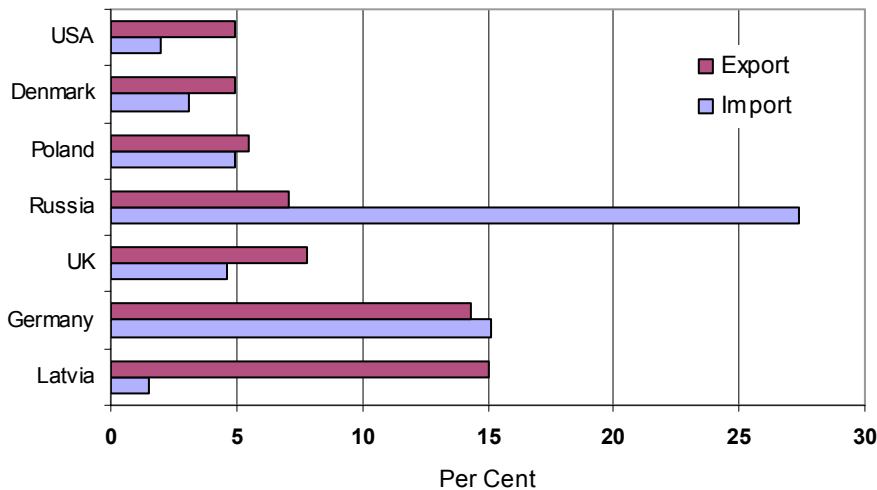
Table LT32: Goods loaded to and unloaded from seagoing vessels by country

1000 Tonnes

	Total		Loaded		Unloaded	
	1995	2000	1995	2000	1995	2000
Total	12 721	22 724	10 099	18 577	2 622	4 147
Belgium	583	858	470	746	113	113
Brazil	29	271	0	174	29	97
Denmark	654	1 400	522	785	132	615
Spain	416	388	402	384	14	4
Italy	32	160	32	156	0	4
United Kingdom	1 081	1 585	1 055	1 190	27	395
United States of America	1 017	1 689	879	1 607	138	82
Canada	28	126	28	111	0	14
China	430	310	430	310	0	0
Cuba	2	278	2	3	0	275
Poland	197	355	193	348	4	7
Netherlands	1 751	5 880	1 663	5 750	88	130
Norway	172	348	167	232	5	116
France	234	740	221	728	13	12
Russia	15	382	14	54	1	329
Finland	156	397	151	358	5	39
Sweden	851	1 158	716	954	135	204
Switzerland	348	92	348	70	0	23
Thailand	204	30	204	30	0	0
Taiwan	46	172	46	172	0	0
Germany	3 530	3 196	1 915	1 930	1 615	1 267
Unknown country	0	697	0	697	0	0
Other countries	948	2 209	643	1 786	305	423

Table LT33: Percentage share of foreign trade 2000

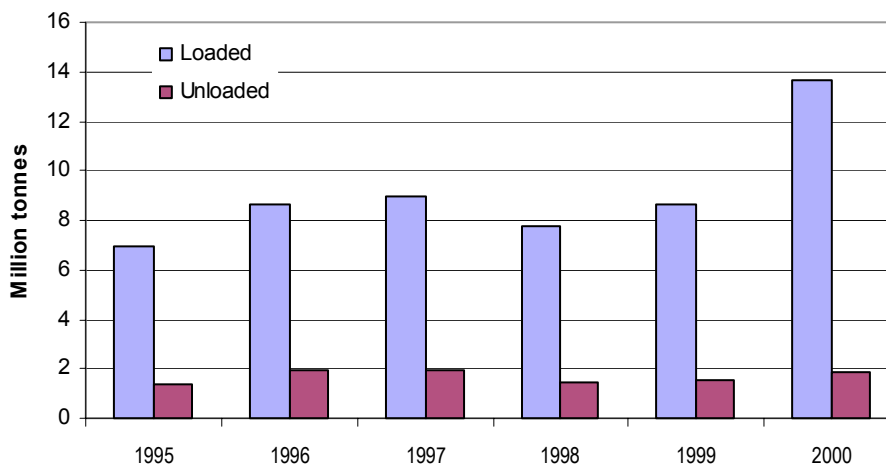
	Per Cent	
	Import	Export
Latvia	1.6	15.0
Germany	15.1	14.3
UK	4.5	7.8
Russia	27.4	7.1
Poland	4.9	5.5
Denmark	3.1	4.9
USA	2.4	4.9

Figure LT34: Percentage shares of foreign trade by country


Indeed, Lithuania has a major role in handling transit traffic from Russia and other neighbouring countries and this is illustrated in Table LT35 and Figure LT36, which show developments in transit trade. Goods loaded in Lithuanian ports forms the major element and the tonnage handled has nearly doubled in the five years from 1995 to 2000, with most of the growth in the last year. In 1995, some 7 million tonnes were loaded but by 2000 the total had reached 13.5 million tonnes. Transit traffic for unloaded goods moved erratically over the five years but also managed an increase. From 1,3 million tonnes in 1995, the total had reached 1,9 million by 2000 after recording nearly 2 million tonnes in 1997.

Table LT35: Traffic in transit goods

	000 tonnes		
	Total	of which loaded	unloaded
1995	8 286	6 914	1 372
1996	10 519	8 616	1 904
1997	10 931	8 953	1 979
1998	9 239	7 765	1 475
1999	10 207	8 669	1 538
2000	15 521	13 655	1 866

Figure LT36: Transit traffic at Lithuanian ports


Tables LT37 and LT38 and Figures LT39 and LT40 show the development of container traffic in Lithuanian ports over the years 1995 to 2000. What has been most remarkable is the changing balance between loaded and unloaded. In 1995, Figure LT39 shows that unloaded traffic was dominant in terms of cargo carried in gross tonnes. By 2000, the trade had become much more balanced with weight of cargo carried in containers loaded exceeding that of containers unloaded. Contributing to this trend is the shift in the balance between empty and cargo carrying containers over the years. Figure LT40 indicates how the proportion of loaded containers shipped empty has fallen dramatically since 1995 when there were emptier than cargo carrying ones. In contrast, the proportion of empty containers unloaded has increased from very low levels over the same period so that there is a near balance between loaded and unloaded empty containers in 2000.

Table LT37: Containers loaded in Klaipeda 1995-2000

	1995	1996	1997	1998	1999	2000
Number of TEU	14 773	18 987	18 595	17 070	15 135	20 649
of which						
Carrying cargo	5 203	7 727	7 527	6 315	10 026	15 582
Empty	9 570	11 260	11 068	10 755	5 109	5 067
Number of containers	8 785	11 519	12 599	11 687	9 608	12 972
less than 20 ft	-	-	9	-	-	-
20 ft	2 797	4 051	6 594	6 304	4 081	5 295
40 ft	5 988	7 468	5 996	5 383	5 527	7 677
of which empty	5 602	7 017	8 171	7 743	3 783	3 902
Gross weight of containers, 1000 t	69.1	113.4	97.6	104.8	138	212.7

Table LT38: Containers unloaded in Klaipeda 1995-2000

	1995	1996	1997	1998	1999	2000
Number of TEU	15 235	20 256	18 141	15 261	13 543	19 306
of which						
Carrying cargo	14 820	19 470	17 271	14 290	9 520	13 378
Empty	415	786	870	971	4 023	5 928
Number of containers	9 020	12 340	12 306	10 484	9 001	12 194
less than 20 ft	-	-	6	-	-	-
20 ft	2 805	4 424	6 465	5 707	4 459	5 082
40 ft	6 215	7 916	5 835	4 777	4 542	7 112
of which empty	275	399	514	617	2 330	3 372
Gross weight of containers, 1000 t	203.1	271.8	191.1	175	128.1	182.5

Figure LT39: Container traffic in Lithuanian ports, in Gross weight

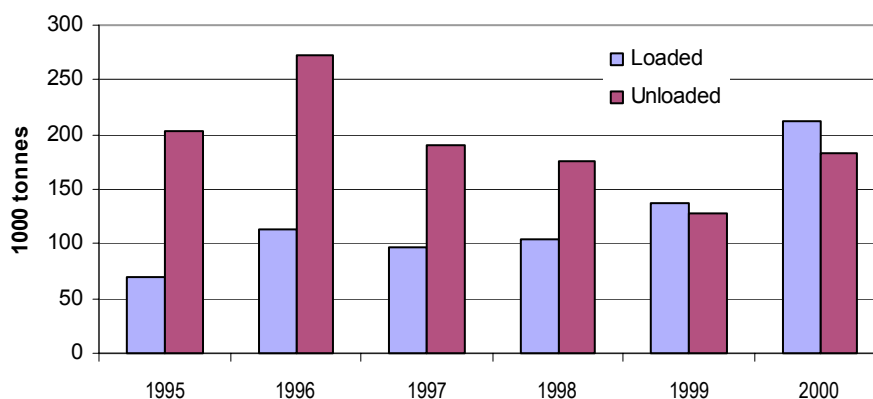


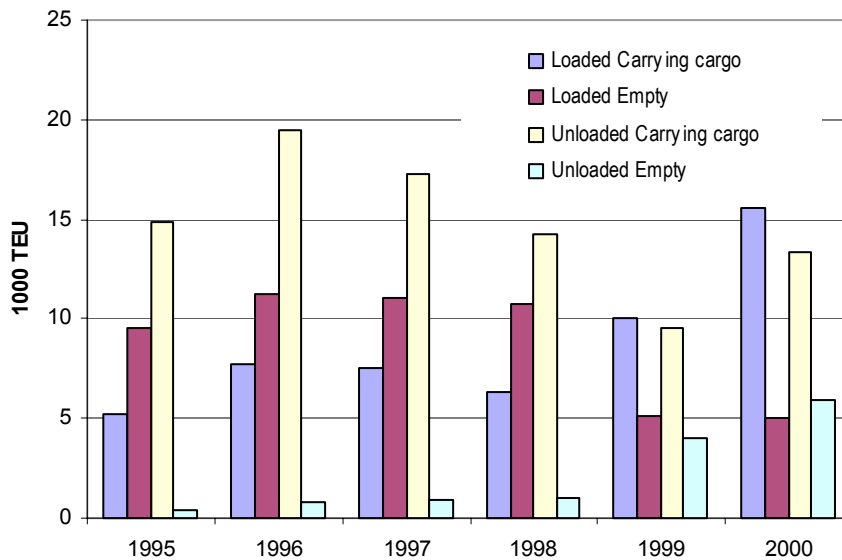
Figure LT40: Container traffic at Lithuanian ports, in TEU


Table LT41 and Figures LT42 and LT43 show the trends in road vehicle traffic using the Ro-Ro ferries out of Klaipeda since 1995. Throughout the period, more road vehicles have been unloaded than loaded although the gap between the two has been shrinking. In 1995, more than twice as many vehicles were unloaded as loaded. By 2000 the ratio was much reduced with 60 thousand vehicles unloaded and 46 thousand loaded. Looking at the detail for 2000, it is clear that the major contribution to the continuing gap comes from passenger vehicles (cars) with a smaller contribution from lorries. Movements of trailers and articulated vehicles were much more in balance.

Table LT41: Road vehicles loaded and unloaded 1995-2000

	number					
	1995	1996	1997	1998	1999	2000
Road vehicles loaded	32 514	43 732	55 332	45 877	37 332	46 107
Lorries	1 211	1 528	1 544	1 696	1 745	1 505
Trailers and semitrailers	17 157	27 187	38 314	28 296	18 675	21 992
Articulated vehicles	10 581	11 166	11 483	10 929	12 027	17 361
Passenger cars	3 517	3 736	3 517	4 481	4 393	4 661
Other road vehicles	48	115	474	475	492	588
Road vehicles unloaded	69 089	94 387	103 986	87 260	52 314	60 174
Lorries	2 374	2 996	3 503	3 739	2 895	3 338
Trailers and semitrailers	17 284	27 451	38 821	28 046	19 632	22 006
Articulated vehicles	11 457	13 253	12 808	11 404	12 194	18 764
Passenger cars	37 860	50 266	47 757	42 812	16 738	14 901
Other road vehicles	114	421	1 097	1 259	855	1 165

Figure LT42: Road vehicle movements through Lithuanian ports

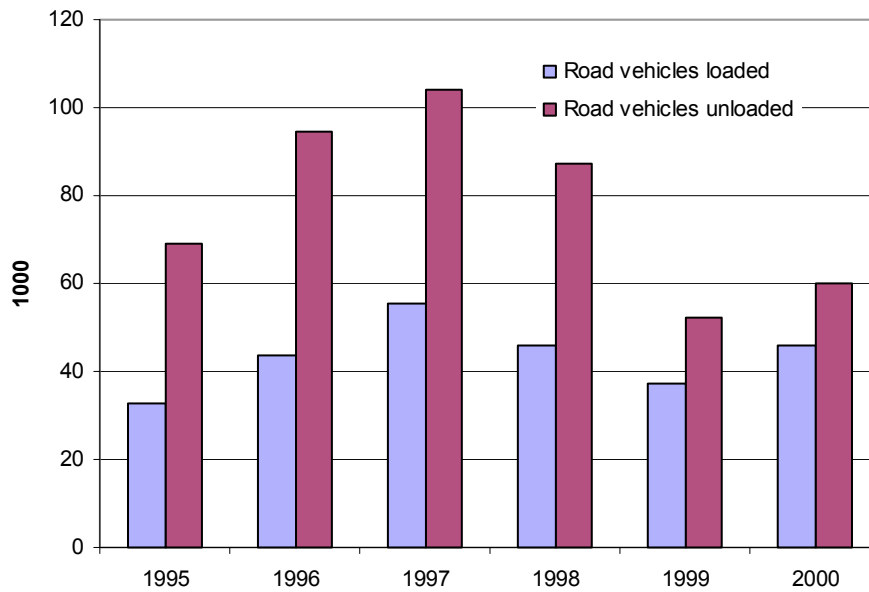


Fig. LT43: Road vehicle movements through Lithuanian ports by vehicle type, 2000

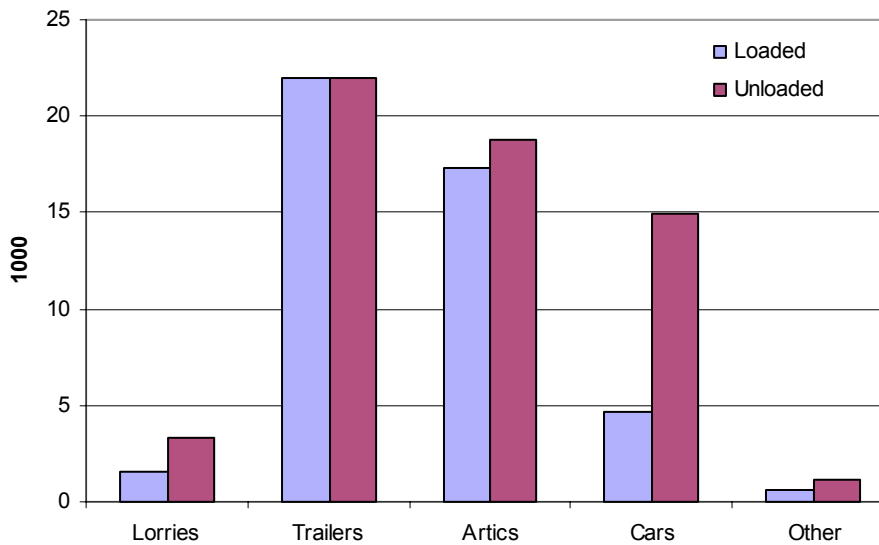
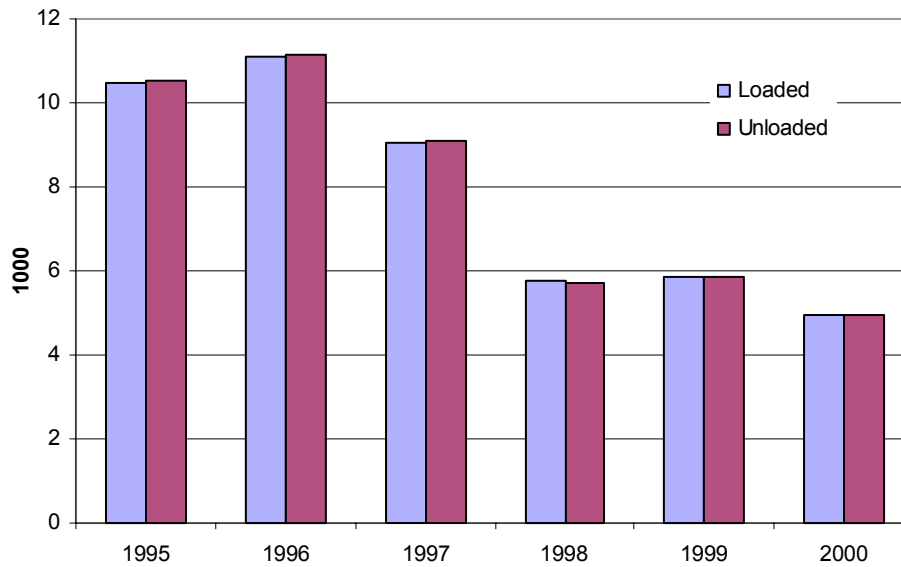
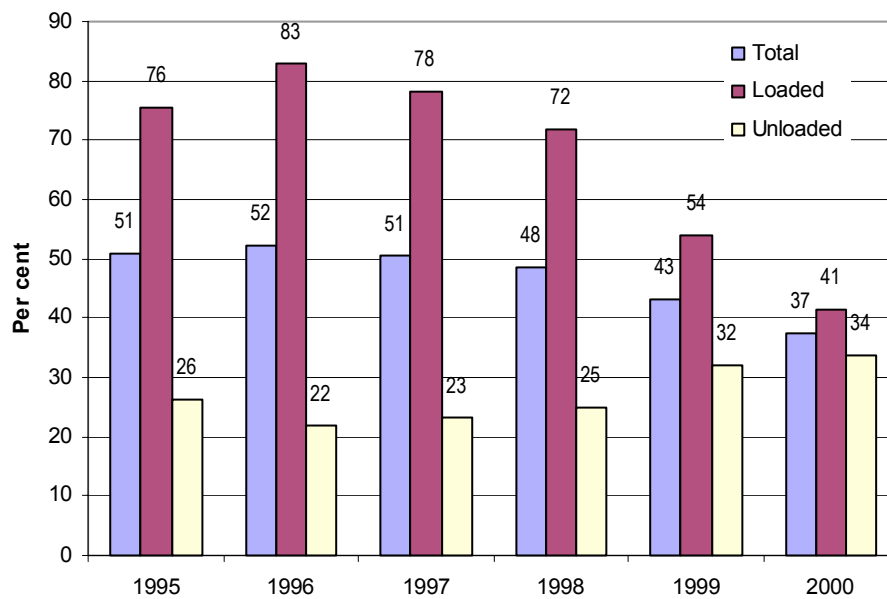


Table LT44 and Figures LT45 and LT46 illustrate the trends in rail wagon movements through Klaipeda. There is a good balance between loaded and unloaded wagons but the trade has been declining since 1995 with some 10 thousand movements loaded and unloaded recorded in 2000, compared with 21 thousand in 1995. Of some interest is Figure LT46, which shows the percentage of empty movements. In 1995, slightly more than half of all movements were of empty wagons with over three quarters of loaded wagons and a quarter of unloaded wagons empty. In 2000, the corresponding Figures were 41% for loaded and 34% for unloaded.

Table LT44: Rail goods wagons loaded and unloaded 1995-2000

	1995	1996	1997	1998	1999	2000
	number					
Total	20 988	22 259	18 157	11 482	11 715	9 904
of which empty	10 692	11 659	9 190	5 560	5 039	3 712
Loaded	10 470	11 101	9 056	5 753	5 863	4 954
of which empty	7 914	9 218	7 074	4 132	3 166	2 050
Unloaded	10 518	11 158	9 101	5 729	5 852	4 950
of which empty	2 778	2 441	2 116	1 428	1 873	1 662

Figure LT45: Rail wagon movements through Lithuanian ports

Figure LT46: % of empty rail wagon movements through Lithuanian ports


3.6 HUNGARY

Hungary is a landlocked country covering an area of 93 thousand square km in Central Europe. It borders with Austria, Slovak Republic, Ukraine, Romania, Yugoslavia, Croatia, and Slovenia, providing major land routes between Western Europe and the Balkans as well as between Ukraine and the Mediterranean basin. The maximum north-south distance within the Hungarian territory is about 268 km and the maximum east-west distance is 528 km. With a population of over 10 043 thousand inhabitants (on 1st January 2000) Hungary is the 4th largest of the Central and Eastern European Candidate Countries. The country is administratively divided into 19 counties and Budapest is the capital.

After centuries of isolation the systemic changes provided new prospects for East-Central Europe for joining the developed, democratic Western part of the continent. After joining NATO in March, 1999, Hungary attaches special significance to its membership in the European Union. Accession to the Union means accepting common values on the one hand and the guarantee of the country's security in economic and social terms, on the other. Diplomatic relations between Hungary and the European Communities were established in August 1988 followed by the Europe Agreement signed in Brussels on December 16, 1991, establishing an associated status for Hungary to EC. Hungary was one of the first target-countries of the Communities' PHARE program started in 1990, providing non-repayable financial assistance for tasks serving the aim of preparation for membership. The European Commission published its opinion about the associated countries in December 1997. The conclusions stated that Hungary, along with the Czech Republic, Estonia, Poland, Slovenia, could be in the position to satisfy all the conditions of membership in the medium term if they maintain and strongly sustain their efforts of preparation and had therefore been found eligible for accession negotiations. The talks started in March 1998 and by this, Hungary was admitted to the first circle of candidates and the process of its accession entered a new decisive stage.

The Nice European Council successfully outlined the framework for the new institutional system. Consequently, a major obstacle on the road leading to the accession of the most prepared candidates has been removed. Having received consistently high remarks in the Commission's Regular Reports, Hungary is determined to speed up and complete its preparation for membership by the end of 2002 and expects to join the Union among the first new members.

Lively growth characterised the Hungarian economy during the second half of the nineties. Gross domestic product increased by 22% between 1996 and 2000. It rose in every year of the reviewed period, however, the growth rate was modest (1.3%) in 1996. Economic development was dynamic and relatively high in the course of the following years: gross domestic product rose by 4.6% in 1997, while its growth rate was 4.9 and 4.2% in 1998 and 1999 respectively. According to preliminary data the growth rate reached 5.2% in 2000. Development of the Hungarian economy was remarkable also in international comparison. Economic growth (of 22% during the five year long period between 1996 and 2000) is 1.7-fold higher than the average growth in the member states of the European Union, 1.3-fold greater than the OECD average growth, and slightly lags behind that (24%) of the United States. CEFTA

countries, standing nearer to Hungary, as far as economic development and historical conditions are concerned, reached a GDP growth of 15% in the reviewed five year period.

Hungary's main trade partner is the EU (Table HU1). About 58.5% of the total imports in value are from the EU and about 75.2% of the total exports are towards the EU. In terms of single countries, the major import partners are Germany (25.6%), Russia (8%), Austria (7.4%) and Italy (7.5%); while the major export partners are Germany (37.3%), Austria (8.7%), Italy (5.9%), the Netherlands (5.4%) and France (5.2%).

Table HU1: External trade by principal countries (in million HUF), 2000

	Exports	Imports
EU-15	5 965 177	5 292 769
Germany	2 958 099	2 314 259
Austria	688 319	667 246
Italy	466 246	680 808
The Netherlands	431 849	199 483
France	416 813	395 521
CEFTA countries	647 655	683 606
Russia	129 158	731 805
United States of America	417 302	345 580
Total	7 942 804	9 064 022

The Hungarian road network spans across 30 307 km and the railways cover close to 8 thousand km of tracks. Pipelines also extend over the country for a length 7 248 km. Although Hungary has no access to the sea, it has a considerable inland waterway system including 1 373 km of permanently navigable routes. The major modes of domestic and international transport are land-based, but air transport has seen an increased importance in more recent years, both for Hungarian travelling abroad and for international arrivals.

AIR TRANSPORT

Transport Infrastructure and Equipment

Infrastructure

The Budapest/Ferihegy airport is essentially the only airport concerned with commercial aviation in Hungary and accounts for over 99% of the total passenger traffic. The airport is over 50 years old and it presents two passenger terminals (Terminal 2A and 2B, one of which was open in 1999), as well as facilities for cargo. A few regional airports (such as Debrecen and Zalavár) may be further developed in the future but their high operational and maintenance costs are not justified by the low demand for domestic air transport. These regional airports are mainly used for general aviation and for a very limited number of non-scheduled flights. There are several airfields scattered around the country that mainly used for military and training purposes.

Equipment

The Hungarian civil aircraft register comprises a total of 1192 vessels, of which 457 are for commercial purposes. The majority of the commercial aircraft (352) are of smaller size, with less than 2250 kg of maximum take-off weight. The register also includes 111 commercial helicopters (Table HU2).

Table HU2: Number of registered civil aircrafts in Hungary by MTOW

	1999		2000	
	total	commercial	total	commercial
Number of airplanes	1142	421	1192	457
Of which:				
0 – 2 250 kg	952	320	996	352
2 251 – 5 700 kg	145	56	149	58
5 701 – 9 000 kg	9	9	9	9
9 001 kg and more	36	36	38	38
Number of helicopters	170	105	177	111
Of which:				
0 – 2 250 kg	31	20	37	25
2 251 – 5 700 kg	139	85	140	86

Traffic and transport measurement

Passengers

Over 1.7 million international travellers arrived by air in 2000 and, in the last ten years, this mode of transport has been increasing in popularity as compared to the road (which nevertheless remains by far the major mode of transport). In 1990 international arrivals by air represented only 1.59% and only 2.46% of the Hungarians travelling abroad. In 2000 the shares of air transport have increased to 5.57% and 7.16% respectively and are now comparable or even greater than the shares of international travel by rail (Table HU3).

Table HU3: International travel by mode of transport (in thousands)

	Hungarians travelling abroad			International arrivals		
	1990	1995	2000	1990	1995	2000
Road	12 148	11 923	9 720	30 696	35 736	27 478
Air	335	755	792	597	892	1 735
Waterway	11	5	15	103	70	138
Rail or others	1 102	400	538	6 236	2 542	1 791
	13 596	13 083	11 065	37 632	39 240	31 142

Air transport employed over 3 thousand people in Hungary in 2000, representing about 2% of the employed in the transport sector (Table HU4).

Table HU4: Number of employees in the transport sector

	1999	2000	%
Land transport, transport via pipelines	127 017	127 705	78.96
Transport via railways	58 535	57 479	35.54
Other scheduled passenger land transport	42 747	41 964	25.95
Freight transport by road	24 168	26 410	16.33
Water transport	2 294	2 010	1.24
Air transport	3 446	3 435	2.12
Supporting and auxiliary transport activities; travel agencies	26 678	28 581	17.67
Total in transport (*)	159 435	161 731	100.00
TOTAL	3 811 500	3 849 100	

(*) data on enterprises with more than 4 people

The passenger volume handled by Hungarian air companies has increased over 52% in the last five years, while cargo carried by air has increased by nearly 70%. The average transport distances by air has also increased from 1117 km in 1990 to 1429 km in 2000 for passengers and 1636 km to 2713 km for goods, although the situation has remained stable since 1995 (Table HU5).

Table HU5: Performance of the air transport sector in Hungary

	1990	1995	2000
Number of air routes *	44	38	49
Passengers carried (thousands)	1 517	1 625	2 476
Passenger kilometers (millions)	1 695	2 383	3 539
Average paxs transport distance (km)	1 117	1 467	1 429
Freight carried (thousand tonnes)	9.4	13	22
Tonne-kilometers (millions)	15	35.7	59.7
Average freight transport distance (km)	1 636	2 746	2 713

* only MALEV company and summer timetable

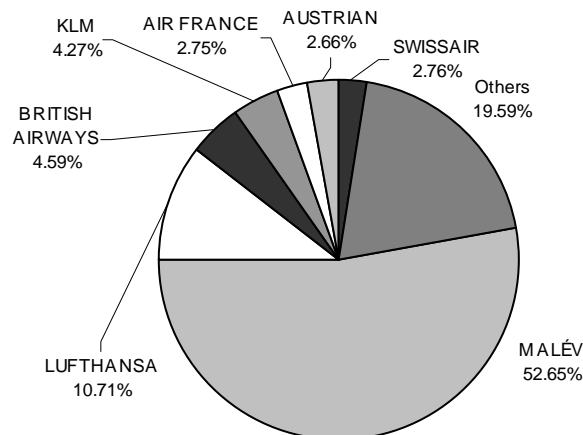
Over 40 thousand flights landed and took-off from Budapest/Ferihegy airport in 2000 doubling the number of flights operated in 1990. About 4.7 million passengers were embarked and disembarked, representing a 60% increase as compared to 1995 and an 88% increase since 1990.

Over 40 different airline companies have scheduled flights to and from Hungary. The Hungarian flag carrier, MALEV, is by far the major airline company operating in Budapest/Ferihegy. It handled 42% of the flights, 37% of the freight and over 52% of the total passenger traffic. Lufthansa (11%) also managed a significant share of passengers, followed by British Airways (4.6%) and KLM (4.3%) (Table HU6 and Figure HU7).

Table HU6: Traffic at the Budapest / Ferihegy airport by major airline company, 2000

Airline company	Airplanes landing and taking off	Number of passengers		total	Quantity of goods, tonnes	
		disembarked	embarked		unloaded	loaded
MA MALÉV	16 775	1 230 114	1 242 737	2 472 851	8 971	7 184
LF LUFTHANSA	3 667	240 549	262 647	503 196	1 517	1 147
BA BRITISH AIRWAYS	733	107 122	108 600	215 722	1 909	2 056
KL KLM	1 033	98 352	102 278	200 630	817	459
AF AIR FRANCE	658	64 789	64 358	129 147	162	274
OS AUA AUSTIRAN	1 385	60 292	64 866	125 158	169	142
SR SWISSAIR	732	58 187	71 620	129 807	599	631
SN SABENA	634	42 857	39 780	82 637	190	231
SK SAS	398	34 364	36 792	71 156	223	170
AY FINNAIR	381	31 733	32 095	63 828	257	16
OK CSA CZECH	470	31 534	27 832	59 366	134	32
TU TUNIS AIR	273	29 656	30 584	60 240	3	6
LY ELAL	225	28 691	29 227	57 918	260	159
SU AEROFLOT	367	26 996	27 042	54 038	789	81
LO LOT POLISH	511	16 336	15 376	31 712	44	55
Others	11 930	220 014	219 332	439 346	6 828	7 977
Total	40 172	2 321 586	2 375 166	4 696 752	22 872	20 620

Figure HU7



Scheduled services account for the great majority of passenger traffic by air (91%). Air relations with the EU are predominant. The over 3 million passengers flying to and from the EU account for about 64% of the total scheduled traffic and about 55% of the non-scheduled traffic. Central and Eastern European countries represent only 7.5% of the total passenger traffic, while the rest of Europe constitutes over 17%. Transatlantic flights are mainly scheduled and represent 3% of the total. Germany, the United Kingdom, the Netherlands, Switzerland and France are the main countries for scheduled traffic, while Greece, Spain, Tunisia, Israel and Turkey are the most popular non-scheduled destinations (Table HU11, Figure HU8, HU9 and HU10).

Figure HU8: Air passenger traffic: share by world regions

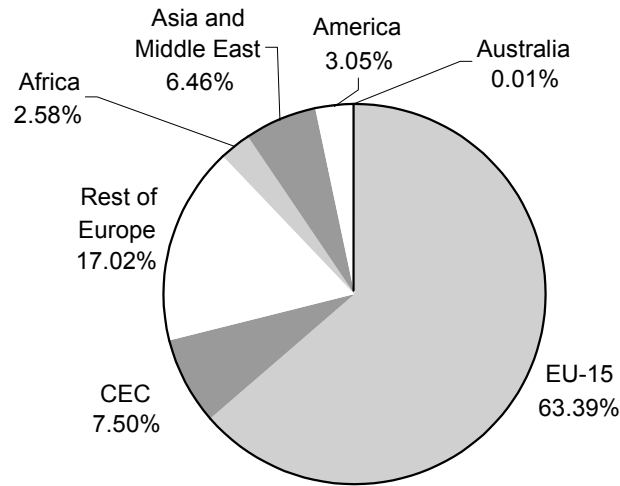


Figure HU9

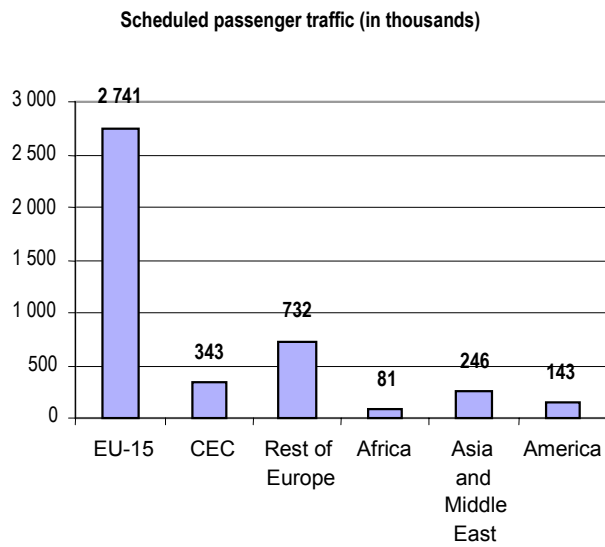


Figure HU10

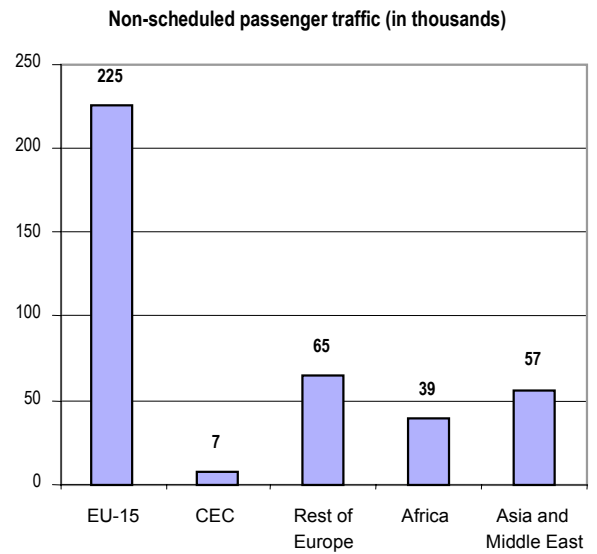


Table HU11: Scheduled and non-scheduled passenger traffic to / from Budapest / Ferihegy by country, 2000

	Scheduled traffic			Non-scheduled traffic			TOTAL
	Disembarked	Embarked	Total	Disembarked	Embarked	Total	
Austria	60 477	65 234	125 711	333	819	1 152	126 863
Belgium	74 183	72 441	146 624	-	707	707	147 331
Denmark	54 828	58 039	112 867	-	145	145	113 012
Finland	70 687	70 021	140 708	3 010	3 107	6 117	146 825
France	129 238	133 409	262 647	2 942	3 337	6 279	268 926
Germany	400 436	429 854	830 290	1 798	1 904	3 702	833 992
Greece	74 164	66 580	140 744	58 545	59 489	118 034	258 778
Ireland	14 940	15 871	30 811	625	624	1 249	32 060
Italy	69 789	71 311	141 100	5 898	5 959	11 857	152 957
Netherlands	134 778	139 312	274 090	1 006	1 195	2 201	276 291
Portugal	-	-	-	116	257	373	373
Spain	36 609	37 963	74 572	33 422	35 675	69 097	143 669
Sweden	30 847	31 717	62 564	263	241	504	63 068
United Kingdom	195 788	202 131	397 919	1 829	1 729	3 558	401 477
EU-15	1 346 764	1 393 883	2 740 647	109 787	115 188	224 975	2 965 622
Bulgaria	25 665	23 334	48 999	330	342	672	49 671
Czech Rep.	64 661	62 306	126 967	451	446	897	127 864
Latvia	1 922	1 908	3 830	-	-	-	3 830
Poland	45 120	43 999	89 119	258	213	471	89 590
Romania	29 793	31 430	61 223	2 590	2 254	4 844	66 067
Slovenia	6 902	6 189	13 091	305	308	613	13 704
CEC CCs	174 063	169 166	343 229	3 934	3 563	7 497	350 726
Albania	22 598	20 381	42 979	16	-	16	42 995
Bosnia	15 387	14 665	30 052	31	-	31	30 083
Cyprus	19 170	18 412	37 582	5 011	5 115	10 126	47 708
Iceland	-	-	-	1 335	1 782	3 117	3 117
Macedonia	12 192	11 874	24 066	629	547	1 176	25 242
Malta	3 402	3 620	7 022	3 433	3 373	6 806	13 828
Moldavia	12 413	11 682	24 095	646	626	1 272	25 367
Norway	11 850	12 388	24 238	460	464	924	25 162
Russia	51 307	51 607	102 914	3 830	3 940	7 770	110 684
Switzerland	137 956	145 758	283 714	245	94	339	284 053
Turkey	42 123	41 042	83 165	10 544	10 295	20 839	104 004
Ukraine	36 436	35 408	71 844	30	657	687	72 531
Yugoslavia	-	-	-	5 873	5 654	11 527	11 527
Rest of European continent	364 834	366 837	731 671	32 083	32 547	64 630	796 301
Egypt	19 511	20 911	40 422	493	1 240	1 733	42 155
Lybia	3 873	4 474	8 347	-	-	-	8 347
Morocco	-	-	-	832	1 080	1 912	1 912
Tunisia	16 678	15 939	32 617	17 073	18 452	35 525	68 142
Africa	40 062	41 324	81 386	18 398	20 772	39 170	120 556
Cina	8 413	8 221	16 634	-	-	-	16 634
Israel	66 909	66 431	133 340	13 569	13 742	27 311	160 651
Japan	-	-	-	6 225	5 196	11 421	11 421
Kazakhstan	2 977	2 945	5 922	8 884	8 954	17 838	23 760
Lebanon	13 763	13 612	27 375	-	-	-	27 375
Oman	208	206	414	-	-	-	414
Syria	14 930	13 574	28 504	-	-	-	28 504
Thailand	15 996	17 503	33 499	-	-	-	33 499
Asia and Middle East	123 196	122 492	245 688	28 678	27 892	56 570	302 258
USA	55 204	54 475	109 679	-	-	-	109 679
Canada	15 360	17 490	32 850	-	-	-	32 850
America	70 564	71 965	142 529	-	-	-	142 529
Australia	-	-	-	83	192	275	275
Australia	-	-	-	83	192	275	275
Others	-	-	-	9 140	9 345	18 485	18 485
TOTAL	2 119 483	2 165 667	4 285 150	202 103	209 499	411 602	4 696 752

The top 15 airport relations with Budapest/Ferihegy are shown in Table HU12. They all represent flows close to or greater than 100 thousand passengers. Traffic with London accounted for over 400 thousand passengers and represents the major share (8.5%), followed closely by Frankfurt (8%).

Table HU12: Top 15 airport relations with Budapest / Ferihegy for passenger traffic, 2000

	Scheduled			Non-scheduled			TOTAL	share in %
	Disembarked	Embarked	Total	Disembarked	Embarked	Total		
1 London	195 788	202 131	397 919	1 503	1 403	2 906	400 825	8.53
2 Frankfurt	178 089	197 316	375 405	23	177	200	375 605	8.00
3 Zürich	134 028	141 766	275 794	168	39	207	276 001	5.88
4 Amsterdam	134 778	139 312	274 090	493	131	624	274 714	5.85
5 Paris	129 238	133 409	262 647	827	1 258	2 085	264 732	5.64
6 München	101 736	109 950	211 686	168	237	405	212 091	4.52
7 Tel-Aviv	66 909	66 431	133 340	13 569	13 742	27 311	160 651	3.42
8 Brussels	74 183	72 441	146 624		707	707	147 331	3.14
9 Helsinki	70 687	70 021	140 708	3 010	3 107	6 117	146 825	3.13
10 Prague	64 661	62 306	126 967	451	446	897	127 864	2.72
11 Wien	60 477	65 234	125 711	333	819	1 152	126 863	2.70
12 Copenhagen	54 828	58 039	112 867		145	145	113 012	2.41
13 New York	55 204	54 475	109 679			0	109 679	2.34
14 Moscow	47 946	47 955	95 901	276	720	996	96 897	2.06
15 Athens	49 595	45 343	94 938	749	846	1 595	96 533	2.06
TOTAL	2 119 483	2 165 667	4 285 150	202 103	209 499	411 602	4 696 752	100.00

Freight

In terms of goods' transport, Hungarian air enterprises carried 22 thousand tonnes with an overall performance of 59.7 million tonne-kilometres, against the 891 million tonne-kilometres by water and 25 447 million tonne-kilometres by land (Table HU13). However, aviation is mainly concerned with passenger transport and Hungarian air companies (mainly the MALEV airlines) carried close to 2.5 million passengers, totalling 3539 million passenger-kilometres, i.e. approximately 14% of the passenger transport performance by all modes of transport on non-urban routes (Table HU14 and Figure HU15).

Table HU13: Goods' transport performances by mode, 2000

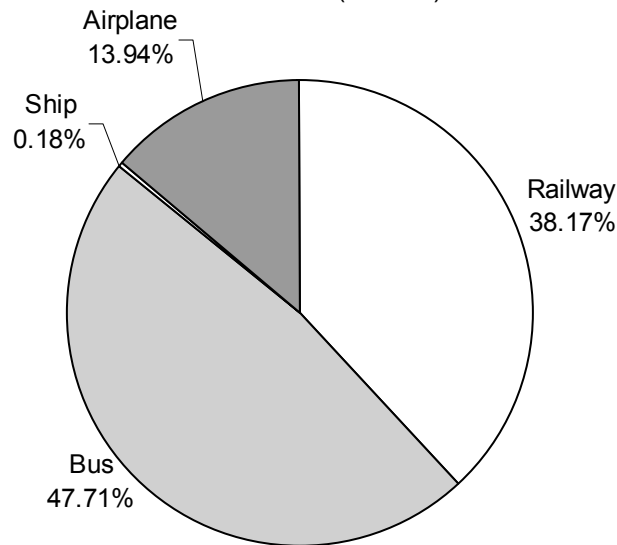
	Thousand tonnes			Million tonne-kilometres		
	National	International	Total	National	International	Total
Rail	16 844.0	33 271.0	50 115.0	1 984.0	6 111.1	8 095.1
Road	137 196.0	5 194.0	142 390.0	7 359.4	5 969.6	13 328.9
Water	1 075.0	1 345.0	2 420.0	39.2	851.8	891.1
Air	–	22.0	22.0	–	59.7	59.7
Pipeline	8 594.0	12 405.0	20 999.0	874.1	3 149.6	4 023.7
Total	163 709.0	52 237.0	215 946.0	10 256.7	16 141.8	26 398.5

Table HU14: Passenger transport performances by mode (excluding all urban transport), 2000

	Passengers (thousands)	Pax-Kilometers (millions)
Railway	155 984	9 693
Bus	573 629	12 115
Ship	3 015	45
Airplane	2 476	3 539

Figure HU15:

Performance of Hungarian transport enterprises in pax-Kilometers (millions)



After experiencing a contraction in volume between 1990 and 1995, the quantity of goods loaded and unloaded has also shown a positive trend, increasing by 87% in the last five years (Table HU16, Figure HU17 and HU18).

Table HU16: Traffic at the Budapest / Ferihegy airport

Year	Airplanes	Number of passengers			Quantity of goods, tonnes	
	landing and taking off	disembarked	embarked	total	unloaded	loaded
1980	16 340	889 670	890 445	1 780 115	5 606	17 145
1990	20 278	1 226 491	1 270 328	2 496 819	12 357	11 104
1995	26 165	1 448 942	1 486 678	2 935 620	13 255	9 966
1996	29 666	1 642 343	1 671 677	3 314 020	13 463	9 891
1997	31 604	1 793 291	1 825 783	3 619 074	15 335	11 840
1998	33 043	1 947 575	1 993 292	3 940 867	17 221	14 487
1999	35 557	2 127 507	2 197 206	4 324 713	20 378	17 559
2000	40 172	2 321 586	2 375 166	4 696 752	22 872	20 620

Figure HU17:

Passengers (disembarked+embarked) at Budapest/Ferihegy Airport in thousands

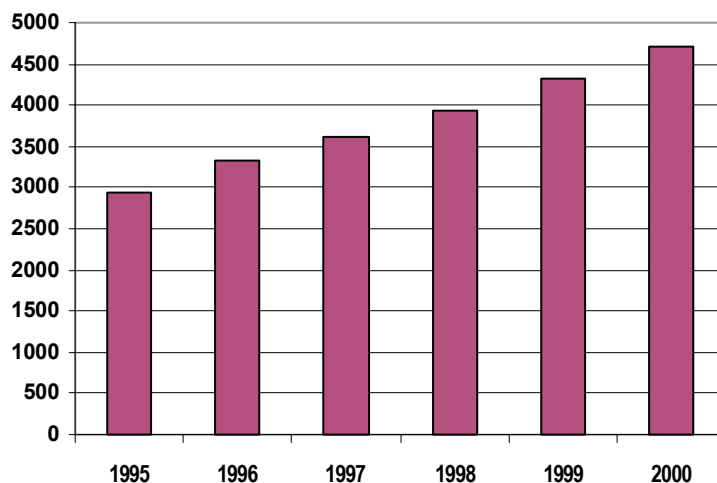
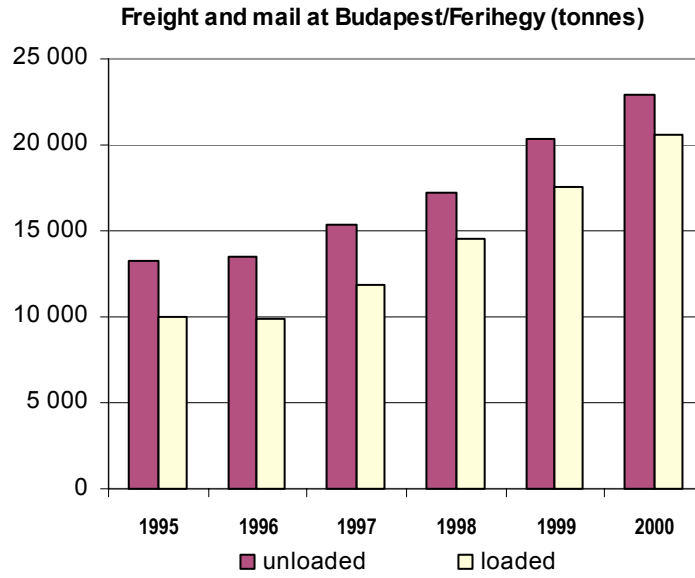


Figure HU18:



3.7 POLAND

Poland is the largest of the candidate countries, situated on the south coast of the Baltic between Germany to the West and Belarus and the Ukraine to the East with the Czech and Slovak Republics to the South and the Kaliningrad Oblast of Russia and Lithuania to the Northeast. Poland has an area of 313 thousand square kilometres and a population of 39 million. In recent years, it has recorded strong growth in GDP. At current prices, GDP rose from 300 000 million Zloty in 1995 to some 700 000 million Zloty in 2000 (Table PL1).

Table PL1: Poland GDP at current prices

	Bn Zloty					
	1995	1996	1997	1998	1999	2000
Total	308.10	387.80	472.40	553.60	615.10	684.90
Of which Transport	13.00	15.90	18.30	20.60	24.90	27.50
Of which Air Transport	0.20	0.30	0.20	0.20	0.30	N/A
Water Transport	0.30	0.30	0.30	0.20	0.10	0.1
	% of total					
Transport	4.22	4.10	3.87	3.72	4.05	4.02
Air Transport	0.06	0.08	0.04	0.04	0.05	N/A
Water Transport	0.10	0.08	0.06	0.04	0.02	0.02

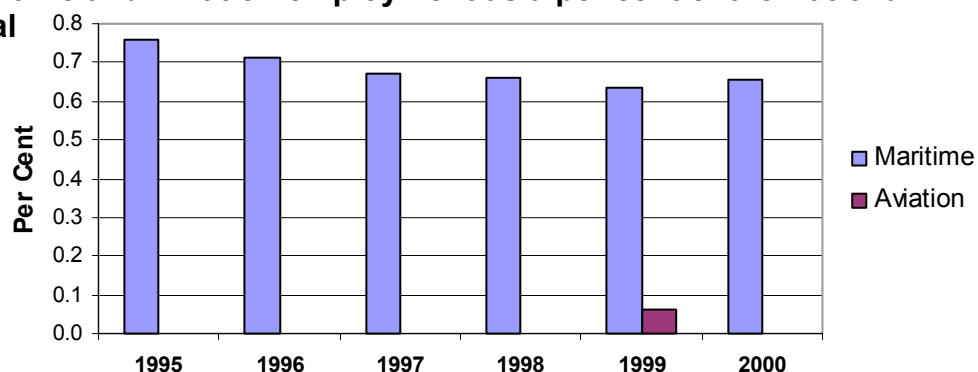
Employment in Poland rose from some 15 million in 1995 to 16.25 million in 1997 and 1998 before falling back to 15 million in 2000. Within this total, maritime employment declined from 113 thousand in 1995 to 100 thousand in 2000 with substantial declines in sea and coastal transport and port authorities employment. There were some 10 000 employees in the aviation sector in 1999, about half of 0,1 per cent of the national total (Table PL2 and Figure PL3).

Table PL2: Maritime and Aviation employment

	in 1000					
	1995	1996	1997	1998	1999	2000
Employment in national economy *	14 967.9	15 841.9	16 294.5	16 267.1	16 008.9	15 159.0
of which in maritime economy	113.2	113	109.2	107.7	101.6	99.5
of which in:						
transshipment	8.4	9.0	8.2	7.9	7.3	6.4
sea and coastal transport	9.9	9.2	7.5	6.3	4.6	3.9
port authorities	2.4	2.0	1.7	1.7	1.7	1.7
of which in aviation					9.7	

* for 1995 and 1996 as of December, 31; since 1997 as of September, 30

Figure PL3: Maritime and Aviation employment as a per cent of the National total



Investment outlays (Table PL4 and Figure PL5) in the Polish economy amounted to some 126 000 million Zloty in 1999 compared with 47 000 million Zloty in 1995. Within the total, investment in the maritime economy accounted for some 586 million Zloty in 1999 including 93 million Zloty in the transshipment area, 86 million Zloty for port authorities and 24 million Zloty for sea and coastal transport. The total rose to 1.1 000 million Zloty in 2000. In 1999, maritime accounted for under 0.5% of the total compared to 0.75% in 1995. Investment in the aviation transport sector grew from 27 million Zloty in 1996 to 204 million Zloty in 1999 as the modernization of the aviation infrastructure began in earnest. Much of the rise in 1999 was concentrated in the purchase of new aircraft. Even so, in 1999, aviation represented less than a fifth of one per cent of the national total for investment.

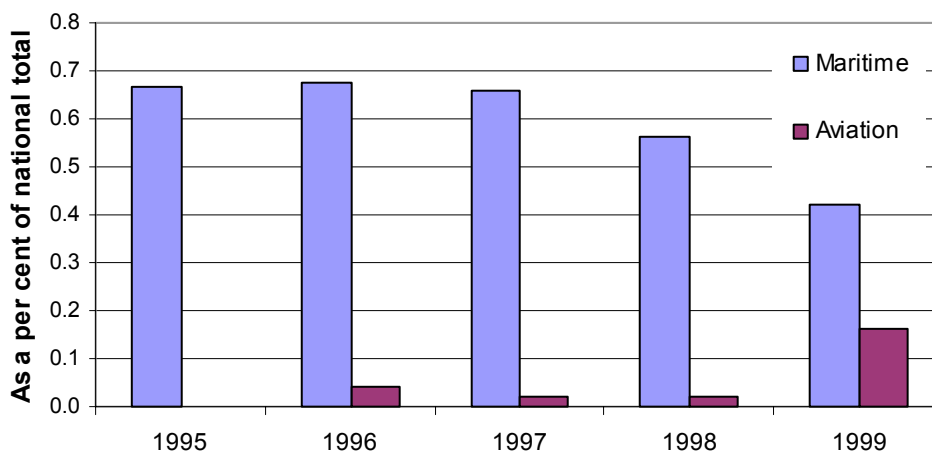
Table PL4: Investment outlays in million Zloty

	1995	1996	1997	1998	1999	2000
Investment outlays in national economy - b	47 145	65 622	90 438	112 814	125 954	
of which in maritime economy - a	370	499	642	709	586	1 074
of which in maritime economy - b	314	442	595	636	530	820
<i>of which in:</i>						
transshipment - a	19	27	53	90	93	
transshipment - b	18	26	51	87	91	
sea and coastal transport - a	61	86	133	61	24	
sea and coastal transport - b	39	54	130	39	20	
port authorities - a	67	76	72	75	86	
port authorities - b	54	70	72	75	81	
Of which Aviation		27	19	24	204	
of which buildings		15	10	9	47	
machinery etc.		6	6	6	19	
transport equipment		5	4	10	138	

a - total including purchases of second-hand fixed assets (except 1995)

b - investment in new assets

Figure PL5: Maritime and Aviation investment as a per cent of the National total



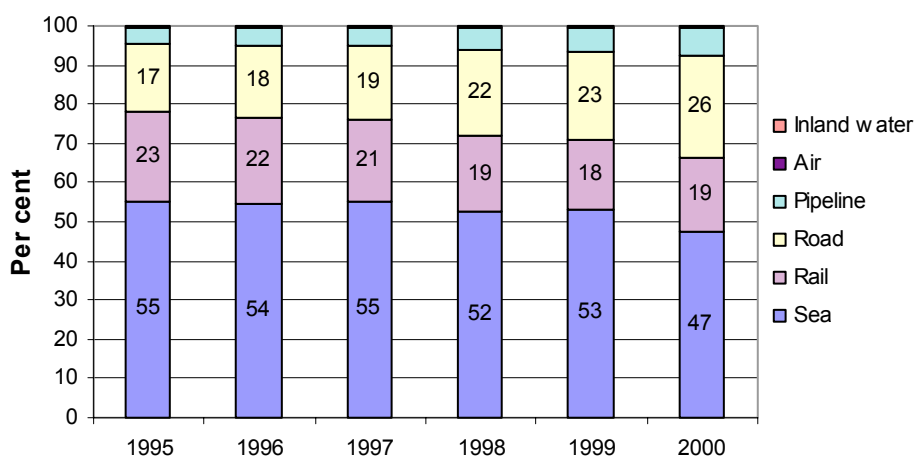
Looking at transport as a whole, Table PL6 shows that 1 300 million tonnes of goods were lifted in 2000, a 2% fall compared with the figure in 1995. Within the total, there was little change in road transport but a decline in rail was partly offset by a rise in pipeline transport. A different picture emerges in looking at goods moved. Here, the total of 283 000 million tonne kms in 2000 was a 6% fall compared with 1995. Within

the total, substantial declines in rail and sea transport were partly offset by rises in road and pipeline transport. As a result, Figure PL7 shows that the share of rail and sea transport declined substantially over the five years from about ¾ in 1995 to 2/3 in 2000 with corresponding gains for road and inland waterway transport. Aviation, which makes a tiny contribution to total goods transport on these measures, has seen freight volumes rise over the five years.

Table PL6: Goods transport by Polish enterprises

	1995	1996	1997	1998	1999	2000
Goods lifted	mn tonnes					
Total	1 380	1 386	1 407	1 359	1 329	1 348
Railway transport	225	224	227	206	187	187
Road transport	1 087	1 092	1 111	1 077	1 068	1 083
Air transport	0	0	0	0	0	0
Pipeline transport	33	35	34	41	43	44
Inland waterways	9	9	9	9	8	10
Sea	25	26	25	25	23	23
Goods moved	billion tonne kms					
Total	301	309	330	317	311	283
Railway transport	69	68	69	62	55	54
Road transport	51	57	64	70	70	73
Air transport	0	0	0	0	0	0
Pipeline transport	13	15	15	18	19	20
Inland waterways	1	1	1	1	1	1
Sea	166	168	181	166	164	134

Figure PL7: Mode share of freight transport in tonne-kms



In terms of numbers carried, passenger transport is dominated by road and rail (Table PL8 and Figure PL9). Here, the increased penetration of private car use has led to a 17 per cent decline in total passengers carried from 1 600 million in 1995 to 1 300 million in 2000. Passengers carried on rail fell by 23% and on road by 15%. In contrast, passengers carried by air rose by 56% and by sea by 37% though in both cases from a very small base. In terms of passenger kms, aviation makes a more significant contribution because of the relatively long distances travelled by air passengers. While there was an overall decline in passenger kms of 5% between 1995 and 2000, this was more modest than the corresponding fall in passenger

numbers. Within the total, road accounted for about a half of the total and rail 40% in 2000 but the aviation share has risen from 7% in 1995 to 10% in 2000 (Figure PL10).

Table PL8: Passenger transport by Polish enterprises

	1995	1996	1997	1998	1999	2000
Passengers						
	million					
Total	1 601.0	1 522.9	1 486.6	1 444.0	1 400.8	1 320.0
Railway transport	465.9	434.2	417.3	401.5	395.9	360.7
Road transport	1 131.6	1 085.4	1 065.4	1 038.3	1 000.6	954.5
Air transport	1.8	2.0	2.3	2.6	2.6	2.9
Inland waterways	1.2	0.6	1.0	1.0	1.1	1.3
Sea	0.5	0.6	0.6	0.6	0.6	0.6
Passenger-km						
	billion					
Total	65.5	65.1	64.1	65.3	65.2	62.1
Railway transport	26.6	26.6	25.8	25.7	26.2	24.1
Road transport	34.0	34.0	33.1	34.0	33.3	31.8
Air transport	4.6	4.4	4.9	5.4	5.6	6.0
Inland waterways	0.0	0.0	0.0	0.0	0.0	0.0
Sea	0.2	0.2	0.2	0.2	0.1	0.1

Figure PL9: Passenger numbers carried by Polish enterprises

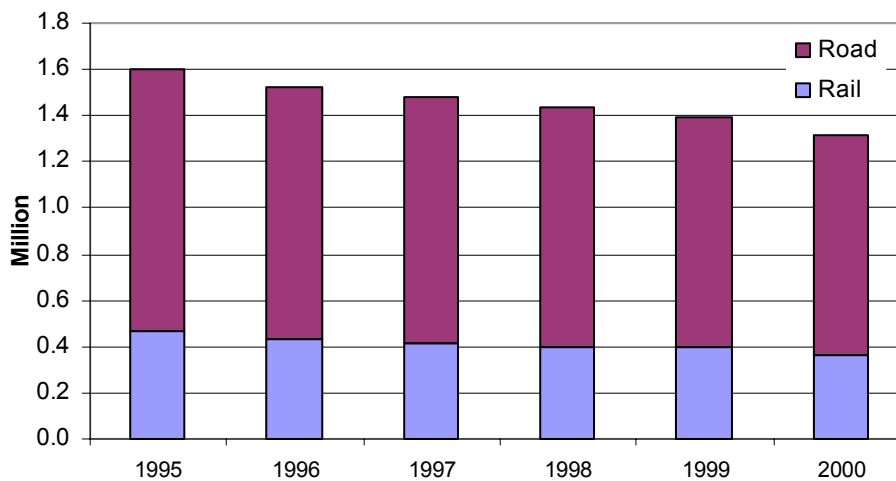
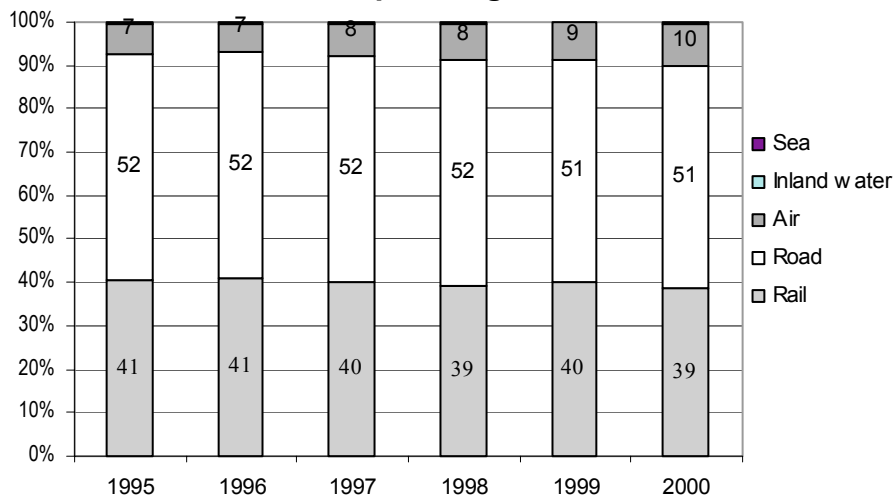


Figure PL10: Modal Share of passenger- kms



Maritime

Poland has four major ports, Gdansk, Gdynia, Szczecin and Swinoujscie together with a number of smaller facilities, including Police and Stepnica. It also has a number of shipping line operators which own and operate vessels both under the Polish flag and foreign flags. The Polish fleet, including Polish flagged vessels and foreign flagged vessels under full or joint Polish ownership consisted of 152 vessels (including deep sea fishing vessels) at the end of December 2000 (Table PL11).

Table PL11: Vessel fleet by type of vessel at 31 December 2000*

	Number	'000 DWT	'000 GT
Liquid bulk carrier	7	53	40
Dry bulk carrier	79	2 117	1 307
Container ship	1	5	4
Specialised carrier	-	-	-
General cargo non-specialized	41	376	432
Dry cargo barge	-	-	-
Passenger ship	-	-	-
Cruise ship	-	-	-
Deep sea fishing	24	.	85
Others	-	-	-
Total	152	2 551	1 868

* including fishing fleet

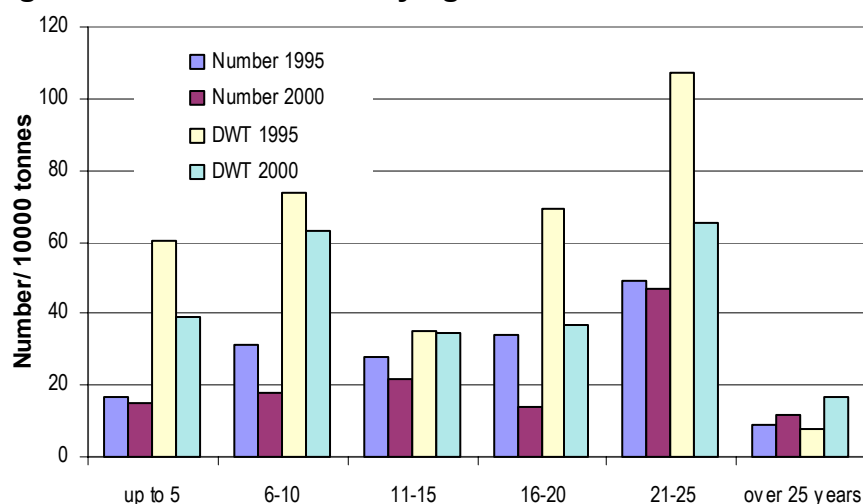
Of this total, there were 7 tankers, 79 dry bulk carriers and 1 container ship. There were 41 general cargo ships, including 8 ferries, 5 reefers and 28 other general cargo ships. Excluding fishing vessels, Table PL12 and Figure PL13 show the age of the fleet.

Table PL12: Vessel fleet by age group *

	Number		'000 DWT		'000 GT	
	1995	2000	1995	2000	1995	2000
up to 5	17	15	604	393	:	257
6-10	31	18	737	628	:	411
11-15	28	22	350	345	:	294
16-20	34	14	694	366	:	241
21-25	49	47	1 070	652	:	449
over 25 years	9	12	78	168	:	131
Total	168	128	3 533	2 552	:	1 783

* excluding fishing fleet

Figure PL13: Vessel fleet by age and size



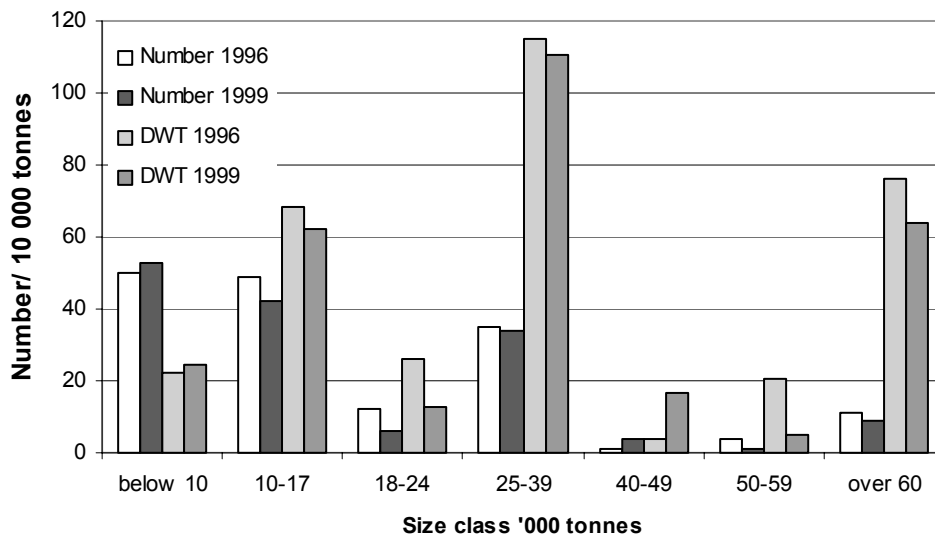
Comparing 1995 with 2000, the number of vessels in the Polish fleet has declined from 168 to 128 with falls in all age ranges except for the very oldest, over 25 years where there was an increase from 9 to 12. The same picture is repeated in DWT terms except that the fall has been sharper, declining from 3,5 million DWT in 1995 to 2,6 million DWT in 2000 but still recording an increase for the oldest vessel category. The number of Polish flagged vessels in the fleet has declined from 132 in 1995 to 41 in 2000. In terms of the size of vessel, figures are only available for the years 1996 to 1999 and show a decline for most size classes in both number and DWT (Table PL14 and Figure PL15). The exceptions are the very smallest size group (less than 10 000 DWT) where numbers increased and the mid range group (40 to 49 000 DWT) where both numbers and DWT recorded a rise.

Table PL14: Vessel fleet by size of ships *

'000 dead weight tonnes	Number		'000 DWT	
	1996	1999	1996	1999
below 10	50	53	220	243
10-17	49	42	684	624
18-24	12	6	262	127
25-39	35	34	1 152	1 105
40-49	1	4	41	165
50-59	4	1	208	52
over 60	11	9	763	641
Total	162	149	3 330	2 957

* excluding fishing fleet

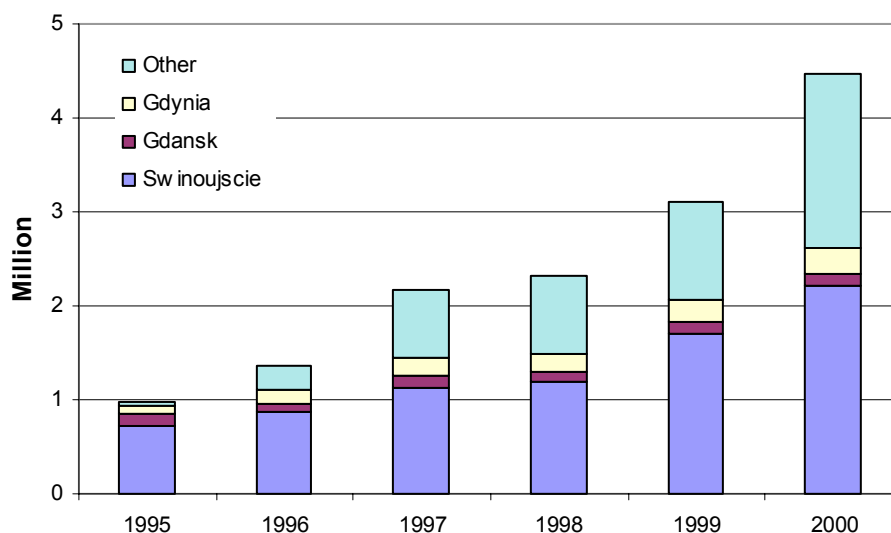
Figure PL15: Vessel fleet by size of ship



Looking in more detail, Table PL16 and Figure PL17 show the numbers of passenger movements by port for the five years from 1995 to 2000. Swinoujscie with its ferry terminal is Poland's main passenger port. Its passenger traffic increased from 726 thousand in 1995 to 2,2 million in 2000. Of the other ports, Gdynia also hosting some ferry terminals achieved strong growth, recording a rise from 95 thousand in 1995 to 265 thousand in 2000.

Table PL16: Passenger traffic at Polish ports

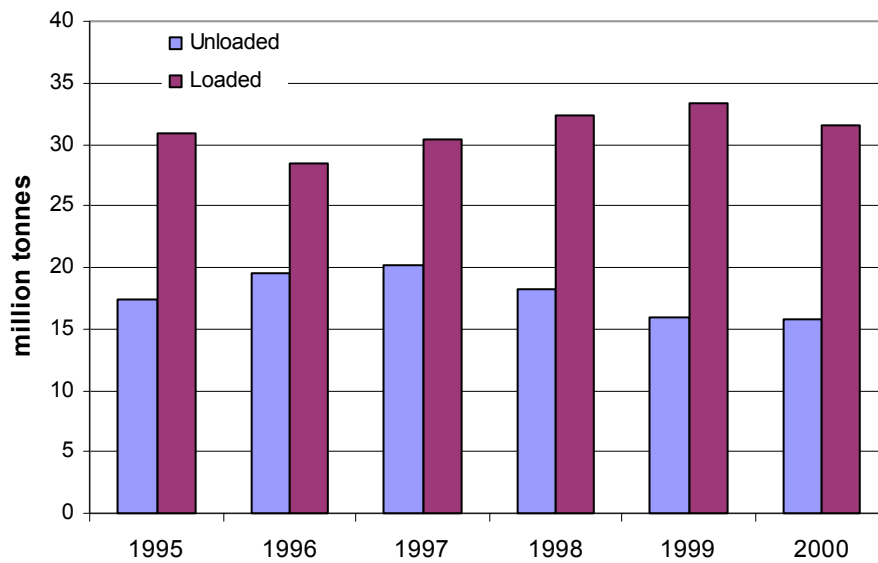
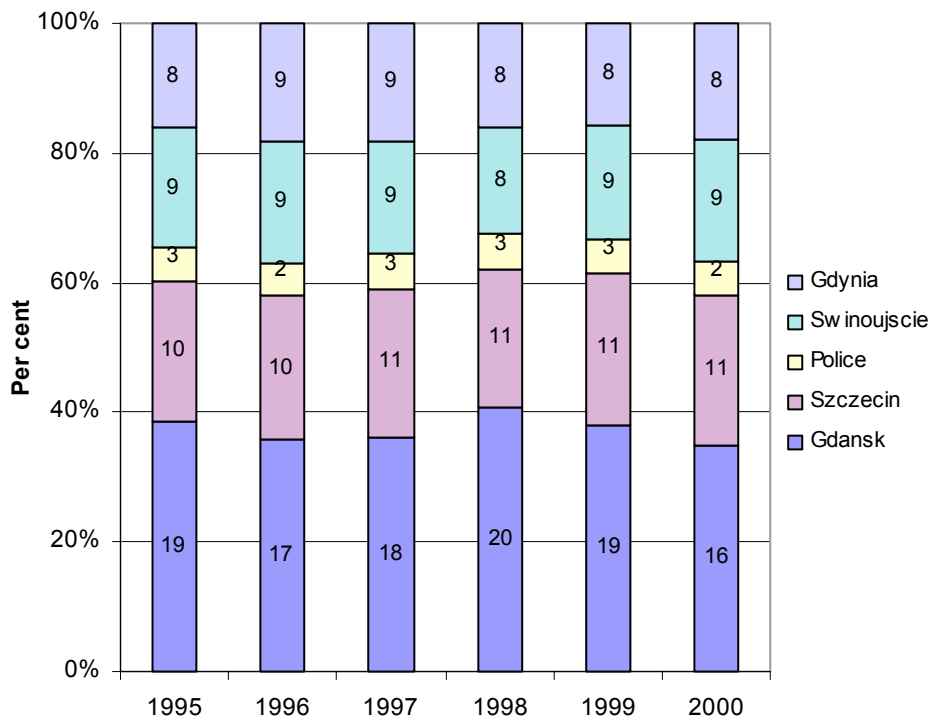
	1995	1996	1997	1998	1999	2000
	1000					
Total	988.7	1 353.4	2 169.7	2 309.0	3 116.9	4 465.1
Swinoujscie	725.7	868.5	1 136.1	1 182.0	1 698.8	2 203.4
Gdansk	125.1	97.1	124.5	119.2	121.8	141.9
Gdynia	94.6	139.2	182.9	179.1	241.4	264.5
Szczecin	0.7	0.5	0.4	0.3	0.3	0.1
Other	42.6	248.1	725.8	828.4	1 054.7	1 855.2

Figure PL17: Passenger traffic through Polish ports

For freight traffic, Table PL18 and Figure PL19 show the levels of freight movements by port. While the bulk ports, Gdansk, Szczecin (and Police in recent years) are large in tonnage terms, the other two, Gdynia and Swinoujscie, remain substantial. The overall total has varied around 50 million tonnes since 1995 with more goods loaded than unloaded. The largest port, Gdansk, has seen its share of the total decline since 1995 with the others remaining relatively stable (Figure PL20).

Table PL18: Freight movements through Polish ports

	1995	1996	1997	1998	1999	2000
	1000 tonnes					
Total	48 179	47 925	50 630	50 564	49 227	47 334
Unloaded	17 356	19 549	20 160	18 249	15 866	15 810
Loaded	30 823	28 376	30 470	32 314	33 361	31 525
<i>of which:</i>						
Gdansk	18 528	16 793	18 045	20 403	18 619	16 471
Unloaded	6 808	5 985	6 674	6 261	4 880	4 024
Loaded	11 720	10 808	11 370	14 142	13 739	12 447
Szczecin	10 301	10 476	11 303	10 704	11 484	10 937
Unloaded	2 448	3 738	3 775	3 723	3 534	3 327
Loaded	7 853	6 738	7 528	6 981	7 950	7 610
Swinoujscie	8 800	8 727	8 593	8 290	8 609	8 886
Unloaded	3 676	3 404	3 058	2 916	2 547	3 255
Loaded	5 124	5 323	5 536	5 375	6 062	5 630
Gdynia	7 732	8 646	9 061	7 994	7 750	8 382
Unloaded	2 707	4 320	4 158	3 511	3 220	3 627
Loaded	5 025	4 326	4 903	4 483	4 530	4 755
Police	2 505	2 459	2 823	2 852	2 569	2 455
Unloaded	1 534	1 469	1 765	1 589	1 549	1 432
Loaded	971	990	1 058	1 263	1 020	1 024

Figure PL19: Freight traffic through Polish ports

Figure PL20: Freight traffic through Polish ports - percentage shares


As Table PL21 and Figure PL22 show, Swinoujscie, the main ferry port, is the largest in terms of vessel movements. The number of movements at the port increased from 9 thousand in 1995 to over 19 thousand in 2000 when it accounted for some 27% of total vessel movements. For the other main ports, there were much smaller changes, which left their share of total movements relatively, stable.

Table PL23 shows the share of maritime freight movements in 2000 by the flag of vessel. Polish flagged vessels carried around 20% of the total for both imports and exports with about the same being carried in vessels flagged to the country of

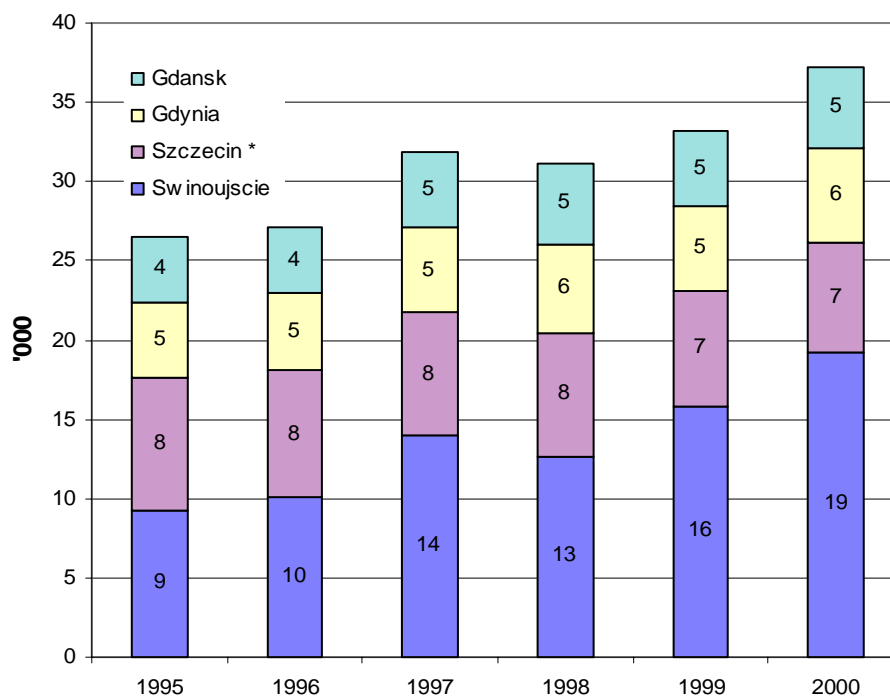
origin/destination. Other countries accounted for over half the total and the flags carrying the highest shares of trade were Cyprus, Greece (for export only), Malta, Panama (largely export) and Russia (largely import).

Table PL21: Vessel movements at Polish ports

	Number					
	1995	1996	1997	1998	1999	2000
Total	29 107	34 749	47 986	48 467	54 392	70 513
of which						
Gdansk	4 159	4 186	4 765	5 087	4 711	5 164
Gdynia	4 708	4 780	5 413	5 676	5 421	5 899
Szczecin *	8 421	8 076	7 748	7 764	7 253	6 913
Swinoujscie	9 192	10 071	13 974	12 638	15 803	19 228

* including Police and Stepnica

Figure PL22: Vessel movements at Polish ports



* including Police and Stepnica

Table PL24 and Figures PL25 and PL26 show details of container traffic at Polish ports in 2000. These show that nearly 2 million tonnes of goods moved through Polish ports in 2000 with 1,1 million loaded and 0,9 million unloaded. 150 thousand containers, equivalent to 225 thousand TEU were involved in this trade. By all measures, Gdynia is by far the largest Polish container port, accounting for over 80% of tonnes, numbers of units and TEUs. An interesting feature is the difference between the ports in the percentage of empty containers handled. Both Gdynia and Gdansk are close to the overall average while Szczecin is well above average, particularly for empty containers unloaded.

Table PL23: Sea transport of Polish foreign trade cargo by nationality of vessels in 2000

Nationality of vessel	million tonnes		per cent	
	Export	Import	Export	Import
Total	24.6	11.0	100	100
Poland	5.5	2.1	22	19
Country of goods destination	5.5	1.9	22	17
Country of goods origin	0.3	0.9	1	9
Other countries	13.2	6.1	54	56
of which:				
Antigua Barbuda	0.5	0.4	2	4
Bahamas	0.7	0.2	3	2
Bermuda	0.1		0	
China	0.2		1	
Cyprus	1.3	0.5	5	4
Denmark	0.7	0.2	3	2
Finland	0.4	0.2	2	2
Greece	1.1		5	
Honduras	0.1		0	
India	0.4		2	
Liberia	0.5	0.5	2	4
Malta	1.3	0.4	5	4
Netherlands	0.3	0.2	1	2
Germany	0.3	0.4	1	3
Norway	0.8	0.3	3	3
Panama	1.5	0.3	6	2
Russia	0.6	0.8	2	8
Singapore	0.2		1	
St. Vincent	0.3	0.2	1	2
Sweden	0.5	0.1	2	1
United Kingdom	0.4		1	
Marshall Islands	0.2	0.2	1	2
Italy	0.3		1	

Table PL24: Container traffic at Polish ports in 2000

	Total	Unloaded	Loaded	Total
			1000 tonnes		Per cent
Total	1 966	861	1 104	100
<i>of which:</i>				
Gdansk	135	55	80	7
Gdynia	1 639	750	888	83
Szczecin	192	56	136	10
			1000 containers	Per cent
Total	147.4	69.9	77.5	100
<i>of which:</i>				
Gdansk	9.8	3.9	5.9	7
Gdynia	123.1	60.8	62.4	84
Szczecin	14.5	5.2	9.3	10
Empty				
Total	39.1	17.2	21.8	100
<i>of which:</i>				
Gdansk	2.4	1.1	1.3	6
Gdynia	30.9	13.4	17.6	79
Szczecin	5.8	2.8	3.0	15
			1000 TEU	Per cent
Total	225.4	106.2	119.1	100
<i>of which:</i>				
Gdansk	15.1	5.7	9.4	7
Gdynia	188.4	92.3	96.1	84
Szczecin	21.9	8.2	13.7	10
Empty				
Total	56.8	30.5	26.3	100
<i>of which:</i>				
Gdansk	3.5	2.2	1.4	6
Gdynia	45.1	23.4	21.7	79
Szczecin	8.2	5.0	3.2	14

Figure PL25: Container traffic at Polish ports in 2000 - in 1000 tonnes

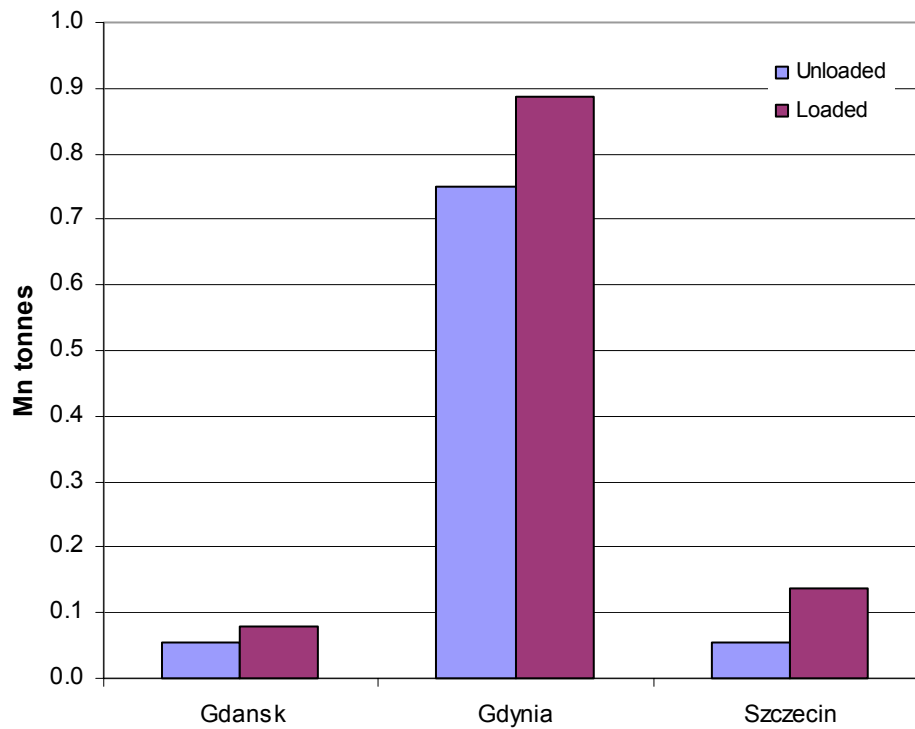
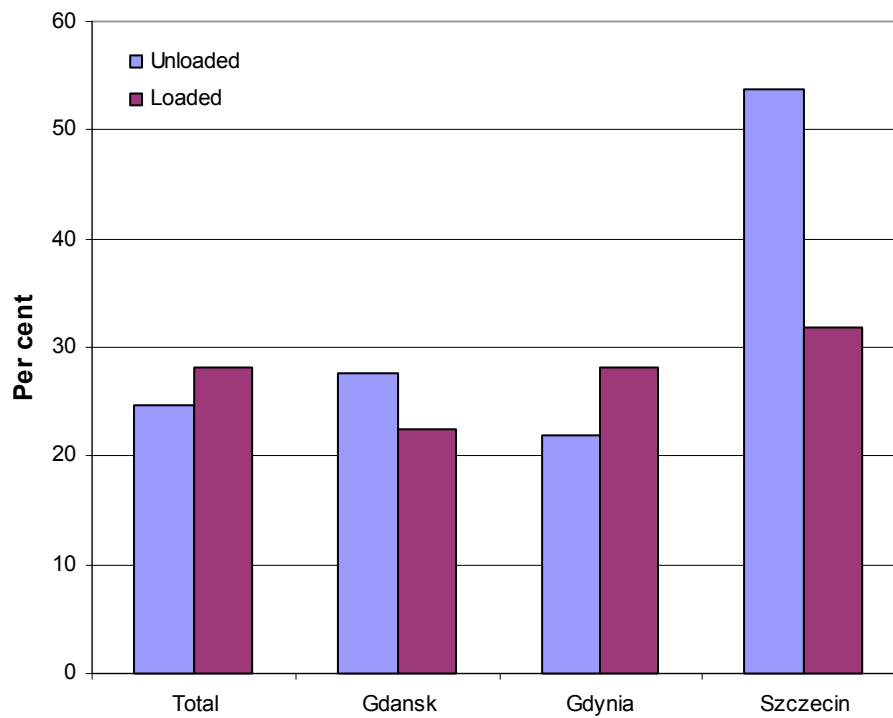


Figure PL26: Per centage of empty containers at Polish ports in 2000



Aviation

Poland has 6 major airports: Warszawa, Kraków, Gdansk, Wrocław, Poznan and Katowice. In 2000, there were 68 airlines serving 29 countries and 51 cities with scheduled services and a route network of 89 thousand kms (Table PL27). In 2000, the aircraft fleet consisted of nearly 900 aircraft of which 46 were transport aircraft. Of the latter 13 were ATR, 23 Boeings and 10 ERJ with an increase for Boeings and ERJ compared with 1999. This resulted in an increase in passenger capacity between the two years from some 4000 to 4700 (Table PL28).

Table PL27: Aviation summary

	Numbers					
	1995	1996	1997	1998	1999	2000
Number of Airlines	59	57	57	59	58	68
Network length km	108 043	88 897	93 992	89 166	87 395	89 975
Number of Countries with Scheduled Services	34	33	32	28	27	29
Number of Cities with Scheduled Services	53	52	49	49	48	51

Table PL28: Aircraft fleet

	Numbers					
	1995	1996	1997	1998	1999	2000
Transport Aircraft	33	32	32	30	35	46
of which ATR	7	8	8	8	13	13
Boeing	14	15	20	20	20	23
ERJ	-	-	-	-	2	10
Other Aircraft	874	886	848	812	833	876
	Passenger Capacity					
Transport Aircraft	3770	3531	3865	3740	3948	4656
of which ATR	448	512	512	512	752	752
Boeing	2124	2271	3097	3100	3100	3424
ERJ	-	-	-	-	96	480

Table PL29: Aircraft movements at Polish airports

	Numbers					
	1995	1996	1997	1998	1999	2000
Total	70 440	83 780	91 570	110 230	127 457	156 341
<i>Of which</i>						
Bydgoszcz				449	1 382	10 589
Gdansk	7 226	7 084	4 208	9 158	10 376	11 434
Katowice	5 596	3 588	4 290	5 240	6 510	8 710
Krakow	1 745	5 886	7 728	9 447	11 145	13 128
Lód?				1 434	1 412	851
Poznan	3 340	8 195	8 931	9 105	11 063	13 225
Rzeszów	571	1 016	1 193	923	2 511	3 804
Szczecin	1 572	1 371	1 765	3 341	4 207	5 939
Szymany					238	788
Warsawa	44 530	50 282	55 597	61 395	68 180	75 979
Wrocław	5 820	6 358	7 808	9 468	10 333	11 858

In 2000, there were over 150 thousand aircraft movements at Polish airports (Table PL29) compared with 70 thousand in 1995. Figure PL30 shows that Warsaw's share of aircraft movements declined from 63% in 1995 to under half in 2000. Poznan's share rose from 5% to 8% and Kraków's from 2 to 8% between the same years. Even more remarkable was the rise of Bydgoszcz, which reached 7% in 2000 from zero in earlier years.

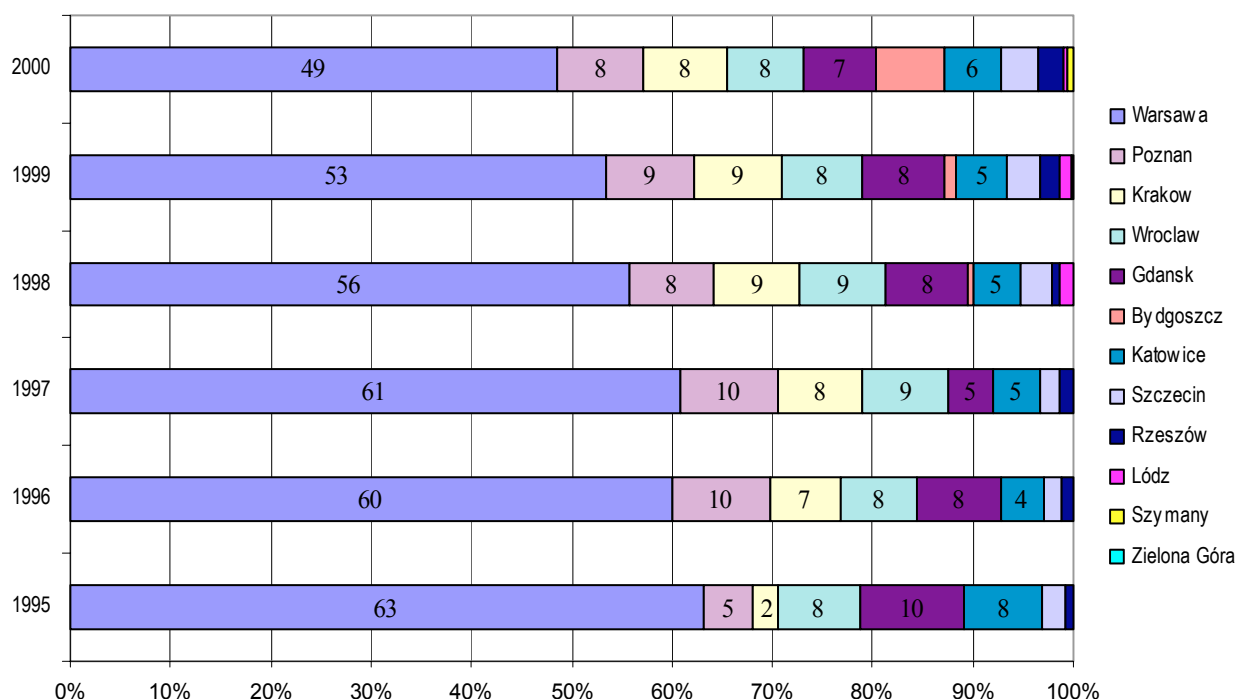
Figure PL30: Share of aircraft movements at Polish airports in 2000

Table PL31 shows the movements of passengers through Polish airports. In 2000, there were 5,7 million passenger movements through Polish airports, compared with 3,3 million in 1995. Table PL31 and Figures PL32 and PL33 show that the majority of these were at Warsaw, which accounted for 75% of all passenger movements while Kraków accounted for a further 9%.

Table PL31: Passenger movements at Polish airports

	Numbers					
	1995	1996	1997	1998	1999	2000
Total	3 274 062	3 610 110	4 192 015	4 900 902	5 246 147	5 732 862
Of which						
Arrivals	1 632 719	1 805 642	2 094 609	2 450 311	2 611 145	2 864 258
Departures	1 641 343	1 804 468	2 097 406	2 450 591	2 635 002	2 868 604
Of which						
International	2 685 695	2 871 114	3 369 725	4 035 847	4 326 497	4 696 308
Domestic	588 367	738 896	822 290	865 055	919 650	1 036 554
Of which						
Bydgoszcz	-	-	-	1 421	5 340	14 089
Gdansk	167 872	178 025	195 264	213 158	236 561	254 131
Katowice	112 357	61 347	90 204	136 022	160 930	160 946
Krakow	40 868	181 577	244 280	331 829	400 994	494 688
Lódz	-	-	-	1 757	3 552	794
Poznan	59 379	99 759	132 049	2 632	187 063	204 672
Rzeszów	6 226	7 335	11 362	169 895	11 386	8 597
Szczecin	29 527	34 069	44 570	9 255	48 637	56 334
Szymany	-	-	-	45 107	2 453	1 873
Warszawa	2 735 469	2 911 974	3 327 526	3 815 624	3 997 531	4 325 814
Wroclaw	122 364	136 024	146 760	173 990	191 502	210 717
Zielona Góra	-	-	-	212	198	207

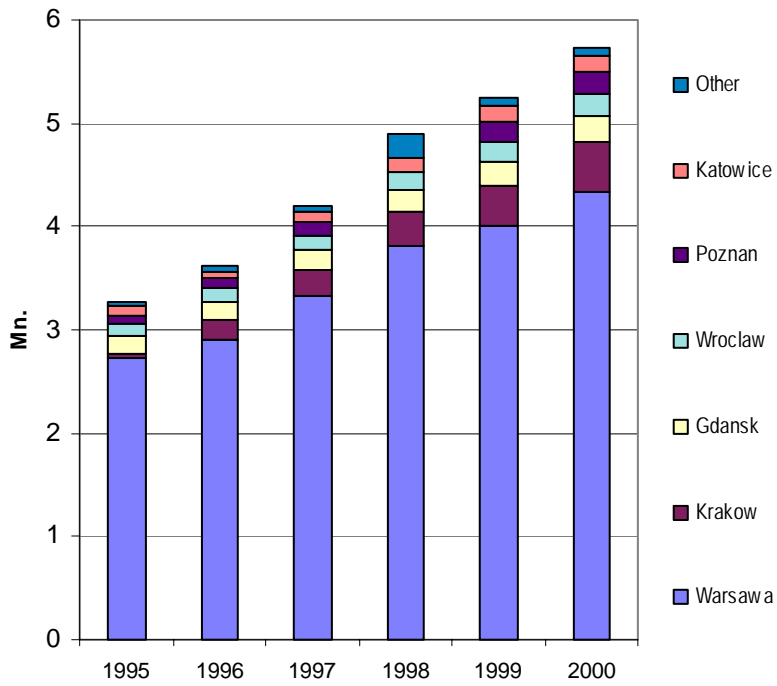
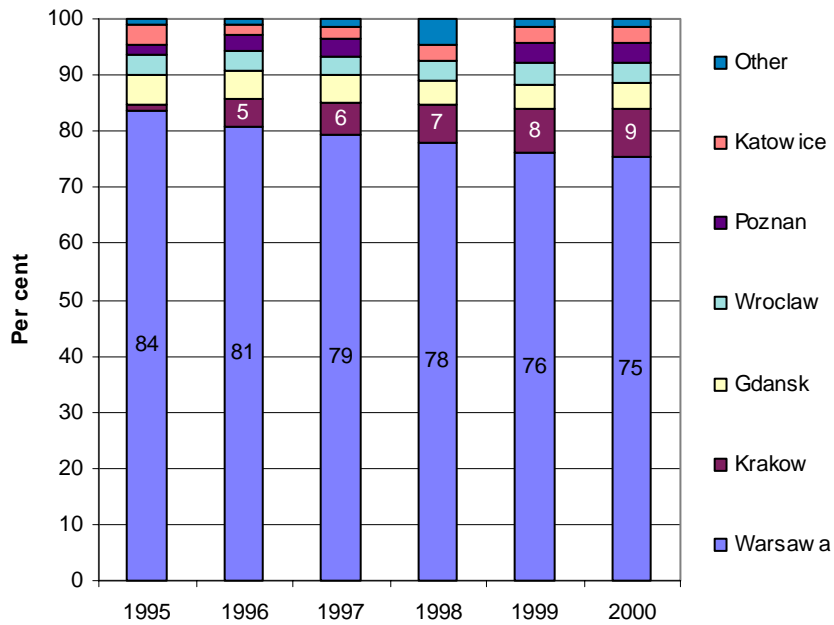
Figure PL32: Passenger movements at Polish airports

Figure PL33: Share of passenger movements at Polish airports


Table PL34 and Figures PL35 and PL36 show freight movements through Polish airports. In 2000, 61 thousand tonnes of freight moved through Polish airports, compared with 38 thousand tonnes in 1995. In 2000, Warsaw accounted for 73% of the total, Katowice 17% and Kraków a further 5%.

Table PL34: Freight and mail traffic at Polish airports

	tonnes					
	1995	1996	1997	1998	1999	2000
Total	38 265.0	47 172.0	57 824.0	54 092.0	53 772.3	61 224.4
Of which						
Loaded	24 988.0	19 209.0	22 676.0	20 872.9	19 720.9	26 355.9
Unloaded	13 277.0	27 963.0	35 148.0	33 219.1	34 051.4	34 868.5
Of which						
International	32 633.0	42 012.0	51 785.0	49 484.9	50 191.6	57 252.5
Domestic	5 632.0	5 160.0	6 039.0	4 607.1	3 580.7	3 971.9
Of which						
Mail	.	.	.	.	6 326.9	6 730.7
Of which						
Bydgoszcz	-	-	-	80.0	120.0	-
Gdansk	1 455.0	1 315.0	1 107.0	1 281.6	1 472.8	1 552.5
Katowice	-	564.4	1 291.6	1 365.0	1 522.0	7 745.0
Kraków	848.0	684.0	1 060.0	1 280.7	2 059.0	2 855.6
Lódz	-	-	-	3.5	125.8	-
Poznan	214.0	472.0	405.7	468.9	848.2	388.8
Rzeszów	45.0	1 913.1	5 356.0	3 003.5	1 757.3	1 221.1
Szczecin	97.0	-	622.9	615.2	445.1	337.0
Warszawa	34 396.0	40 902.1	46 864.6	45 212.7	44 794.3	44 576.0
Wroclaw	1 210.0	1 321.5	1 116.2	780.9	627.8	2 548.4

Figure PL35: Freight and mail traffic at Polish airports

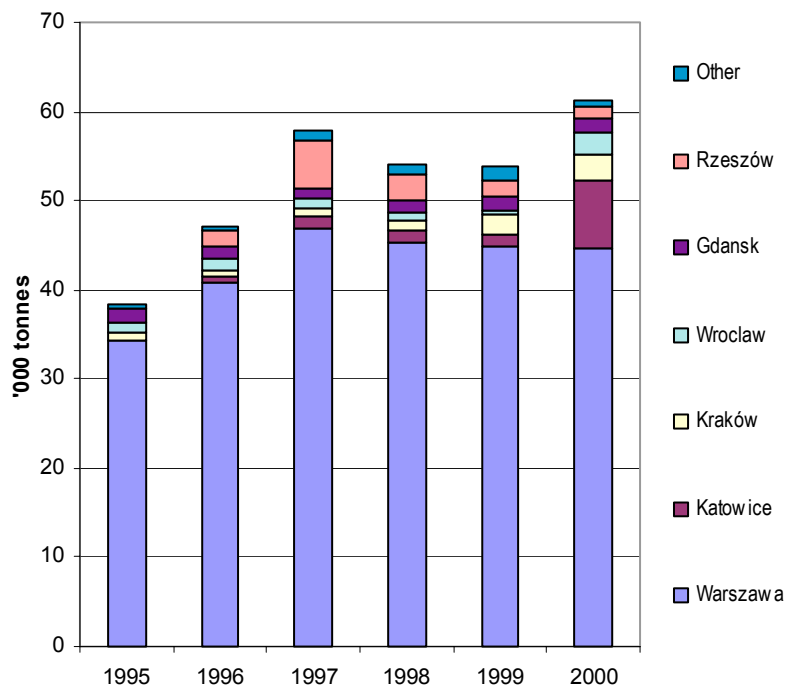
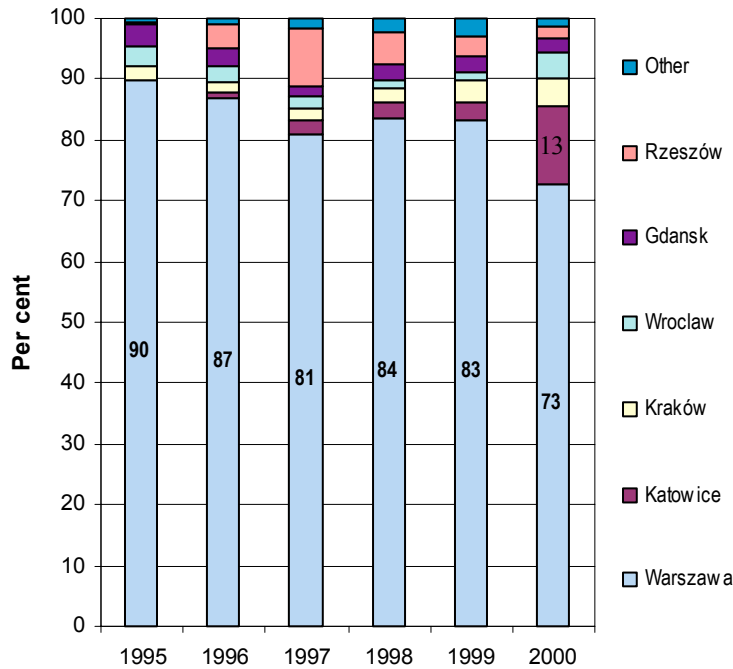


Figure PL36: Share of freight and mail traffic at Polish airports


At Warsaw airport, Table PL37 and Figure PL38 show the development of scheduled and non-scheduled passenger movements. In 2000, there were 3,8 million scheduled passenger movements and 0,5 million non-scheduled movements. This represented a rise of some 40% for scheduled and some 800% for non-scheduled since 1995.

Table PL37: Scheduled and non-scheduled passenger movements at Warsaw airport

	Million					
	1995	1996	1997	1998	1999	2000
Scheduled	2.7	2.9	3.2	3.4	3.5	3.8
Non-scheduled	0.1	0.2	0.3	0.4	0.5	0.5
Total	2.7	3.1	3.5	3.8	4.0	4.3

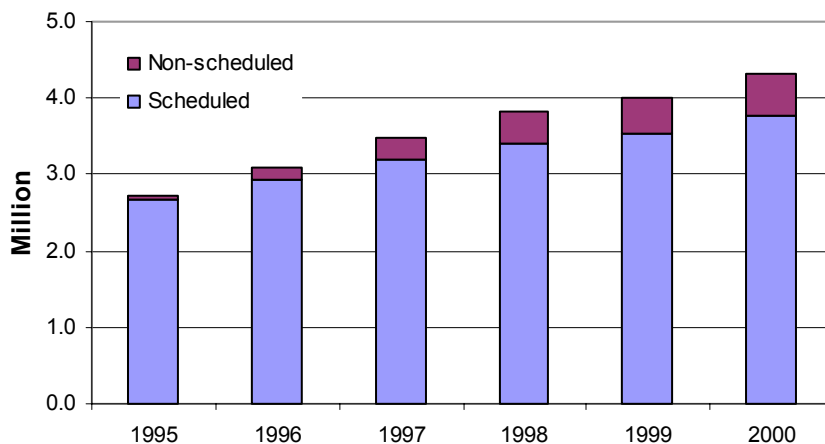
Figure PL38: Scheduled and non-scheduled passenger movements at Warsaw airport


Table PL39 and Figure PL40 show the monthly pattern of passenger movements through Warsaw in 2000. The peak month, September, was 80% higher than the trough in February. Table PL41 shows the ranking of the top ten air routes out of Warsaw between 1995 and 2000. As Figure PL42 shows, the top four routes, London, Frankfurt, Paris and Amsterdam are the same with some changes in ranking. The most interesting aspect is the replacement of Moscow, Chicago and New York lower down the ranking in 1995 by two domestic routes, Wrocław and Kraków, and Brussels in 2000.

Table PL39 and Figure PL40: Monthly passenger movements at Warsaw airport - 2000

	in 1000
January	255
February	252
March	305
April	325
May	405
June	420
July	430
August	420
September	455
October	400
November	313
December	287

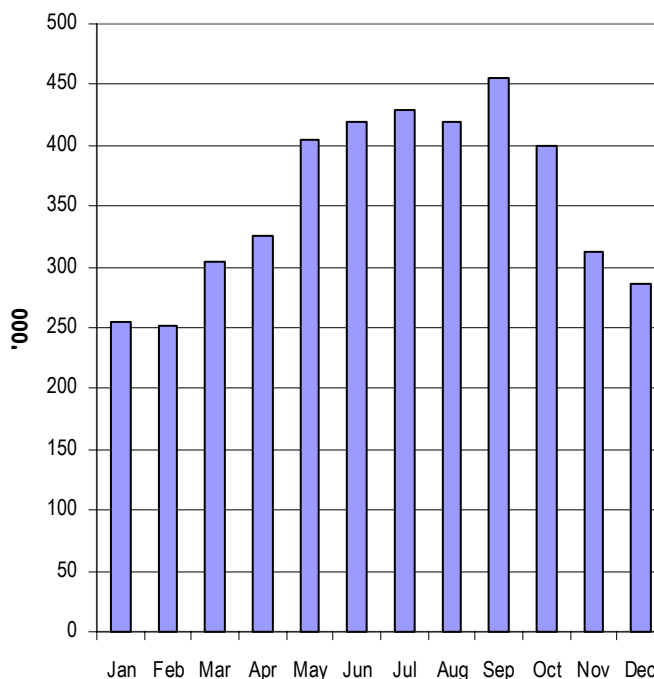
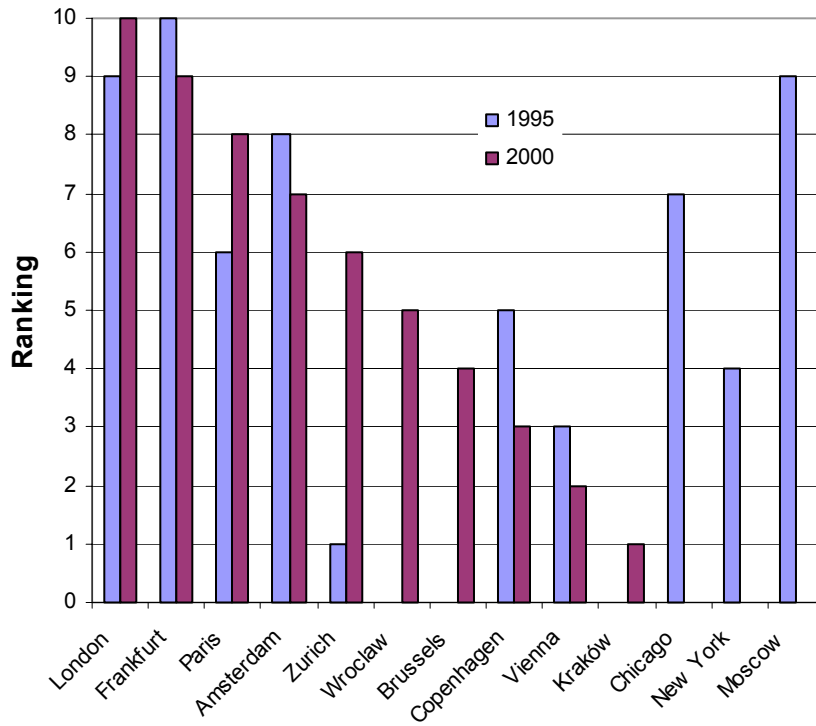


Table PL41: Ranking of top ten air routes from Warszawa

	1995	1996	1997	1998	1999	2000
London	2	2	2	1	1	1
Frankfurt	1	1	1	2	2	2
Paris	5	4	3	3	3	3
Amsterdam	3	3	4	5	4	4
Zurich	10	10	-	-	6	5
Wrocław	-	-	-	-	9	6
Brussels	-	-	10	9	-	7
Copenhagen	6	7	8	8	10	8
Vienna	8	6	7	7	7	9
Kraków	-	-	-	-	-	10
Chicago	4	5	5	6	5	-
New York	7	8	6	4	8	-
Moscow	9	9	9	-	-	-
Munich	-	-	-	10	-	-

Figure PL21: Change in ranking of top ten routes from Warszawa - 1995/2000



3.8 ROMANIA

Romania is the second largest candidate country after Poland with 238 390 square km, and, together with Bulgaria, the eastern-most of the Balkan countries. With more than 2.2 million inhabitants, the capital Bucharest is by far the most important city in the country. In the south of the country, the Danube constitutes the border with Bulgaria. Further to the east, Romania features the Danube Delta, where the river flows into the Black Sea. Romania's Black Sea coastline is approximately 250 km long. The main city on the coast is Constantza (340 000 inhabitants, the 3rd largest in the country), which is also Romania's main port. Via the Bosphorus and the Marmara-Sea, Romania has access to the Mediterranean Sea.

After a period with a persistent decreasing trend (1997-1999), the Romanian economy registered a certain growth again in 2000. In absolute terms, the estimated GDP for 2000 was 1.6% higher than in 1999. This growth was mainly determined by the increase of the activity volume (gross value added) in industry (+6.1%), construction (+6.3%), and services (+3.1%). The growing trend still continues in 2001. In the first semester of 2001, the GDP increased, in absolute terms, with 4.9% as against the same period of 2000. In general, the privatisation process, the reduction of inflation, measures stimulating economic growth and the qualifying for EU-membership are being considered as priorities.

Following the Helsinki-summit in December 1999, the negotiations for EU-adhesion started in February 2000. In general, it is expected that requirements in the field of environmental protection and agricultural policy will constitute major challenges for Romania.

Figures for 2000 show that Romania's main trading partners for export are Italy (22.4 % of total export value), Germany (15.7 %), France (7.0 %), Turkey (6.1 %) and the United Kingdom (5.3 %). On the basis of the total import value, Italy comes first too (18.7 %) followed by Germany (14.7 %), Russia (8.6 %), France (6.1 %) and the United Kingdom (4.1 %).

In absolute terms, road and rail transport play a dominant role in Romanian goods transport having performed 14 288 and 17 982 million tkm respectively (2000). Inland waterway transport has seriously decreased since the destruction of the Danube bridge in Novi Sad / Yugoslavia (NATO air-raid). Whereas in 1999, 2 802 million tkm were performed, this number fell to 2 634 in 2000. First quarterly results show signs of improvement since the removal of debris and the subsequent possibility of international navigation on the Danube again.

Maritime transport has a particular position: the only major port of Romania, Constantza, is located at the end of the Rhine-Maine-Danube corridor. The Danube-Black-Sea canal has its mouth right inside the port, allowing direct transshipment from seagoing vessels onto barges. Another port of interest is Galatzi further to the North, located 50 km west of the Danube Delta, allowing sea-going vessels to perform a journey up-stream through the natural Sulina canal to reach the port installations.

In 2000, the volume of goods handled in Romanian ports amounted to 45.4 million tonnes, an increase of 6.6% compared to 1999. 25.5 million tonnes (56%) of this volume was handled in maritime, 19.9 million tonnes in inland waterway transport. In maritime traffic, the port of Constantza, with 22.9 million tonnes is dominant and represents 90% of the total volume in maritime traffic (Table RO1).

Table RO1: Maritime transport of goods in Romanian ports in 2000 in thousand tonnes

	Loaded			Unloaded			Total	
	Export goods	Transit outwards	Total	Import goods	Transit inwards	Total	1000 t	share (%)
All ports 1996¹⁾	13 192	804	14 016	20 861	2 323	23 985	38 001	X
All ports 1997¹⁾	12 295	217	12 643	18 964	2 501	21 748	34 391	
All ports 1998¹⁾	10 860	813	11 673	17 344	1 593	18 966	30 639	
All ports 1999	11 493	783	12 276	10 597	496	11 093	23 369	
All ports 2000	12 252	399	12 651	11 773	1 045	12 818	25 469		100
Constantza	9 883	398	10 281	11 591	1 045	12 636	22 917	90.0
Galati	1 457	-	1 457	28	-	28	1 485	5.8
Braila	189	-	189	-	-	-	189	0.7
Midia	321	1	322	46	-	46	368	1.4
Tulcea	274	-	274	43	-	43	317	1.2
Mangalia	81	-	81	41	-	41	122	0.5
Cernavoda	47	-	47	24	-	24	71	0.3

¹⁾ Totals include small volumes carried in domestic traffic

Having only two major ports, it is obvious that Romanian maritime enterprises deal essentially with international transport of goods. Maritime transport of passengers is negligible and statistics in this respect are not collected.

Tourism on the Black-Sea coast is fairly well developed, mainly on the stretch between Constantza and the Bulgarian border. Tourism is primarily national in character.

Romania has four international airports, of which two are located in Bucharest: Otopeni and Baneasa airport. Bucharest-Baneasa should however be considered as the main airport for national traffic. Only 0.9 % of passengers in international traffic go to the account of Baneasa. Bucharest-Otopeni is responsible for 87.9% of all international passengers. The other airports, Timisoara and Constantza, take a share of 5% and 2% respectively. It is foreseen that Otopeni airport will integrate the entire traffic of Baneasa within the next five years. The today airport premises would be covered by urban developments.

In addition, there are ten more airports in Romania which mainly handle national air traffic.

Table RO2: International air traffic, 1997 - 2000

	Passengers (number)				Freight and mail (tonnes)		
	embarked	disembarked	total	direct transit	loaded	unloaded	total
Total 1997	765 409	817 316	1 582 725	152 017	4 216	9 057	13 273
Total 1998	813 233	882 821	1 696 054	121 592	4 076	9 599	13 675
Total 1999	868 373	926 253	1 794 626	130 904	4 693	9 528	14 221
Total 2000	996 894	1 068 128	2 065 022	182 362	4 835	10 415	15 250
	2000, of which:						
<i>scheduled flights</i>	948 432	1 021 838	1 970 270	181 053	4 094	8 930	13 024
national operators	451 538	531 490	983 028	174 837	1 265	3 601	4 866
foreign operators	496 894	490 348	987 242	6 216	2 829	5 329	8 158
<i>non-scheduled flights</i>	48 462	46 290	94 752	1 309	741	1 485	2 226
national operators	33 708	33 354	67 062	530	479	1 305	1 784
foreign operators	14 754	12 936	27 690	779	262	180	442
International air traffic: main airports							
Bucharest-Otopeni	869 620	946 453	1 816 073	59 654	4 148	9 814	13 962
Bucharest-Baneasa	9 593	9 462	19 055	231	312	304	616
Timisoara	54 550	51 765	106 315	74 754	141	116	257
Constantza	23 415	22 521	45 936	15 840	44	-	44

In 2000, 2.36 million passengers were carried in commercial air traffic, an increase of nearly 14% compared to the previous year. 2.07 million passengers were carried in international traffic, of which 95 % in scheduled traffic (Table RO2). The main destinations in scheduled traffic (embarked and disembarked) from Romanian airports are Amsterdam (169 975 passengers), Paris (154 502), Tel Aviv (147 898), Frankfurt/Main (134 266) Zürich (130 431) and Istanbul (122 229) (Table RO3).

Table RO3: International passenger air traffic* 2000: main origins and destinations

	ORIGIN		DESTINATION	
	nb of flights	nb of passengers	nb of flights	nb of passengers
1. Amsterdam	1 071	84 757	1 072	85 218
2. Paris	1 166	81 775	1 162	76 925
3. Tel Aviv	635	76 849	639	76 079
4. Frankfurt / Main	1 084	69 995	1 079	68 669
5. Zürich	723	66 815	731	64 459
6. Istanbul	895	62 069	885	63 034
7. Vienna	1 246	55 274	1 263	60 571
8. Athens	864	46 231	859	44 486
9. Rome	424	35 610	826	35 436
10. Budapest	1 480	33 681	424	32 270

* both scheduled and non-scheduled flights have been considered

Employment in the transport and storage sector amounted to 478 thousand persons in 1993. Ever since, the employment in this sector has been decreasing with at least 20 thousand jobs less per year. In 1998, employment in this sector amounted to 340 thousand.

Romania is a member of the ECMT (European Conference of Ministers of Transport – since 1992), IMO (International Maritime Organisation), ICAO (International Civil Aviation Organisation) and IATA.

AIR TRANSPORT

Transport Infrastructure and Equipment

Infrastructure

There are four airports for international traffic in Romania: Bucharest-Otopeni, Bucharest-Baneasa, Timisoara and Constantza. Airports with mainly national air traffic are Arad, Baia Mare, Cluj-Napoca, Iasi, Oradea, Satu Mare, Sibiu, Suceava and Targu Mures.

The airport of Bucharest-Otopeni is by far the largest, handling about 78% of the total passengers. In international traffic, the airport offers services to over 30 scheduled destinations. It also hosts a cargo terminal, where 87% of the total volume of cargo and mail was handled (Figures RO4 and RO5).

Equipment

The Romanian aircraft register includes 28 passenger aircraft (end of year 2000) with a total seat capacity of 2 866 and 3 cargo aircraft with a total loading capacity of 316 tonnes. The types of passenger aircraft registered include two Airbus A 310, ten Boeing 737, seven ATR-42, and two BAC 1-11. Dedicated cargo aircraft include two Boeing 707 and one AN-26.

The number of aircraft in the register has decreased considerably over the last couple of years: in 1994, there were still 59 passenger and 8 cargo aircraft registered.

Figure RO4:
International passenger traffic 2000:
share of airports

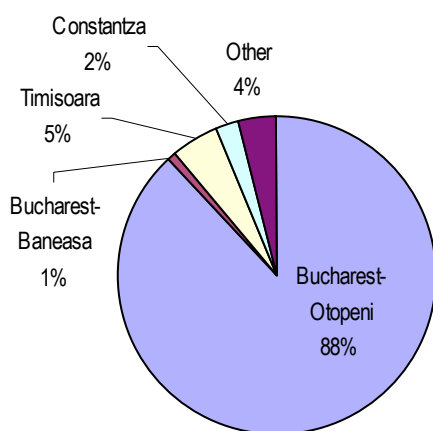
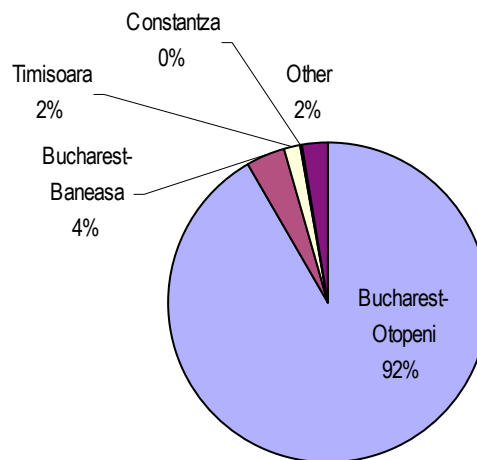


Figure RO5:
International traffic of freight and
mail 2000: share of airports



Air traffic and transport measurement

Passenger air transport has declined seriously between 1996 and 1998 but has been growing again since 1999, without however reaching pre-1996 levels.

In domestic air traffic transport, 157 thousand passengers (basis: embarkments) were carried, 83% on scheduled flights (Table RO6). The relations that carried the most passengers were between Cluj-Napoca and Bucharest Baneasa (32 910 passengers), Timisoara and Bucharest Baneasa (22 903) as well as between Oradea and Bucharest Baneasa (22 377).

Table RO6: National air traffic, 2000

	passengers	share (%)
Total 1997*	172 038	
Total 1998*	164 788	
Total 1999*	141 318	
Total 2000*	157 027	100
main routes**		
Cluj-Napoca - Bucharest/Baneasa	32 910	21
Timisoara - Bucharest/Baneasa	22 903	15
Oradea - Bucharest/Baneasa	22 377	14

* scheduled and non-scheduled flights ** scheduled flights only

Over 58 270 commercial aircraft movements were operated in Romanian airports (an increase of nearly 21% compared to 1999) transporting a total of 2.36 million passengers and 16 thousand tonnes of freight and mail. About 78% of the movements constituted international flights. Of all international aircraft movements, foreign operators performed 38%. Bucharest-Otopeni airport alone dealt with about 30 757 aircraft movements (53% of the total). Freight and mail transported by air (national and international) through Otopeni-airport reached 14 024 tonnes in 2000. All Romanian airports together handled 16 099 tonnes, an increase of nearly 6% compared to 1999.

A total of 8 Romanian air transport companies had licenses for flight activities (as of 2000). The most important are TAROM – Romanian Air Transport and Romavia. There is however a certain fluctuation in the number of licensed companies.

The National Statistical Institute collects no statistics on accidents.

MARITIME TRANSPORT

Transport Infrastructure and Equipment

Infrastructure

Romania features a limited amount of ports: 3 are located on the Black-Sea coast (Constantza, Midia, Mangalia), the other ports and are either on the Black Sea-Danube channel (Cernavoda) or on the Danube close to the Danube Delta (Galati, Tulcea, Braila) Only the port of Constantza and Galati were over the threshold of

1 million tonnes of cargo in 2000. Both ports together handle 95.8 % of the maritime traffic (cfr. Table RO1).

The ports of Midia and Mangalia are satellite ports of Constantza. All three ports are managed by the 'Compania Nationala Administratia Porturilor Maritime Constantza S.A.' ('National Company Maritime Ports Administration Constantza S.A.') or MPAC. The company is organised as a stock company which manages the port territories as public domain. MPAC is run by the Shareholders General Assembly and by the executive body that is the Board of Administration. MPAC is under the co-ordination of the General Direction for Maritime Transport of the Ministry of Transport. The MPAC is member of IAPH (International Association of Ports and Harbours), IACP (International Association of Cities and Ports), EIA (European Intermodal Association) as well as MCT (Mediterranean Community of Transport).

The port of Constantza is the largest and deepest Romanian port on the Black Sea. It has a design capacity of 85 million tonnes per year. In 2000, the port handled 22.9 million tonnes of goods, representing 90% of the total maritime cargo loaded and unloaded in Romania. The port features terminals for almost all types of cargo, including container and ro-ro. In general, passenger traffic is very limited and Constantza has not yet a dedicated passenger terminal. A new passenger terminal (two berths, 294m and 364m long, capacity of 20 000 passengers/year, for vessels up to 13 000 gross registered tonnes) is however planned. Constantza lies far under the reporting threshold according to which detailed statistics are required in the EC Maritime Statistics Directive, at least today. There is no statistical data collection on passenger traffic.

Apart from Constantza, the only other port with a volume of over one million tonnes is Galati. Located East of Danube Delta, sea-going vessels are capable to navigate upstream to reach the port installations. Here, transshipment on river barges can be performed. Another smaller port located in the Danube Delta is Braila.

The ports of Midia and Cernavoda are located on the Black Sea – Danube canal, which can be entered through the port of Constantza (locks).

Equipment

According to the Ministry of Transport, there is a Ship register, but this register is hard to keep updated (see Table RO7 for vessels registered in 1998 and 1999). A lot of Romanian ships have been sold or leased, and those who still navigate under Romanian flag hardly call in Romanian harbours. Also, some ships have been scrapped recently. This general situation is confirmed when one looks at the number of port entries of vessels sailing under Romanian flag (see further). In 2001, there was not a single passenger ship registered in Romania.

Table RO7: Ships registered in the Romanian shipping register

	1998				
	Number at 31.12.1998	Capacity in dwt at 31.12.1998	Reg.Gross Tonn. at 31.12.1998	nb registered during year	nb deregistered during year
Passenger vessels	2	826 <i>pass.</i>		-	-
Tanker vessels (liquid bulk)	16	1 045 314	199 743	-	2
Dry bulk vessels	34	1 630 593	771 073	4	3
Container ships	2	16 400	15 160	-	-
Cargo vessels, non-specialized	151	1 190 355	868 022	-	11
Cargo vessels, specialized	28	42 000	21 371	-	-
Ro-ro vessels	9	43 794	79 739	-	-
Ferry-boats	2	24 000	41 242	-	-
"Remorhere"	83	-	23 050	-	-
Technical, special purpose ships	136	-	196 299	-	-

	1999				
	Number at 31.12.1998	Capacity in dwt at 31.12.1998	Reg.Gross Tonn. at 31.12.1998	nb registered during year	nb deregistered during year
Passenger vessels	1	410 <i>pass.</i>		-	1
Tanker vessels (liquid bulk)	15	959 314	152 743	-	1
Dry bulk vessels	14	844 790	300 985	-	20
Container ships	2	16 400	15 160	-	-
Cargo vessels, non-specialized	144	1 110 524	808 991	1	8
Cargo vessels, specialized	28	42 000	21 371	-	-
Ro-ro vessels	8	39 820	71 579	-	1
Ferry-boats	2	24 000	41 242	-	-
"Remorhere"	76	-	16 570	-	7
Technical, special purpose ships	134	-	196 219	-	2

Traffic and Transport Measurement

Passengers

Cruises with stops in Constantza have a certain tradition, however, there are no available statistics on their number. It is recalled that there is no dedicated passenger terminal yet.

Freight

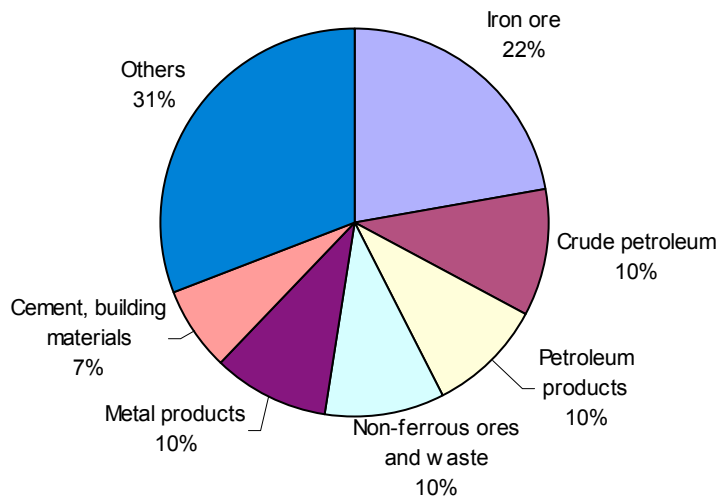
In 2000, the total volume of freight handled in maritime traffic in all Romanian ports was 25.5 million tonnes. 12.651 million tonnes were loaded, 12.818 million tonnes unloaded. (see Table RO1).

The share of incoming and outgoing transit traffic is 5.7%, while exports are 48.1% and imports represent 46.2% of the total cargo loaded/unloaded. Major commodity categories are iron ores (22.2%), crude oil (10.4%) and petroleum products (10.0%) (see Table RO8 and Figure RO9). A total of 31 423 containers were loaded, 31 335 were unloaded.

Keeping in mind the relative importance of the port of Constantza, it is not surprising to see that the shares of the main goods groups handled in that port are very similar: iron ores (24%), crude oil (11%) and petroleum products (10.0%). The port of Galati handled notably metal products (81.7 % of the total cargo handled). The other, smaller ports are often specialized in the handling of certain goods, like Midia for petroleum products and Tulcea for ores and non-ferrous waste.

Table RO8: Maritime transport of goods in all Romanian ports in 2000 – by group of goods – in thousand tonnes

	loaded 1000 t	unloaded 1000 t	total 1000 t	total share (%)
All groups	12 651	12 818	25 469	100.0
1 Cereals	599	194	793	3.1
2 potatoes, other fresh or frozen fruits and vegetables	0	49	49	0.2
3 live animals, sugar beet	164	376	540	2.1
4 wood and cork	801	0	801	3.2
5 textiles, text.articles and man-made fibres, other raw animal and veget. mat.	4	4	8	0.0
6 food stuff and animal fooder	60	261	321	1.3
7 oil seeds and oleaginous fruits and fats	163	25	188	0.7
8 solid mineral fuels	84	1 061	1 145	4.5
9 crude petroleum	50	2 603	2 653	10.4
10 petroleum products	1 526	1 017	2 543	10.0
11 iron ore, iron and steel waste and blast furnace dust	1 560	4 102	5 662	22.2
12 non-ferrous ores and waste	414	2 072	2 486	9.8
13 metal products	2 459	18	2 477	9.7
14 cement, lime, manufactured building materials	1 754	14	1 768	6.9
15 crude and manufactured minerals	2	35	37	0.2
16 natural and chemichal fertilizers	1 145	249	1 394	5.5
17 coal chemichals, tar	26	15	41	0.2
18 chemichals other than coal chemichals and tar	998	217	1 215	4.8
19 paper pulp and waste paper	9	0	9	0.0
20 transp. equip., machinery, app., engines whether or not assembl., and parts thereof	25	5	30	0.1
21 manufactured of metal	227	61	288	1.1
22 glass, glassware, ceramic products	18	1	19	0.1
23 leather, textile, clothing, other manufactured articles	4	4	8	0.0
24 miscellaneous articles	559	435	994	3.9

Figure RO9: Main commodities handled in Romanian ports, 2000


As mentioned earlier, international transport of goods carried out by vessels registered in Romania is limited: in 2000, only 0.4 million out of a total of 12.7 million tonnes were loaded on vessels operating under Romanian flag (3.12%). Main destinations of the goods loaded were Turkey (28% of all goods) Egypt (8%) and Italy (7%), as shown in Table RO10.

Unloaded in Romanian ports were 12.8 million tonnes. Only 0.071 million tonnes (0.5%) were unloaded from vessels sailing under Romanian flag. The main countries of origin of the goods were Brazil (20%), Australia (17%), the Ukraine (12%) and Italy (6%), as shown in Table RO11.

Both for cargo loaded and unloaded, solid and liquid bulk take a lion's share: 40% of the total cargo loaded in Romanian ports consisted of solid bulk, 18% of liquid bulk. With regards to goods unloaded, these shares read 66% and 28% respectively (Figure RO12).

In 2000, 4 874 vessels called at Romanian ports. Only 1.2% carried the Romanian flag (Table RO13). This very low share is explained by the fact that there are few vessels left sailing under Romanian flag.

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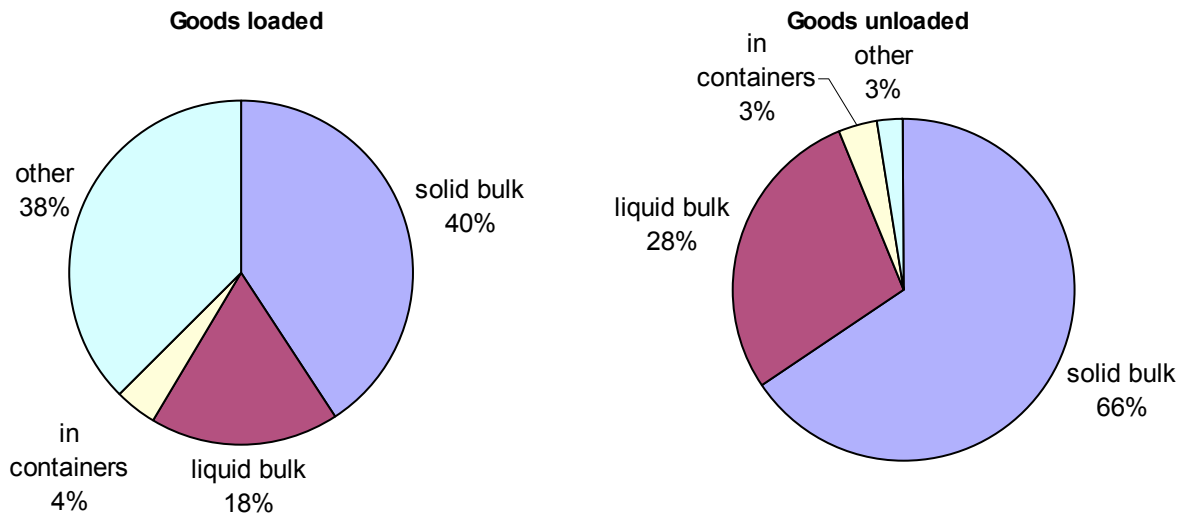
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Table RO10: Goods loaded in all Romanian ports – by destination (in thousand tonnes), 2000

	TOTAL	solid bulk	liquid bulk	in containers	other
Goods loaded	12 651	5 162	2 258	472	4 759
<i>of which</i> loaded on vessels under Romanian flag	395	258	42	0	95
<i>of which</i> loaded on vessels under foreign flag	12 256	4 904	2 216	472	4 664
<i>by country of destination:</i>					
South Africa	31	-	31	-	-
Albania	46	3	43	-	-
Algeria	313	67	-	-	246
Saudi Arabia	126	45	-	8	73
Argentina	45	3	-	-	42
Bahrain	12	-	-	7	5
Bangladesh	10	-	-	-	10
Belgium	129	10	22	-	97
Benin	133	133	-	-	-
Brazil	22	10	11	-	1
Bulgaria	293	-	281	11	1
Cambodia	11	-	-	-	11
Cameroon	17	5	-	10	2
Canada	53	-	-	9	44
Chile	40	-	-	-	40
China	186	97	6	34	49
Cyprus	53	10	-	33	10
Colombia	25	2	-	4	19
Croatia	11	11	-	-	0
Cuba	19	3	-	-	16
Denmark	30	1	-	-	29
Egypt	977	663	27	22	265
United Arab Emirates	93	7	-	-	86
France	220	34	106	13	67
Georgia	216	70	145	-	1
Germany	37	4	4	-	29
Ghana	22	3	-	-	19
Gibraltar	56	-	56	-	-
Greece	347	50	76	37	184
Equatorial Guinea	119	119	-	-	-
India	77	3	29	16	29
Iran	144	82	-	1	61
Israel	480	82	76	44	278
Italy	911	427	126	61	297
Kenya	12	-	-	2	10
Kuwait	15	-	-	1	14
Lebanon	78	13	-	5	60
Libya	31	22	-	-	9
FYROM	15	11	-	-	4
Malaysia	30	-	-	6	24
Malta	112	-	97	15	-
Morocco	254	145	58	-	51
Mexico	62	16	-	-	46
Nicaragua	34	34	-	-	-
Nigeria	170	48	54	-	68
Netherlands	129	56	70	-	3
Pakistan	16	14	-	-	2
Portugal	173	156	1	-	16
United Kingdom	50	-	-	1	49
Republic of Korea	51	10	-	2	39
Russia	208	208	-	-	-
USA	532	52	53	6	421
Singapore	102	-	-	3	99
Syria	150	14	-	8	128
Slovenia	94	-	85	-	9
Spain	405	267	8	-	130
Sudan	25	17	-	-	8
Taiwan	159	64	-	4	91
Tanzania	22	-	-	-	22
Thailand	131	112	-	6	13
Tunisia	156	28	20	8	100
Turkey	3 495	1 768	557	52	1 118
Ukraine	268	93	160	10	5
Venezuela	106	9	-	-	97
Yemen	16	-	-	2	14
Yugoslavia	28	-	28	-	-

Table RO11: Goods unloaded in all Romanian ports – by origin (in thousand tonnes), 2000

	TOTAL	solid bulk	liquid bulk	in containers	other
Goods unloaded	12 818	8 408	3 638	448	324
<i>of which</i> unloaded from vessels under Romanian flag	71	71	-	-	-
<i>of which</i> unloaded from vessels under foreign flag	12 747	8 337	3 638	448	324
<i>by country of origin:</i>					
South Africa	266	266	-	-	-
Algeria	11	11	-	-	-
Netherlands Antilles	69	-	69	-	-
Argentina	62	59	-	3	-
Australia	2 215	2 215	-	-	-
Belgium	13	13	-	-	-
Brazil	2 581	2 556	-	25	-
Bulgaria	64	9	45	3	7
Canada	126	120	-	6	-
Chile	11	11	-	-	-
China	105	4	-	59	42
Cyprus	27	22	4	1	-
Colombia	100	29	66	-	5
Cuba	399	385	-	-	14
Denmark	117	115	-	1	1
Equador	90	49	-	4	37
Egypt	47	-	-	3	44
France	69	20	27	14	8
Georgia	372	6	363	-	3
Ghana	21	21	-	-	-
Greece	182	148	6	21	7
Guinea	95	95	-	-	-
Equatorial Guinea	55	55	-	-	-
Guinea-Bissau	170	170	-	-	-
Guyana	147	147	-	-	-
India	170	170	-	-	-
Iran	12	12	-	-	-
Ireland	23	23	-	-	-
Israel	192	24	148	19	1
Italy	758	51	618	50	39
Japan	20	-	-	17	3
Kazakhstan	228	-	226	-	2
Malta	99	-	99	-	-
Morocco	228	225	-	3	-
Nicaragua	22	22	-	-	-
Netherlands	15	5	-	10	-
Peru	23	19	-	-	4
Poland	77	77	-	-	-
Portugal	21	21	-	-	-
United Kingdom	50	9	-	23	18
Republic of Korea	48	5	-	29	14
Russia	421	10	407	-	4
USA	435	417	-	16	2
Syria	110	57	53	-	-
Spain	32	21	-	11	-
Sri Lanka	108	108	-	-	-
Sweden	20	20	-	-	-
Taiwan	28	-	-	17	11
Togo	23	23	-	-	-
Tunisia	10	7	-	-	3
Turkey	272	170	-	53	49
Ukraine	1 543	16	1 507	19	1
Venezuela	195	195	-	-	-
Yugoslavia	69	47	-	21	1

Figure RO12: Goods loaded and unloaded in Romanian ports, 2000- by type of commodity

Table RO13: Maritime traffic: vessel movements - 2000

	1996		1997		1998		1999		2000	
	port entries	port exits	port entries	port exits	port entries	port exits	port entries	port exits	port entries	port exits
Total vessel movements	3 137	3 432	4 351	4 717	4 643	5 051	4 867	5 226	4 874	5 163
Romanian flag vessels	:	:	:	:	:	:	181	192	59	70
Foreign flag vessels	:	:	:	:	:	:	4 686	5 034	4 815	5 093

3.9 SLOVENIA

Slovenia is a small country with the surface area of just over 20 000 square kilometres and fewer than 2 million inhabitants. It is an independent republic that borders on Italy, Austria, Hungary and Croatia. The length of the state borders amounts to 1 382 kilometres, of which 46.6 kilometres is coast and 413 kilometres are rivers.

The population of Slovenia grew very slowly. At the end of 2000, the population of Slovenia was 1 990 000, which is only 0.1% more than in 1999. The natural increase has been negative since 1997, and it was also negative in 2000.

Fertility of the population of Slovenia is low. In 2000, the number of live-born children in Slovenia was 18 180; this was 9.1 live births per 1 000 inhabitants and 3.7% more than in 1999. In 2000 the number of inhabitants who died in Slovenia was 18 588, which was 1.6% less than in 1999. Life expectancy at birth has been lengthening in Slovenia. A boy who was born in 1999/2000 can expect to live 71.94 years and a girl 79.10 years.

Table SI1: Basic demographic data, Slovenia, 1995-2000

Year	Population on 31 December	Number		
		live births	deaths	natural increase
1995	1 990 266	18 980	18 968	12
1996	1 986 989	18 788	18 620	168
1997	1 984 923	18 165	18 928	-763
1998	1 978 334	17 856	19 039	-1183
1999	1 987 755	17 533	18 885	-1352
2000	1 990 094	18 180	18 588	-408

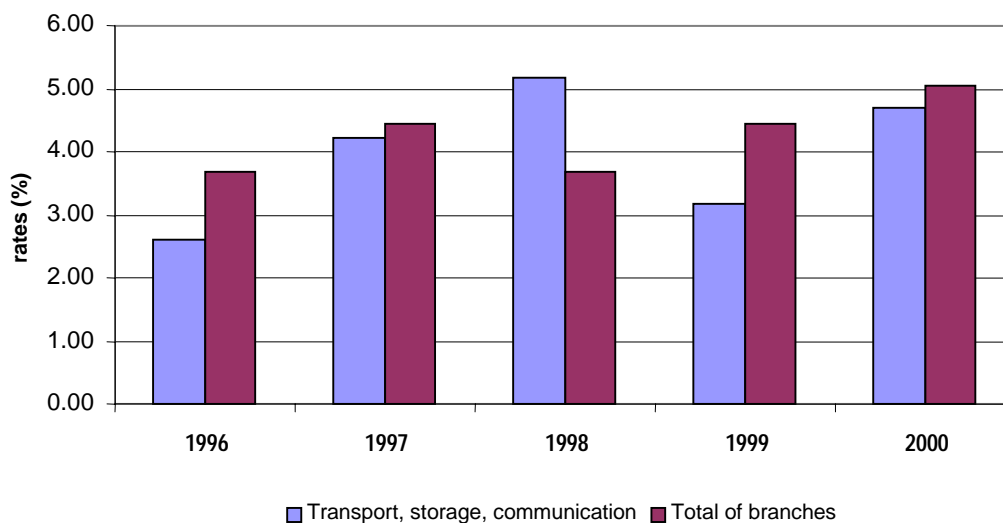
In 2000 there were on average 768 172 persons in employment in Slovenia: 683 042 persons in paid employment in enterprises, companies and other organisations or by self-employed persons and 85 130 self-employed persons, who are either individual private entrepreneurs, own account workers or farmers. In 2000, on average 5 329 people worked in public works.

In the activity 'Transport, storage and communication' there were on average 47 561 persons in employment in 2000: 40 194 of them were persons in paid employment and 7 367 were self-employed persons. 121 persons worked in maritime transport, 20 in other supporting water transport activities, 616 in air transport and 424 in other supporting air transport activities. The table shows their breakdown by persons in paid employment and self-employed persons.

Table SI2: Persons in employment, Slovenia, 2000

Activities	Persons in employment	Persons in paid employment			Self - employed persons			
		total	in companies, enterprises and organisations	by self-employed persons	total	individual private entrepreneurs	own account workers	farmers
Total	768172	683042	615492	67549	85130	44858	5846	34426
Section I Transport, storage and communication	47561	40194	35473	4720	7367	7291	76	-
61.1 Sea and costal water transport	121	116	112	4	5	5	-	-
62 Air transport	616	616	602	14	-	-	-	-
63.22 Other supporting water transport activities	20	20	20	-	-	-	-	-
63.23 Other supporting air transport activities	424	424	424	-	-	-	-	-

In the 1996-2000 period, Slovenia recorded growth of value added. The growth rate of value added in the activity 'Transport, storage and communication' was slightly lower than the total value added growth rate. The one exception was 1998, when 'Transport, storage and communication' achieved the highest growth rate of value added in that year (5.2%), which was 1.6 percentage points higher than the total value added growth rate.

Figure SI3: Annual real growth rates of value added (%), Slovenia, 1996-2000


In 2000 'Transport, storage and communication' represented 7.9% of total value added, which is only 0.2 percentage point more than in 1995, so that we cannot say that there was a considerable increase in this activity.

'Transport, storage and communication' represents 7% of the gross domestic product. The values of water transport and air transport are practically negligible, since water transport represents only 0.004%, and air transport only 0.15% of the GDP. The situation is similar as regards supporting water/air transport activities. They represent 0.004% and 0.09% of the GDP respectively.

Table SI4: Gross domestic product, Slovenia, 2000

		2000	
		mio SIT	structure (% of GDP)
Gross domestic product		4 035 518	100.000
Section I	Transport, storage, communications	282 646	7.004
61	Water transport	170	0.004
62	Air transport	5 993	0.149
63.22	Other supporting water transport activities	142	0.004
63.23	Other supporting air transport activities	3 789	0.094

According to provisional data, in Slovenia 756 6 million tolar were invested in new fixed capital in 2000. The data cover capital formation in enterprises, companies and organisations, i.e. legal persons. 113 3 million tolar were invested in 'Transport, storage and communication', which is almost 15% of total fixed capital formation. More than a half of this sum is capital formation in postal and communication services. Capital formation in supporting transport activities represents almost 12% of total capital formation in the field of transport. Capital formation in other supporting activities in air and water transport is very low. Capital formation in air transport represents almost 4% of total capital formation in the field of transport, and 95% of this capital formation was capital formation in regular routes.

AIR TRANSPORT

Transport infrastructure and equipment

Republic of Slovenia has been a member of the International Civil Aviation Organisation (ICAO) since 1992, the European Civil Aviation Conference (ECAC) since 1992, and the European Organisation for the Safety of Air Navigation (EUROCONTROL) since 1995. From 2001 on it is also a member in the Joint Aviation Authorities (JAA).

The membership in the above mentioned international organisations is essential for Slovenian integration into international air traffic. This membership puts the Republic of Slovenia under an obligation to comply with the aviation standards and recommended practices as well as trends and directives in the international transport policy.

Civil Aviation Office (CAO) of the Ministry of Transport, in line with legal provisions, performs the following activities in the sphere of civil aviation:

- prepares documents on development;
- performs tasks in relation to public investments;
- prepares starting-points and participates in the preparation of laws and other regulations as well as monitors their implementation;
- cares about safety in air traffic;
- actively participates in working bodies of international organisations, prepares starting-points for bilateral and multilateral agreements and takes part in negotiations;

- examines international aviation standards and technical regulations and procedures, and participates in their adoption and implementation (for example: ICAO, EUROCONTROL, JAA);
- performs tasks connected with investigation of air accidents;
- examines technological development, activities and trends in this sphere and participates in the preparation of training programmes for aircraft personnel;
- examines and keeps aviation statistics.

The Civil Aviation Administration (CAA) of the Republic of Slovenia is an administrative body within the Ministry of Transport. Its mission is to assure safety in air transportation. Its task is to assemble, arrange and issue information and publications about airspace of the Republic of Slovenia.

The CAA of the Republic of Slovenia also deals with the following issues:

- airworthiness and aircraft registration,
- flight operations,
- personnel licensing,
- registration of airports and airfields,
- carrying aviation standards and recommended practices into effect,
- execution of aviation standards and recommended practices.

Air traffic in Slovenian air space is controlled by the **Air Traffic Control Center** located in Ljubljana, while arrivals and departures of aircraft are provided by three units situated in international airports Ljubljana, Portoroz and Maribor.

At the beginning of 2001 Slovenia got a new legislation on aviation (Aviation Act).

Adria Airways became the **national air carrier** with the independence of Slovenia in 1991.

At the end of January 1992 Adria Airways resumed its operations on the reduced market. Most of the charter destinations on the Adriatic coast became inaccessible, due to the fact that they were now in different countries (Croatia and Montenegro). Consequently the whole structure of business changed drastically. The previous revenue of 90% in favour of charter operations changed to 70% in favour of scheduled operations.

In addition to its scheduled services, Adria also operates outgoing and incoming charter flights, which are mostly seasonal and concentrated in the summer period (April through October). The most frequent charter destinations include Greece, Spain, Turkey and Tunisia.

The Adria Airways fleet, which was primarily designed for package tour operations, has been reduced in the new market situation from 13 aircraft (3 Airbus A320, 5 MD 80 /4 MD 82 and 1 MD 81, 3 DC 9-30 and 2 Dash 7) to 7 aircraft. Adria has disposed of the MD 80 aircraft without replacing them. At the beginning of 1998 Adria replaced the two Dash 7 with two modern Canadair Regional Jet CRJ 200 LR aircraft and at the end of 1998 both DC 9 aircraft with the third CRJ. The fourth CRJ arrived in March 2000. Since April 2000 the Adria fleet has consisted of seven aircraft - three

Airbus A-320s and four Canadair Regional Jets - and is one of the most modern and newest fleets in Europe.

The Canadair was chosen as a replacement for the Dash 7 and DC 9 because it is highly efficient, it has possible CAT 3 capability and with the extended range version it offers the same range as the Airbus, giving the airline full flexibility over its whole network. Ljubljana airport has been upgraded to CAT 3 status and Adria's Airbus and Canadair aircraft already have CAT 3 capabilities. With this fleet Adria expects to benefit greatly from Slovenia's associate membership of the EU and eventual full membership.

The company completed the privatisation process in March 1996. It is currently owned 91% by the Development Corporation of Slovenia and 9% by Nova Ljubljanska Banka. Full privatisation is expected in one year, and this should enhance and strengthen the Adria Airways capital base.

In 2000 Adria Airways carried 866 482 passengers, which is 11.1% more than in 1999. In comparison with 1999, the number of passengers on scheduled flights increased by 13.2% and 5.8% more passengers flew on charter flights compared to 1999.

Table SI5: Air transport of passengers, Slovenia, 1995-2000

	1995	1996	1997	1998	1999	2000
	Passengers carried (1000)					
TOTAL	548	594	629	693	780	866
National transport	3	3	1	0	0	0
International transport	545	591	628	693	780	866
to foreign countries	268	289	307	333	380	428
from foreign countries	257	279	296	331	378	415
in foreign countries	20	23	25	29	22	23
	Passenger-km (mio)					
TOTAL	614	655	677	721	832	866
National transport	0	0	0	0	0	0
International transport	614	655	677	721	832	866
to foreign countries	309	323	338	355	412	439
from foreign countries	289	289	313	336	397	418
in foreign countries	16	43	26	30	23	9

In comparison with 1999, in 2000 the total weight of goods carried by Adria Airways increased by 9.9%. Slovenian national air carrier plans to transport over 5 000 tonnes of goods and mail in 2001.

Table SI6: Air transport of goods, Slovenia, 1995-2000

	1995	1996	1997	1998	1999	2000
	Goods carried (t)					
TOTAL	3 877	3 785	3 745	3 705	4 147	4 556
National transport	1	7	4	0	0	0
International transport	3 876	3 778	3 741	3 705	4 147	4 556
to foreign countries	1 910	1 980	1 833	1 677	1 986	2 405
from foreign countries	1 964	1 786	1 903	2 028	2 150	2 117
in foreign countries	2	12	5	0	11	34
	Tonne-km (1000)					
TOTAL	3 655	3 648	3 572	3 459	4 160	4 495
National transport	0	1	0	0	0	0
International transport	3 655	3 647	3 572	3 459	4 160	4 495
to foreign countries	1 928	2 001	1 863	1 670	2 202	2 554
from foreign countries	1 726	1 599	1 706	1 789	1 948	1 904
in foreign countries	1	47	3	0	10	37

Adria Airways anticipates 800 000 passengers by the end of 2001, which is 8% less than in 2000, but it expects that its total income will cover all expenses. The reduction in air traffic is partially due to the smaller number of charter flights and to the decline in the number of passengers as a result of the terrorist attacks in the United States.

In Slovenia there are three international airports: Airport Ljubljana, plc (LJLJ), Airport Maribor, d. o. o. (LJMB), which filed for bankruptcy, and Airport Portoroz (LJPZ).

Over 98% of commercial air transport takes place via Ljubljana Airport. Maribor Airport filed for bankruptcy and its position as a commercial airport is questionable, while the airport in Portoroz is intended for general aviation. Therefore data on airport traffic in Slovenia refer only to Ljubljana Airport.

The **Ljubljana Airport** is Slovenia's main and central airport, which is performing airport and commercial services. It is located 26 kilometres from the capital and almost in the centre of the country. It was officially opened at the present location in December 1963. Since Slovenia became independent, it has been an exclusively international airport providing air transport to most European capitals, destinations in the former Yugoslavia, in the Middle East as well as to airports located near tourist destinations along the Adriatic and Mediterranean coast and on the Canary Islands. European classification puts it among small regional airports and it has been striving for some years to become a hub for the countries of the former Yugoslavia.

The airport has state-of-the-art equipment and offers a wide range of quality services to its business partners, air carriers, passengers and visitors, through more than 50 companies operating in this field. It is equipped with light navigation equipment which make low-visibility operations (CAT II/III) possible.

Today, the Ljubljana Airport is managed by the public limited company Aerodrom Ljubljana plc. The ownership structure is the following: 49% of all shares are

participating preference shares owned by the state and 51% of them are ordinary shares.

The company's business policy has always been development-oriented. In the last decade the company renovated and reorganised the airport completely. The apron was expanded, the passenger terminal was renovated and expanded as well as the runway, utilities and energy supply were upgraded and the buildings used for cargo traffic were modernised. The company has been paying special attention to the development of general aviation gaining importance since Slovenia became independent. Of course, safety in air traffic is of special relevance, and with the latest acquisition, a modern X-ray for baggage inspection, the airport is even safer. Investment into expansion of the parking lot for passenger vehicles, modernisation of arrival and baggage claim areas in the airport building and construction of garage building for technical vehicles, used in turnaround operations, is also underway.

Aerodrom Ljubljana plc is a member of several international associations such as the IATA (International Air Transport Association) and the EBBA (European Business Aviation Association). It also takes part in thematic conferences of the ICAO (International Civil Aviation Organisation). The company actively participates in the Economics Committee, the Marketing and Commercial Committee, the European Policy Committee, the Aviation Security Committee and the World Aviation Security Standing Committee operating within the framework of the ACI Europe (Airport Council International).

Traffic and transport measurement (freight and passengers)

Historical data

In 2000, there were 21 301 commercial aircraft movements at Slovenian airports, representing a 10.8% increase compared to the previous year.

In the total aircraft movements, scheduled flights represent 81.2% and non-scheduled flights only 18.8%. Due to small territory, in Slovenia national transport of commercial aircraft is negligible. In 2000 international transport represented almost 100% of total commercial aircraft movements. Because of Slovenia's geographical position, direct transit is also rare. In 2000 direct transit represented only 0.6% of all commercial aircraft movements.

Table SI7: Commercial aircraft movements, Slovenia, 1995-2000

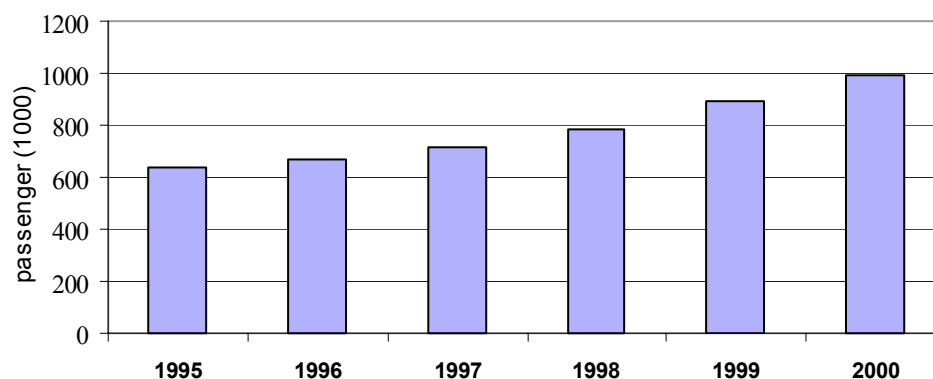
	<i>Commercial aircraft movements</i>			
	total	landings	take-offs	direct transit
1995	17 858	8 940	8 918	0
1996	18 192	9 093	9 099	0
1997	17 471	8 637	8 747	87
1998	19 002	9 302	9 515	185
1999	19 226	9 510	9 610	106
2000	21 301	10 533	10 635	133
TOTAL	21 301	10 533	10 635	133
National transport	192	98	93	1
International transport	21 109	10 435	10 542	132
Scheduled flights	17 295	8 543	8 632	120
Non-scheduled flights	4 006	1 990	2 003	13

In 2000 there were 991 000 arrivals and departures at the airport, which is 10.7% more than in the previous year. Passengers carried with scheduled flights represent 86.9% of the total number of passengers.

Table SI8: Airport traffic of passengers, Slovenia, 1995-2000

	<i>Passengers (1000)</i>			
	total	arrivals	departures	direct transit
1995	638	319	319	0
1996	669	333	336	0
1997	713	352	358	3
1998	786	388	393	5
1999	895	443	448	4
2000	991	491	495	5
TOTAL	991	491	495	5
National transport	0	0	0	0
International transport	991	491	495	5
Scheduled flights	861	427	430	4
Non-scheduled flights	130	64	65	1

Since 1995 Ljubljana registered an upward trend of airport traffic of passengers on commercial flights. In the 1995-2000 period the increase was 55.3%.

Figure SI9: Airport traffic of passengers, Slovenia, 1995-2000


Airport traffic of freight and mail is also on the rise. In 2000, 7 035 tonnes of freight and mail were carried, which is a 5.8% growth compared to 1999. As much as 95.2% of traffic of freight and mail is linked to scheduled flights.

Table SI10: Airport traffic of freight and mail, Slovenia, 1995-2000

	<i>Freight and mail (t)</i>			
	total	loaded	unloaded	direct transit
1995	6 625	4 373	2 252	0
1996	4 937	3 242	1 695	0
1997	5 832	2 752	3 063	17
1998	6 578	2 986	3 569	23
1999	6 649	2 876	3 725	48
2000	7 035	3 400	3 590	45
TOTAL	7 035	3 400	3 590	45
National transport	-	-	-	-
International transport	7 035	3 400	3 590	45
Scheduled flights	6 696	3 258	3 393	45
Non-scheduled flights	339	142	197	-

As regards the number of aircraft movements and traffic of passengers in 2000, Airport Ljubljana is the busiest between May and September.

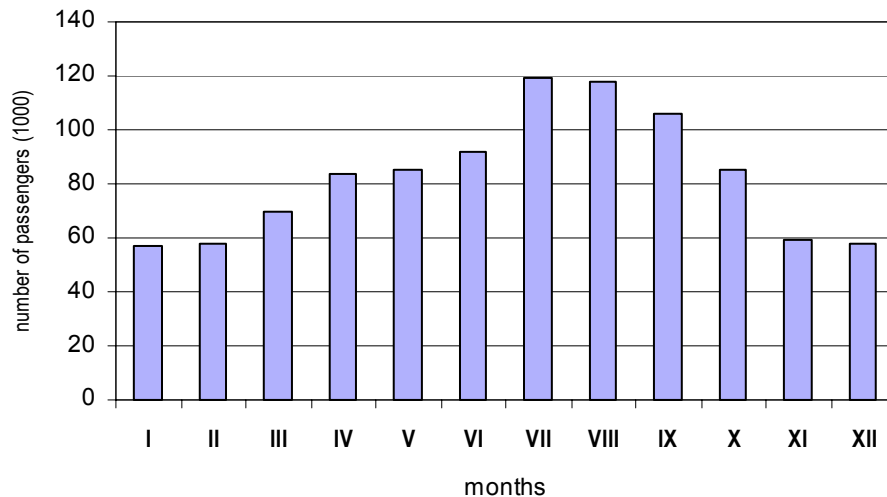
Table SI11: Commercial aircraft movements, Slovenia, 2000

	<i>Commercial aircraft movements</i>			
	total	landings	take-offs	direct transit
2000	21 301	10 533	10 635	133
I	1 459	723	728	8
II	1 486	738	741	7
III	1 688	834	840	14
IV	1 744	854	878	12
V	1 856	920	920	16
VI	2 019	993	1 016	10
VII	2 118	1 047	1 060	11
VIII	2 195	1 088	1 097	10
IX	2 005	999	997	9
X	1 786	889	885	12
XI	1 464	722	728	14
XII	1 481	726	745	10

The number of arrivals and departures of passengers was the highest in the summer season, i.e. in July and August. Airport traffic decreased in the winter from November through February.

Table SI12: Airport traffic of passengers, Slovenia, 2000

	<i>Passengers (1000)</i>			
	total	arrivals	departures	direct transit
2000	991	491	495	5
I	57	29	27	0
II	58	29	30	1
III	70	35	35	1
IV	84	39	44	1
V	85	45	39	0
VI	92	44	48	1
VII	119	58	61	0
VIII	118	59	58	0
IX	106	53	52	1
X	85	42	43	0
XI	59	30	29	0
XII	58	28	29	0

Figure SI13: Airport traffic of passengers, Slovenia, 2000


Airport traffic of freight and mail slightly decreased in the summer months, i.e. in July and August. It was the biggest in March.

Table SI14: Airport traffic of freight and mail, Slovenia, 2000

	<i>Freight and mail (t)</i>			
	total	loaded	unloaded	direct transit
2000	7 035	3 400	3 590	45
I	533	254	275	4
II	595	281	310	4
III	696	340	348	8
IV	565	259	303	3
V	604	274	323	7
VI	583	284	296	3
VII	556	280	273	3
VIII	496	251	243	2
IX	636	335	298	3
X	600	279	317	4
XI	551	252	297	2
XII	620	311	307	2

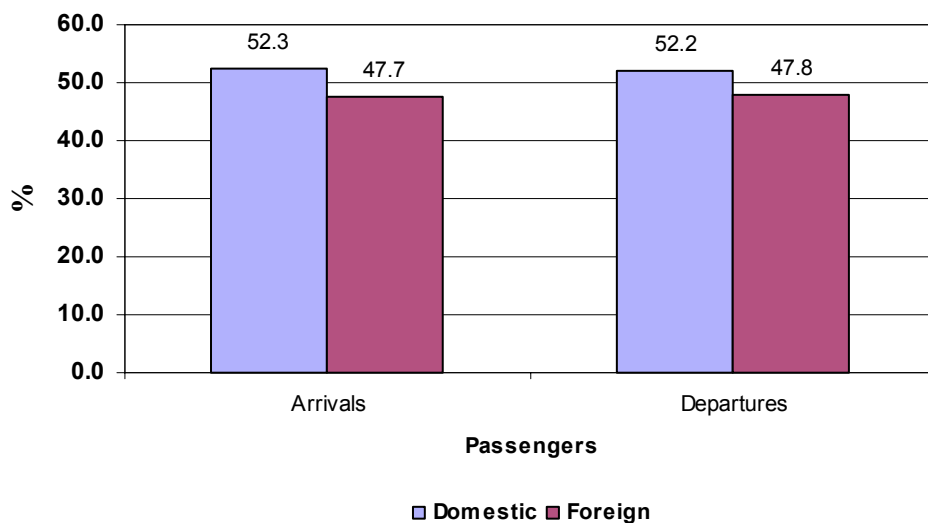
In 2000 the national air carrier performed 16 973 commercial aircraft movements on the Ljubljana Airport, which is 79.7% of all movements. It carried 85.9% of all passengers and 80% of all goods.

Table SI15: Airport traffic structure, Slovenia, 2000

	number	%
Commercial aircraft movements	21 301	100.0
Domestic carriers	16 973	79.7
Foreign carriers	4 328	20.3
Passengers (1000)	991	100.0
Domestic carriers	851	85.9
Foreign carriers	140	14.1
Freight and mail (t)	7 035	100.0
Domestic carriers	5 630	80.0
Foreign carriers	1 405	20.0

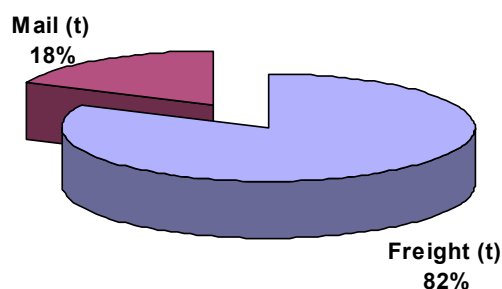
The survey of cross-border air transport provided the structure of passengers at the Ljubljana Airport. As regards arrivals, 52.3% of domestic and 47.4% of foreign passengers were registered in 2000. The structure is similar also for departures.

Figure SI16: Structure of airport traffic of passengers, Slovenia, 2000



In 2000 the share of mail in total airport cargo traffic was only 18%.

Figure SI17: Structure of airport cargo traffic, Slovenia, 2000



Aerodrom Ljubljana plc is operating successfully. Statistics show that the air traffic has grown significantly after Slovenia became independent.

Future plans on Slovenian airport also include further modernisation of the airport. The company will strive to develop a better network of connections between Slovenia and Europe as well as to become a regional hub for South-eastern Europe and one of the entering points for passengers and cargo on their way from the Far East to Europe. The company will also try to provide high-quality airport services with safe and efficient aircraft maintenance and passenger services.

MARITIME TRANSPORT

Transport infrastructure and equipment

Maritime transport in Slovenia takes place in Izola, Koper and Piran. Koper is by far the biggest harbour in Slovenia.

The goods harbour in Koper is one of the most modern harbours in this part of the world. It is connected with the hinterland with roads and railway. The harbour, which is the meeting point of naval and land transport routes, enables international commercial flows due to its excellent geographic position on the fifth Pan-European transport corridor. It represents a competitive edge for exporters and importers from Slovenia and from hinterland countries, since transport of goods from Central Europe to the Middle East and Far East is shorter by a few days than transport over Western European harbours and through the Strait of Gibraltar. In the Koper harbour there are terminals for general cargo (e.g. coffee, rice, sugar, cotton, etc.), fruit and perishable goods, timber, livestock, other dry bulk cargo (e.g. ores, minerals, fodder, bauxite, etc.), cereals, liquid cargo, and the container and RO-RO terminal. The harbour infrastructure is owned by the state, but in accordance with regulations it is managed by the joint-stock company Luka Koper d.d.

The Port of Koper lies over 1 600 hectares, of which only 400 hectares of area are in use (piers, warehouses, and manipulation area). This means that the Port of Koper has additional areas available, which are intended for industrial activities, manufacturing (i.e. industrial zone) and goods distribution activity.

At the moment pier III is being built on which the container and RO-RO terminal will be located. This terminal will be moved from its present location on pier I. Thus the capacity of the container terminal will increase considerably up to 300 000 TEU and 300 000 vehicles per year.

In Slovenia Splošna plovba is engaged in the activity of maritime transport. This company has 16 ships, but they are all sailing under foreign flags. As regards the type of ships, at the end of 2000 Splošna plovba had 11 ships for transporting dry bulk cargo with the gross tonnage of 687 199 m³ and 5 ships for transporting general cargo with the gross tonnage of 170 415 m³. Ships are sailing between foreign harbours. In 2000 they carried 3 547 000 tonnes of goods and made 17 297 000 tonne miles.

Matters relating to:

- administrative and legal procedures in maritime affairs,
 - safety of sea and inland waterway navigation,
 - management of harbour infrastructure owned by the Republic of Slovenia,
 - granting certificates to sailors in accordance with the SCTW convention,
 - other administrative and professional tasks from the field of maritime affairs,
- are performed by The Slovenian Maritime Directorate (established on 1 January 1995), which operates as an organ within the Ministry of Transport.

Traffic and transport measurement (freight and passengers)

Historical data

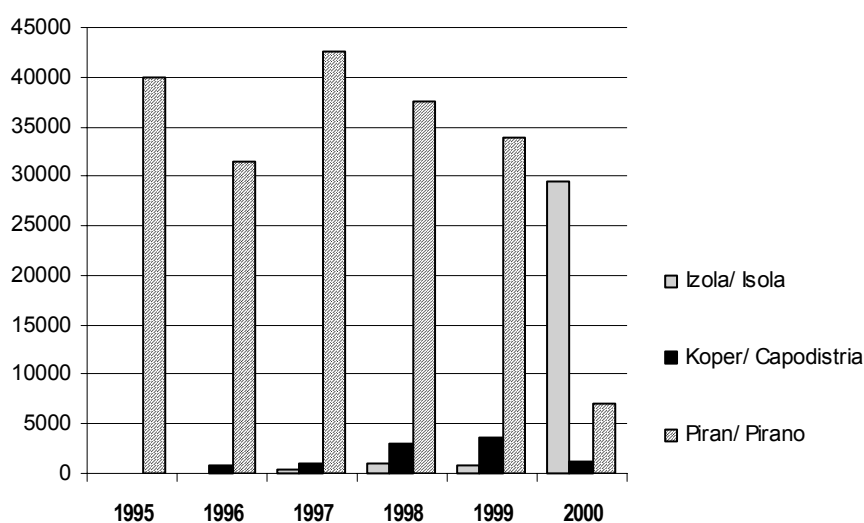
While almost all goods traffic takes place in Koper harbour, until 1999 the biggest number of passengers was embarked/disembarked in Piran and since 2000 in Izola. Until 1999 the ship transporting passengers to Venice (a one-day trip) was namely anchored in Piran and since 2000 it has been anchored in Izola.

In 2000 the total passenger traffic in all three harbours decreased by 6.2% compared to 1995.

Table SI18: Passengers embarked and disembarked by harbours, Slovenia, 1995-2000

	Passengers, embarked					Passengers, disembarked			
	total	Izola/ Isola	Koper/ Capodistria	Piran/ Pirano	total	Izola/ Isola	Koper/ Capodistria	Piran/ Pirano	
1995	40 131	21 810	-	27	21 783	18 321	80	-	18 241
1996	32 330	15 849	48	671	15 130	16 481	48	165	16 268
1997	43 986	21 216	191	555	20 470	22 770	175	489	22 106
1998	41 378	20 639	635	1 636	18 368	20 739	313	1 328	19 098
1999	38 410	19 424	223	1 898	17 303	18 986	525	1 831	16 630
2000	37 654	18 428	14 414	797	3 217	19 226	14 967	488	3 771

Figure SI19: Passenger traffic by harbours, Slovenia, 1995-2000



Compared to 1995, in 2000 goods traffic in Slovene harbours increased by 32.7%. The quantity of loaded goods grew by 14%, while the quantity of unloaded goods grew by 40.8%.

About 99% of all harbour traffic in Slovenia takes place in Koper harbour, the main activity of which includes the following services: transshipment, warehousing, haulage of ships, and berthing and unberthing of ships. This activity is performed in eleven specialised terminals, which are equipped for carrying out transshipment and warehousing of all types of goods: general cargo, containers, liquid cargo, vehicles and dry bulk cargo. Within the terminals there are all the necessary conditions for implementing consignment and distributing of all types of goods. Additional services related to goods complement the basic harbour activities. They are carried out within individual terminals. With these services the value of goods is increased, goods are prepared for direct sale, protected or changed into appropriate transport form. These services are marking, labelling, packing, sorting, mixing, assembly, dismantling, ripening, etc.

Table SI20: Goods loaded and unloaded by harbours, Slovenia, 1995-2000

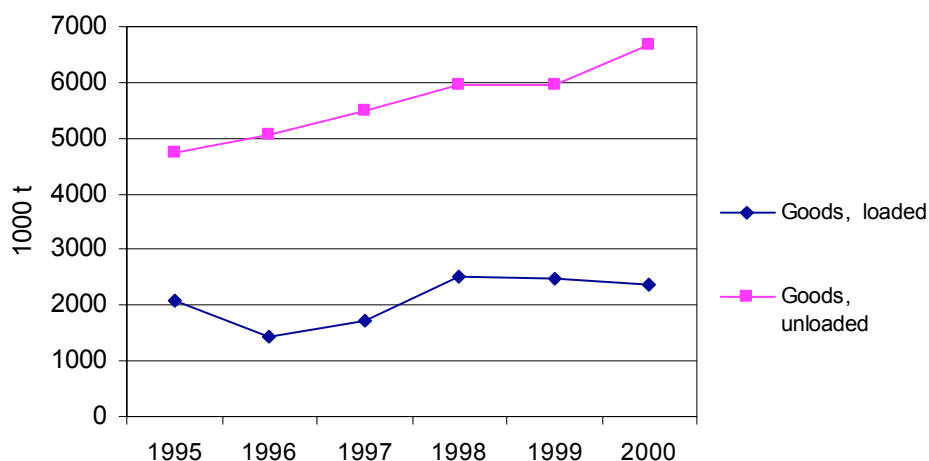
	1000 t					
	Goods		Goods, loaded		Goods, unloaded	
	total	of which: Koper/ Capodistria	total	of which: Koper/ Capodistria	total	of which: Koper/ Capodistria
1995	6811	6781	2081	2081	4730	4700
1996	6502	6453	1443	1443	5059	5010
1997	7248	7207	1740	1740	5508	5467
1998	8446	8428	2504	2504	5942	5924
1999	8412	8348	2461	2460	5951	5888
2000	9038	8994	2379	2379	6659	6615

As regards the type of goods according to the NST/R classification, in the 1995-2000 period the biggest traffic in harbours involved the following types of goods: agricultural products and live animals, solid mineral fuels, petroleum products, and ores and metal waste.

Table SI21: Harbour traffic of goods by type of goods, Slovenia, 1995-2000¹⁾

	1000 t					
	1995	1996	1997	1998	1999	2000
TOTAL	6 811	6 502	7 248	8 446	8 412	9 038
Agricultural products and live animals	1 496	984	693	1 009	1 159	759
Foodstuffs and animal fodder	282	303	292	322	163	163
Solid mineral fuels	447	1 006	1 225	2 080	1 802	2 440
Petroleum products	1 089	1 357	1 392	1 412	1 670	1 732
Ores and metal waste	1 679	1 036	1 667	1 521	1 471	1 674
Metal products	268	166	197	186	133	175
Crude and manufactured minerals, building materials	334	466	369	492	450	384
Fertilizers	130	156	154	123	183	186
Chemicals	135	118	179	187	98	90
Machinery, transport equipment, manufactured articles and miscellaneous articles	951	910	1 080	1 114	1 283	1 435

¹⁾ Goods loaded and unloaded.

Figure SI22: Goods loaded and unloaded, Slovenia, 1995-2000

In the 1995-2000 period the number of ships, especially cargo ships, coming in and going out of Slovene harbours increased by 51.9%.

Table SI23: Vessels incoming and outgoing by harbours, Slovenia, 1995-2000

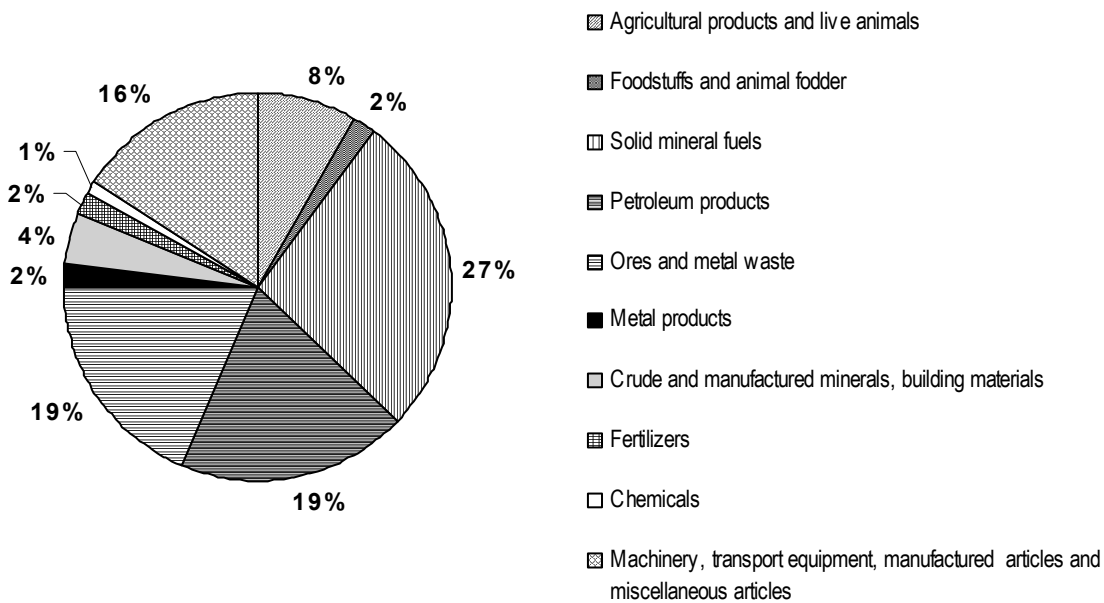
	Vessels, total		Vessels, incoming		Vessels, outgoing	
	total	of which: Koper/ Capodistria	total	of which: Koper/ Capodistria	total	of which: Koper/ Capodistria
1995	3 118	2 915	1 557	1 454	1 561	1 461
1996	3 623	2 989	1 816	1 499	1 807	1 490
1997	4 135	3 394	2 066	1 695	2 069	1 699
1998	4 169	3 587	2 087	1 795	2 082	1 792
1999	4 403	3 791	2 199	1 893	2 204	1 898
2000	4 735	3 861	2 368	1 931	2 367	1 930

Year 2000

In 2000, 2 379 000 tonnes of goods were loaded in Slovene harbours and 6,660,000 tonnes were unloaded. Of all loaded goods, 40.4% were solid mineral fuels, 11.0% wood and cork and 10.1% cereals, while of all unloaded goods 25.8% were petroleum products, 22.2% solid mineral fuels and 20.0% iron ore, iron and steel waste and blast-furnace dust.

Table SI24: Goods loaded and unloaded by commodity groups, Slovenia, 2000

	1000 t					
	Slovenia - total			of which: port Koper		
	total	loaded	unloaded	total	loaded	unloaded
Total	9 038	2 379	6 660	8 994	2 379	6 615
Cereals	388	241	148	388	241	148
Potatoes, other vegetables, fresh or frozen, fresh fruit	87	1	86	87	1	86
Live animals, sugar beet	18	18	0	18	18	0
Wood and cork	264	261	3	264	261	3
Textiles, Textile articles and man-made fibres, other	0	0	0	0	0	0
raw animal and vegetable materials	1	1	0	1	1	0
Foodstuff and animal fodder	129	48	82	110	48	62
Oil seeds and oleaginous fruits and fats	34	8	26	34	8	26
Solid mineral fuels	2 441	962	1 478	2 441	962	1 478
Crude petroleum	3	3	0	3	3	0
Petroleum products	1 730	13	1 716	1 730	13	1 716
Iron ore, iron and steel waste and blast-furnace dust	1 355	20	1 335	1 355	20	1 335
Non-ferrous ores and waste	319	5	314	319	5	314
Metal products	175	90	85	175	90	85
Cement, lime, manufactured building materials	41	2	39	41	2	39
Crude and manufactured minerals	343	0	343	322	0	322
Natural and chemical fertilizers	186	1	185	186	1	185
Coal chemical, tar	0	0	0	0	0	0
Chemical other than coal chemical and tar	62	2	60	62	2	60
Paper pulp and waste paper	28	26	2	28	26	2
Transport equipment, machinery, apparatus, engines, whether or not assembled, and parts thereof	95	52	42	95	52	42
Manufactures of metal	174	13	162	174	13	162
Glass, glassware, ceramic products	0	0	0	0	0	0
Leather, textile, clothing, other manufactured articles	35	10	25	35	10	25
Miscellaneous articles	1 130	600	530	1 126	600	526

Figure SI25: Harbour traffic by type of goods, Slovenia, 2000


Goods arrived to or departed from Slovene harbours on 4 735 ships, of that 3 861 (81.5%) were loaded or unloaded in Koper, which uses eleven specialised terminals for carrying out its activity:

- container and RO-RO terminal,
- car terminal,
- general cargo terminal,
- fruit terminal,
- timber terminal,
- livestock terminal,
- silo terminal,
- alumina terminal,
- terminal for iron ore and coal,
- dry bulk cargo terminal,
- liquid cargo terminal.

As regards the type of ships, the densest traffic in all harbours was that of dry bulk ships (21.8%) and specialised ships (21.4%).

Table SI26: Harbour traffic of vessels by type of ships, Slovenia, 2000

Type of ship	Vessels, total			
	total	Izola/ Isola	Koper/ Capodistria	Piran/ Pirano
Total	4 735	341	3 861	533
Liquid bulk	264	17	247	-
Dry bulk	1 034	6	1 015	13
Container	618	-	618	-
Specialized	1 011	6	1 005	-
General cargo, non-specialized	789	12	767	10
Dry cargo barge	161	-	161	-
Passenger	732	219	6	507
Fishing	9	9	-	-
Offshore activities	3	3	-	-
Tugs	20	14	6	-
Miscellaneous	94	55	36	3

Most of goods transport through Slovene harbours is transit. In 2000 transit represented 68.3% of all transport and 23.5% of all transit was made with Italy.

Table SI27: Goods loaded and unloaded by Maritime coastal areas (MCAs), Slovenia, 2000

MCA	1000 t					
	Total	Export	Import	Transit		
				total	loaded	unloaded
Total	9038	184	2679	6175	2194	3981
Italy	2586	111	1024	1451	1075	376
South Africa	1222	-	-	1222	-	1222
Indonesia	720	-	336	384	1	383
Brazil	683	-	-	683	-	683
Israel: Mediterranean	334	1	146	187	92	95
United Kingdom	293	-	293	0	-	-
Algeria	208	-	-	208	208	-
Egypt: Mediterranean	203	3	39	161	68	93
Colombia: Nord Coast	184	-	-	184	-	184
Greece	170	26	20	124	69	55
Other	2435	43	821	1571	681	890

As regards transshipment, in 2000 record results were recorded in the Port of Koper. In total 9.3 million tonnes of goods were transhipped, which is 12% more than in 1999. Compared to 1999 the highest increase was registered in dry bulk cargo and timber, while transshipment of containers increased by 11%.

3.10 SLOVAK REPUBLIC

The Slovak Republic was established after the split of the Czech-Slovak Federal Republic into two independent states on the 1st of January 1993. It occupies an area of 49 035 km². It has borders with five countries: the Czech Republic, Austria, Hungary, Ukraine and Poland. The length of its borders is 1 672 km in total. Distance between the northernmost and the southernmost point is 226 km and between the westernmost and the easternmost point 429 km. The capital is Bratislava, which is situated on the two banks of the River Danube and on an area of 368 km². The national currency is the Slovak crown (1 crown =100 hellers).

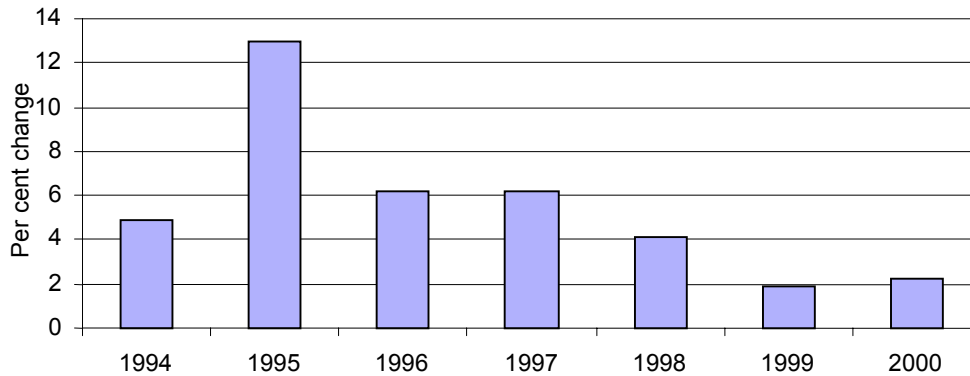
According to the Census of Population, Houses and Dwellings, the Slovak Republic had 5 379 455 permanent inhabitants as of 26 May 2001. Despite the fact that in comparison with 1991 the population had increased by 105 120, the declining trend in the rate of SR population growth continued. More than half the population was female (51.4%). In the past forty years, in spite of several waves of emigration, the population has increased by 29.1%. Out of the total, 8% lived in Bratislava, the capital. The large majority of the population was of Slovak origin (85.8%). People of Hungarian origin accounted for 9.7%, the Czech, Moravian, Silesian origins 0.9%, Roman 1.7% and others 1.9%.

Table SK1: Population

	1960	1980	1991	26 May 2001
Population as of December 31 (in 1000)	4167	4996	5274	5379

Gross domestic product at current prices in 2000 reached 887 200 million SKK, which was 140.4% more than in 1993. At constant prices (1995 =100) gross domestic product in 2000 was 667 700 million SKK, an increase of 44.9% in comparison with 1993. The highest year on year increase of 13% was recorded in 1995. In the following years, year on year growth gradually decreased to reach 1.9% in 1999. With some recovery in the production sector, gross domestic product increased by 2.2% in 2000 in comparison with the previous year (see Figure SK2).

The share of transport in total on gross domestic product at constant prices rose from 6.8% in 1995 to 8.3% in 1996. In other years, including 2000, it varied around 7.5%. Aviation transport and services formed 0.15% of the gross domestic product in the years 1993 to 1996. In 1999 their share increased to 0.17%, but it decreased again to 0.11% in 2000 (see Table SK3).

Figure SK2: Growth rate of GDP at Constant Prices over previous Year


In 2000, investment in total reached 303 000 million SKK. The transport sector's share as a whole was 5.3% of total investment. In particular, the aviation transport and services share was minimal (0.2%).

The labour force consisted of 2 101.7 thousand persons in 2000, that is 39.1% of the total population. Employment decreased by 1.4% in comparison with the previous year and by 2.1% in comparison with 1995. About 99.6 thousand employees worked in the transport sector in 2000. Their number decreased by 3.9% in comparison with 1993. In aviation transport and services, the number of employees had increased in the years between 1993 and 1998. The highest year on year growth, 5.9%, was reached in 1997. A significant decrease of 7.2% in the number of employees occurred in 1999. In 2000, the number of employees decreased slightly by 0.9% to 1 531 persons in comparison with the previous year (Table SK3).

Development of railway infrastructure in the years 1993 to 2000 was minimal. The length of railway lines was extended by 4 km to 3 665 km, and the share of railway lines for 100 km² of area in the length of 7.5 km was unchanged. The share of electrified lines increased by 3.2 percentage points to 41.9% in the same period. In road transport, 98 km of motorways were built during the surveyed period, with the result that their total length reached 296 km in 2000. Since 1993 the length of roads of the 1st, 2nd, 3rd classes (i.e. roads of national importance) was reduced by 225 km to 17 442 km, owing to reconstruction work. The length of local roads (i.e. roads maintained by municipalities and towns) was 25 220 km in 2000, which represents an increase of 241 km over the last three years. In Slovak Republic there are 172 km of navigable waterways, of which 38.5 km are canals. On the Slovak part of the River Danube, there are three international harbours – Bratislava, Komárno, and Štúrovo.

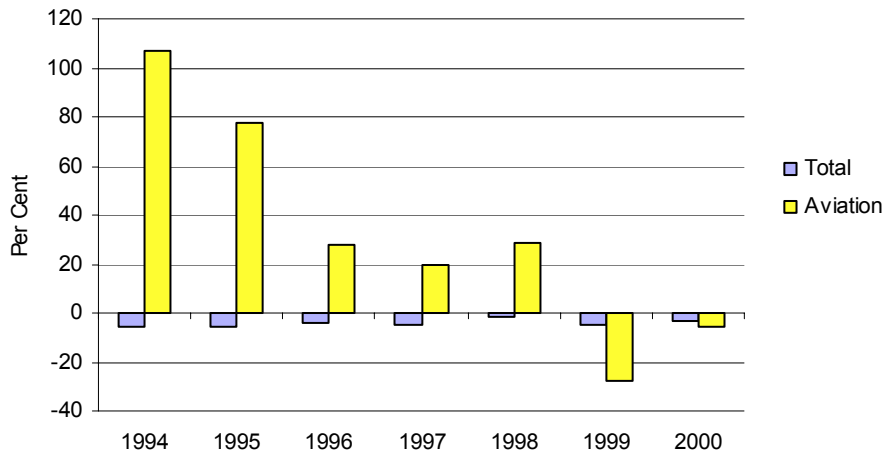
With the break up of 5 former road public transport monopoly enterprises operating in 1989, the situation in this sector has changed significantly with 10 820 enterprises and individual traders functioning in the same market in 2000. Non-transport organisations have also entered the market, undertaking the transport of goods for hire or reward. In 2000, transport enterprises (excluding pipelines and urban transport) carried 95.5 million tonnes of goods in total, a fall of 8.3% in comparison with 1993. The development of international transport and an increase in average transport distance meant that tonne kilometres performed fell by a smaller 3.3%. Aviation transport shared on transport market 0.001-0.008% in transport of goods and 0.001-0.043% in performances of tonne kilometres (Table SK3).

Table SK3: Summary figures for Slovak Republic GDP and transport

	1993	1994	1995	1996	1997	1998	1999	2000
	Gross Domestic Product in constant prices in Mill. SKK (1995=100)							
Economy of the SR in Total	460 800	483 400	546 032	579 922	615 887	641 128	653 309	667 749
of which Transport NACE 60-6323, 634	33 000	35 000	37 328	48 251	46 677	49 336	51 489	50 602
	Gross Domestic Product in current prices in Mill. SKK							
Economy of the SR in Total	369 100	440 500	546 032	606 094	686 087	750 761	815 330	887 198
of which Transport NACE 60-6323, 634	33 000	35 000	37 328	46 725	48 510	53 585	57 817	66 504
Aviation NACE 62+6323 as % of total GDP	0.15	0.15	0.15	0.15	0.10	0.13	0.17	0.11
	Employees							
Economy of the SR in Total	- 2 110 200	2 146 800	2 224 900	2 205 900	2 198 600	2 132 100	2 101 700	
Transport total	103 710	99 177	101 309	107 204	105 156	106 273	99 333	99 637
of which air transport total	1 490	1 514	1 539	1 526	1 616	1 665	1 545	1 531
of which NACE 62	290	314	329	328	395	418	273	271
NACE 6323	1 200	1 200	1 210	1 198	1 221	1 247	1 272	1 260
Air transport (NACE 62+6323) as % of transport total	1.44	1.53	1.52	1.42	1.54	1.57	1.56	1.54
	Public transport total (excluding pipeline and city transport)							
	Transport of goods in thous. tons							
Transport total	104 050	88 834	94 480	94 305	101 863	87 630	84 542	95 464
of which air transport	5.916	7.427	1.280	3.999	0.860	0.637	0.776	0.697
Air transport (NACE 62+6323) as % of transport total	0.006	0.008	0.001	0.004	0.001	0.001	0.001	0.001
	Performances in Mill. tkm							
Transport total	20 508	17 992	20 300	18 786	17 671	17 773	19 996	19 829
of which air transport	0.509	0.330	1.807	8.030	0.759	0.338	0.262	0.220
Air transport (NACE 62+6323) as % of transport total	0.002	0.002	0.009	0.043	0.004	0.002	0.001	0.001
	Transport of passengers in thous.							
Transport total	912 538	860 691	812 119	775 855	739 015	726 336	691 080	671 135
of which air transport	32.210	66.780	118.324	151.592	180.997	232.567	168.382	158.873
Air transport (NACE 62+6323) as % of transport total	0.004	0.008	0.015	0.020	0.024	0.032	0.024	0.024
	Performances in Mill. passenger km.							
Transport total	16 021	15 129	15 400	14 871	13 030	11 937	10 805	11 309
of which air transport	37.382	93.651	186.412	209.519	241.055	315.991	260.496	250.892
Air transport (NACE 62+6323) as % of transport total	0.233	0.619	1.210	1.409	1.850	2.647	2.411	2.219

With significant development of private car use, passengers carried by public transport (excluding city mass transport) decreased by more than a quarter over seven years. Nevertheless, the share of aviation transport in the passenger market has strengthened markedly. While in 1993, its share of passengers carried was 0.004%, in 2000 it had reached 0.024%. Its share of passenger kilometres has increased between 1993 and 2000 by 2 percentage points to 2.2% (Table SK3 and Figure SK4).

Fig. SK4: Year on year increases in passenger-kms for total* transport and air transport



*Excluding pipelines and city transport

AIR TRANSPORT

Transport Infrastructure and Equipment

Investment

In 2000, some 57 million SKK were invested by the Government to the Slovak Airports Authority (SAA), a substantial figure, but well below the totals recorded in earlier years. Over the same period, support to the SAA from the Government of the Slovak Republic for operations of airports declined from 68 million SKK in 1995 to 55 million SKK in 2000 (Table SK5).

Table SK5: Government support for Slovak Airports Authority in Mil. SKK

	1995	1996	1997	1998	1999	2000
Investment	137.1	139.1	127.9	96.1	78.2	56.8
State allowance for operations of Airports	67.9	69.4	72.9	64.0	60.0	54.9

Infrastructure

In 2000, Slovak Republic had eight international airports, Bratislava, Košice, Poprad-Tatry, Sliac, Piešťany and three others, with Bratislava and Košice being the major ones. The Slovak Airports Authority (SAA) manages all of the named airports.

Bratislava Airport is the main airport in Slovak Republic. It is only 9 km from the city centre and in 2002 will be connected to the motorway system. Thanks to its geographical position, Bratislava Airport can easily be linked to the water and railway networks as well. The capacity of the existing runways and passenger terminal meets the needs of current traffic and any foreseeable future expansion. The geographic proximity to Vienna International Airport (about 55 km) is one of the main factors affecting traffic at Bratislava. Up to 1989, when there was very strict border control, Bratislava Airport functioned as a stand-alone airport within the Czechoslovak aviation system. As a result of this market separation, there was no effective competition between the Slovak and Austrian aviation markets. The situation

changed dramatically when land-border controls were relaxed between Slovak Republic and Austria. This has been a crucial factor, as Vienna Airport, served by numerous international airlines, has been able to offer the Slovak travelling public a wide range of routes all over the world. In addition, Czechoslovak Airlines (CSA), the Czech national carrier from 1993, was able to offer connections to many flights from its main hub in Prague. These two factors taken together naturally had a dramatic effect on traffic at Bratislava Airport. In 1991, passenger volume had fallen to 39% of the 1989 volume, with the trough in 1993 at only 26% of 1989 volume.

Bratislava Airport has two runways, the first 3 190 metres long by 45 metres wide and the second 2 900 metres long by 60 metres wide. Its passenger handling capacity is estimated to be some 1.8 million passengers per year. It has a 6 500 square metre area dedicated to cargo handling. In 2000 Bratislava Airport offered services to 30 destinations, some 9 of which were served by scheduled services.

Slovak Republic's second airport serves the second major city of Košice. The airport is situated 6 km from the city centre. With regular flights to Vienna and Prague, Košice Airport is able to offer good air services and connections to various destinations. It has a 3 100 metres long by 45 metres wide runway. In the year 2000 it was served by 3 scheduled and 9 non-scheduled services.

Air Carriers

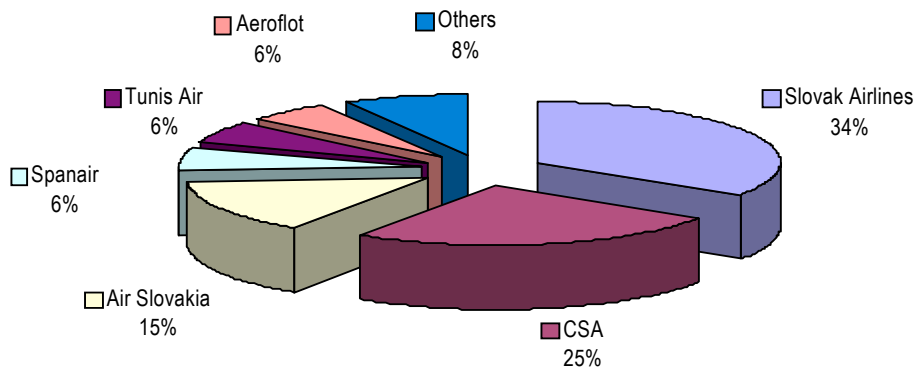
During the lifetime of the Republic of Czechoslovakia, the main carrier (Czechoslovak Airlines – CSA – with its home in the capital Prague) functioned as the main domestic and international flag carrier for the whole country. After the separation of Czechoslovakia, CSA was taken over by the Czech Republic, leaving Slovak Republic without a well-established airline of its own. Similarly, international airline scheduled services were centred at Prague and remained there after separation.

Several private operating air companies have been formed since 1993. The present state of air transport is affected to a large extent by the capacity and capability of Slovak carriers to meet the needs of the public, attract tourist and business travellers, to promote and contribute to the economy and prosperity of the country.

There are five licensed Slovak air carriers, the most important being Slovak Airlines, Air Slovakia and Seagle Air. Slovakia has no flag carrier. Twenty-one companies undertake general aviation activities. Figure SK6 shows the airline share of passenger traffic through Bratislava airport in 2000. Slovak Airlines with just over a third of the total was the largest carrier, followed by CSA with a quarter of the total and Air Slovakia with 15%. The remaining airlines had much smaller shares of the total traffic.

Equipment

The Slovak aircraft register consisted of 37 aircraft (on 31 December 2000) with one Boeing 737 2H4 and 5 Tupolev 154 M. Out of the total, 3 aircraft had a passenger capacity over 150, three aircraft 51 – 150 and 24 aircraft with 50 or less. Despite increasing by 8 aircraft in comparison with 1995, the average age of the fleet has increased. While in 1995, aircraft over 15 years old accounted for 34.5% of the fleet, by 2000 they represented 59.5%. The share of transport aircraft less than five years old decreased by 4.5 percentage points to 16.2% in 2000 (Table SK7).

Figure SK6: Airline share of passenger traffic through Bratislava airport 2000

Table SK7: Slovak air fleet

	By capacity / type						
	passenger				cargo aircraft	convertible and combi	special purpose / ambulance
	50 seats or less	51 to 150 seats	151 to 250 seats	251 seats and over			
At 31 December 1995	16	1	3	0	0	0	9
At 31 December 2000	24	3	3	0	0	0	7
	By age						
	<= 5 years	5-10 years	10-15 years	15-20 years	20-25 years	over 25 years	
	At 31 December 1995	6	8	5	4	5	1
At 31 December 2000	6	1	8	9	9	4	

Traffic and Transport Measurement

Passengers

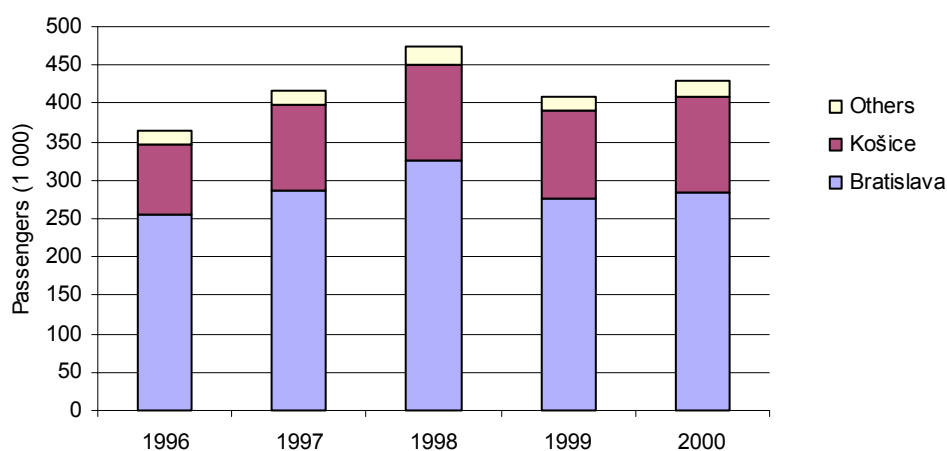
At Slovak airports, 429.6 thousand passengers were carried in 2000 (arrivals and departures). Their number increased by 51.3% in comparison with 1995, with arrivals rising by 48.9% and departures by 53.8%. In comparison with 1996, the highest growth was recorded in international non-scheduled transport (64.7%). International scheduled transport increased by 7.7%, but in comparison with the year of 1998, when number of transported passengers culminated, it decreased by 7.7%. In domestic transport, the largest number of passengers was carried in 1998 (57.6 thousand) and the least in 1999 (19.9 thousand). In spite of some recovery in 2000, domestic passengers carried decreased considerably compared with 1996, for scheduled by 36.7% and for non-scheduled by 43.5% (see Table SK8).

International scheduled transport had the major share of passengers carried in 2000 with 50.6% of the total. In comparison with 1996, its share on transport of passengers decreased by 4.8 percentage points. The share of international non-scheduled transport increased by 11.5 percentage points to 40.6% in comparison with 1996. The impact of the substantial decrease in domestic passengers was also reflected in the share of scheduled domestic passengers in the total, which decreased by 5.6 percentage points to 6.5% and domestic non-scheduled passenger shared was only 0.1%.

Table SK8: Passenger and aircraft movements at Slovak airports

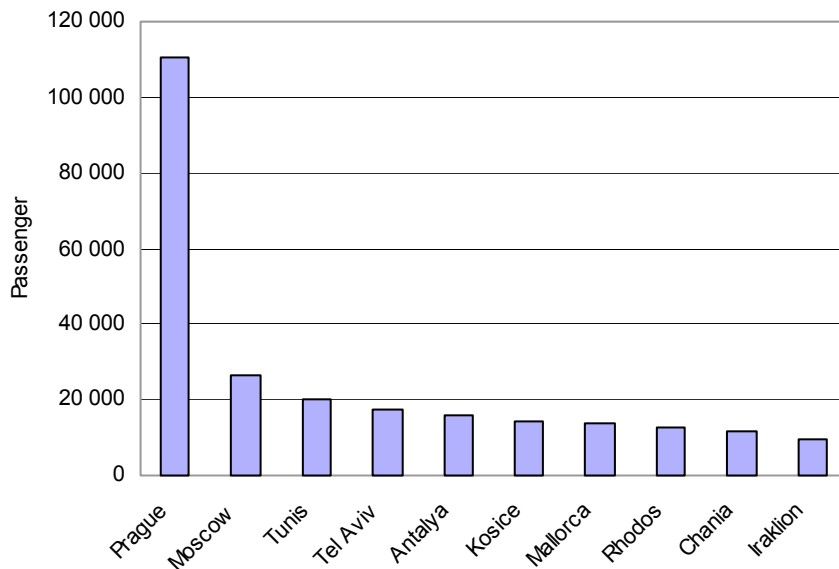
	1995	1996	1997	1998	1999	2000
Aircraft movements	35086	39810	47570	44034	38444	41349
Total passengers	283971	364084	416615	473139	409021	429558
of which:						
international	-	315800	368594	415506	389106	398313
domestic	-	48284	48021	57633	19915	31245
of which:						
arrivals	144781	180147	211891	239306	206652	215513
departures	139190	183937	204724	233833	202369	214045
of which:						
Bratislava	-	253939	285983	324219	276092	283714
Košice	-	93222	113104	126262	113678	125844
Others	-	16923	17528	22658	19251	20000
Bratislava %	-	69.7	68.6	68.5	67.5	66.0
Kosice %	-	25.6	27.2	26.7	27.8	29.3
Others	-	4.7	4.2	4.8	4.7	4.7

Bratislava and Košice airports accounted for more than 95% of air passengers (see Figure SK9). At Bratislava airport, 283.7 thousand passengers were carried in 2000. In spite of an 11.7% increase in passengers at this airport in comparison with 1996, its share on the total number of passengers carried decreased by 3.7 percentage points to 66%. The airport has lost its dominant position in non-scheduled international passenger transport. Though this kind of transport of passengers increased by more than a quarter during the surveyed period, its share of total air passengers decreased by more than a half to 46%. Košice Airport's share of total passengers was 29.3% in 2000. International scheduled passengers at this airport increased by 28.8 percentage points compared with 1996 to reach 77 thousand. Similarly, international non-scheduled passengers increased from 2.5 % share in 1996 to 26.3% in 2000. At both airports, domestic passengers decreased significantly. Compared with 1996 when there were 22 thousand domestic passengers, the 2000 total at the two airports was only 14 thousand.

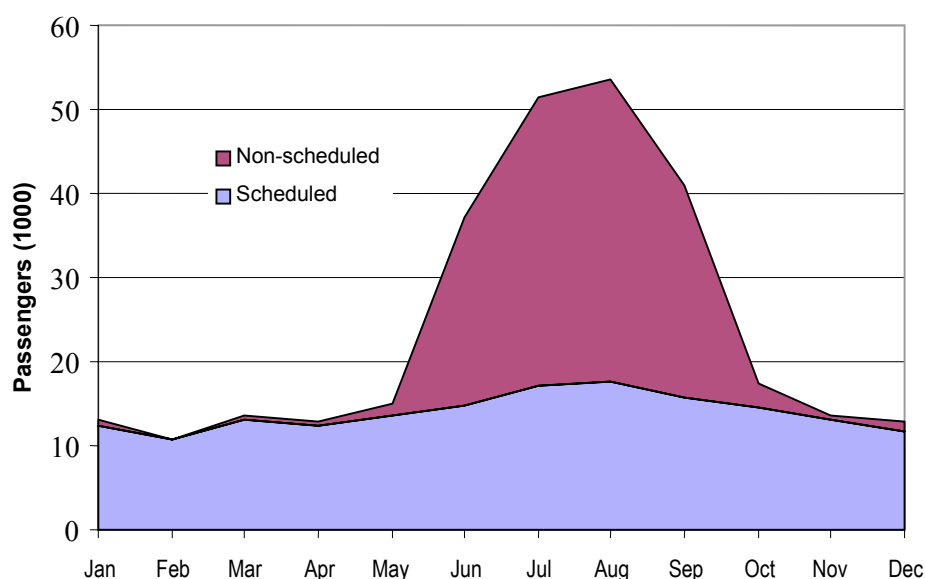
Figure SK9: Airport shares in total airport traffic

Among the top destination for passengers at Bratislava and Košice airports in 2000 were Prague (Czech Republic) with 110.4 thousand transported passengers, Moscow (Russia) with 26.2 thousand and the domestic destination Bratislava–Košice. Further, there were mainly holiday flights to Monastir (Tunis), Tel Aviv (Israel), Antalya (Turkey), Palma de Mallorca (Spain) and Greece (Rhodos, Chania, Heraclion) (Figure SK10).

Figure SK10: Top ten passenger routes out of Bratislava airport 2000



Passenger transport showed significant seasonal effects, as illustrated by Figure SK11. While in the first and the fourth quarters of 2000 only some 13 thousand passengers were carried each month on scheduled services at Bratislava Airport, in July and August the total reached 17 thousand passengers. This situation was even more significantly reflected in non-scheduled international passenger traffic. In February, 4 passengers were carried, in January and November about 600 passengers, but in July and August the total reached around 36 thousand passengers a month.

Fig SK11: Seasonal pattern of passenger movements at Bratislava airport 2000

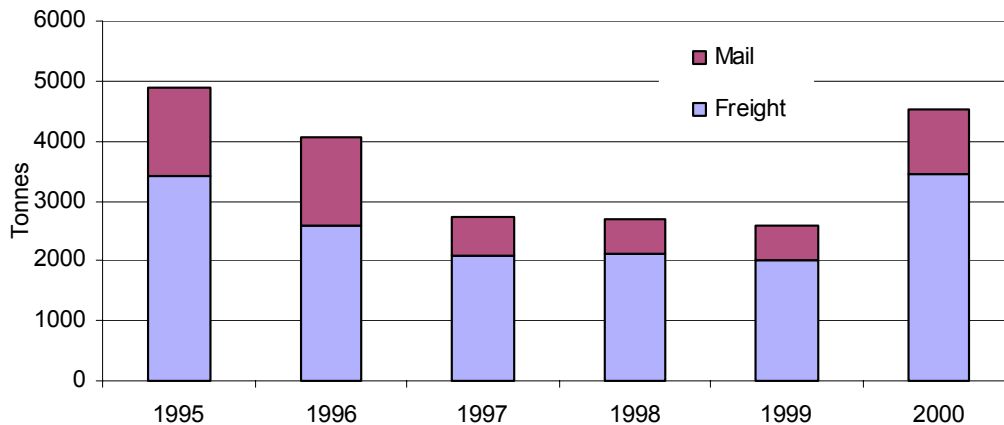
Freight and Mail

In 2000 about 4.5 thousand tonnes of freight and mail were transported at Slovak airports. In comparison with 1996 freight transport increased by 33.1% and mail carried decreased by 26.8%. Transport of freight moved in the range from 2 to 2.6 thousand tonnes in the 1996 to 1999 period. In 2000 it showed a marked year on year increase (73.5%) to 3.5 thousand tonnes. This mainly reflected transport of freight of humanitarian aid to Pristina in Kosovo. During the period under review, the largest amount of mail was carried in 1996 (1.5 thousand tonnes) and the least in 1998 (0.6 thousand tonnes), as shown in Table SK12 and Figure SK13).

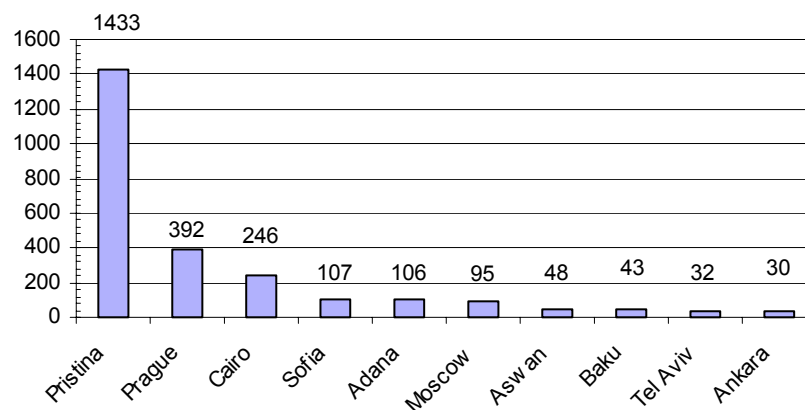
Overall, freight accounted for 64% of total freight and mail in 1996 and 78.7% in 1998. Mail's share varied around 24% except in 1996. Arrivals of freight and mail increased by 1.8% during the period under review and departures by 17.6%.

Table SK12: Freight and mail shipped through Slovak airports

	1995	1996	1997	1998	1999	2000
Total freight and mail	4872	4070	2714	2681	2572	4538
of which						
loaded	2776	2507	1204	915	1164	2947
unloaded	2096	1563	1510	1766	1408	1591
Total freight transported	3410	2604	2079	2111	1997	3464
of which:						
loaded	2079	1822	983	738	982	2576
unloaded	1331	782	1096	1373	1015	888
Total mail transported	1462	1466	635	570	575	1074
of which:						
loaded	697	685	221	177	182	371
unloaded	765	781	414	393	393	703

Figure SK13: Freight and mail shipments through Slovak airports


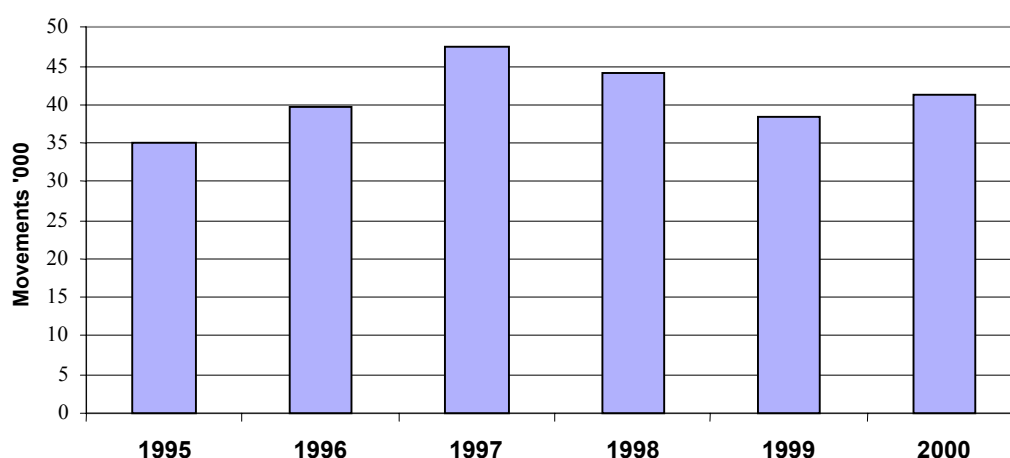
Bratislava Airport accounted for the large majority of freight and mail transported. In comparison with 1996, transport of freight and mail at this airport increased by 26.6% to 4 thousand tonnes, it formed 87.1% from total transport. Košice Airport's contribution to freight and mail transport decreased. While in 1996, it accounted for 18.6% of the Slovak total, by 2000 its share was only 6.1%. Among the destinations with the highest levels of freight and mail traffic from Bratislava and Košice Airports were Pristina (Yugoslavia) with 1.43 thousand tonnes, Prague (Czech Republic) 0.39 thousand tonnes, Cairo (Egypt) 0.25 thousand tonnes, Sofia (Bulgaria) and Adana (Turkey) 0.11 thousand tonnes (see Figure SK14).

Figure SK14: Top ten cargo routes out of Bratislava & Kosice airports 2000, in tonnes


Aircraft Movements

Aircraft movements at Slovak airports in the years 1995 to 1997 increased year on year by approximately 15%. In 1998 and 1999, a decrease was recorded. There was some recovery in 2000, when the number of flights increased by 7.6% compared to 1999 to reach 41 349. By comparison with 1995, this represented a growth of 17.9%. In domestic transport, the number of movements increased by 31.3% over the period since 1995. The share of domestic movements within the total varied between 54.5% (1995) and 65.9% (1997). In international transport, there were 16 246 movements in 2000, nearly 40% of the total. While, in comparison with 1995, international movements increased by 1.8%, their share of the total decreased by 6.2 percentage points. The highest number of international movements, 18 617, was realised in 1998, when their share of the total was 42.3% (Figure SK15).

Figure SK15: Aircraft movements at Slovak airports 2000



Last Remarks

To present of aviation transport within the context of the national economy as well as in its role in the transport market, results of statistical surveys organised by the Statistical Office of the Slovak Republic and the Ministry of Transport, Posts and Telecommunications of the Slovak Republic were used.

Data on aviation transport is regularly provided to international organisations of which the Slovak Republic is a member, namely the ECMT (the European Conference of Ministers of Transport), ICAO (the International Civil Aviation Organisation), ECAC (the European Civil Aviation Conference), WTO, OECD, EUROSTAT, etc.

The report was produced as a co-operative effort between the EUROSTAT expert for the Slovak Republic (Mr. Richard Butchart) and the national co-ordinator Ms. Lüttmerdingová (Statistical Office of the Slovak Republic). During the preparation of the report, they co-operated closely with Ms. Valicková (Ministry of Transport, Posts and Telecommunications of the Slovak Republic) and with other colleagues.

COUNTRY PARAGRAPHS

4. AVIATION AND MARITIME STATISTICS IN THE PHARE COUNTRIES

4.1 BULGARIA

Aviation

Bulgaria features five international airports: Sofia, Varna, Burgas, Plovdiv and Gorna Oriahovitza as well as three domestic airports: Vidin, Rousse and Targovitshe. Presently these national airports do not offer any commercial air services.

Only three airports have a traffic volume greater than the threshold defined by the EC Draft Regulation for aviation statistics (100 000 passengers per year): Sofia, Varna and Burgas.

Up to reference year 1999 the Bulgarian NSI was responsible for the data collection, but since the reference year 2000 the CAA is the national institution responsible for the collection of data from the airports.

Since 1999, statistical data concerning air transport are collected according to the Regulation RD 08-20 “on collecting statistics information on the civil aviation in the Republic of Bulgaria”. This Bulgarian Regulation allows the CAA to cover 100% of the information concerning the 5 international airports.

As regards adaptation to the EC statistical requirements in this field, until the reference year 1998, the form addressed to the airports by the National Statistical Institute can be used and from reference year 1999 “Form I” enclosed to the Regulation and addressed to the airports should be used. The data collected from these two forms only allow completing broad statistics such as those required in dataset C1 of the EC Draft Regulation. None of these forms allow generating data required in datasets A1 and B1. No data are available on the partner airport, the airline or the aircraft.

However, in the next few months, the CAA will introduce an extension to the current Regulation. Through this future amendment, the content of “Form I” that has to be completed by the airports will be extended. Taking into account the data currently available at the airports, CAA will ask for the provision of data by partner airport, airline, aircraft and type of services. The only remaining problem will consist in the fact that only flight stage declarations are available, it will not be possible to obtain Origin/Destination data.

As a conclusion it can be expected that when the above mentioned amendment enters into force, it will be possible to generate draft Council Regulation for datasets A1 and C1.

Maritime

In Bulgaria there are 16 ports but only 2 of them (Varna and Burgas) are over the threshold of 1 million tonnes of cargo per year defined in the EC Maritime Statistics Directive for the provision of detailed data. None of the 16 ports are over the threshold of 200 000 passengers a year.

Up to reference year 2000 the Bulgarian NSI was responsible for the maritime data collection. Since the reference year 2001 the Ministry of Transport and Communications is the national institution responsible for the collection of data from the ports.

Until the reference year 2000 the Bulgarian National Statistical Institute collected the maritime data through two reporting forms. One of these forms is addressed to the Bulgarian maritime operators, the other form is addressed to the ports (3 ports: Varna, Burgas and Lesport Varna).

End of year 2000 the Bulgarian Transport Ministry, with the assistance of the Bulgarian National Statistical Institute, elaborated a legal act. This ordinance entered into force at the beginning of year 2001 and is now the new basis for the maritime statistical data collection.

A specific application has been designed for the management of the data in the frame of the new ordinance, its requirements were defined together with the competent authorities. The NSI was mainly involved in the provision of nomenclatures currently used by the European Commission. One part of this software has been distributed to the port authorities for the data input. The port administration agency and its regional departments use the complete version of the software for the aggregation of the data and the production of the data output including the production of the tables required by the European Regulation.

The current situation shows that the Bulgarian CNAs will be soon ready to send data fulfilling an important part of the information required by the European legal acts. Few elements have to be improved; in particular concerning the nomenclature: the content of the port lists used by the system has to be updated.

4.2 CZECH REPUBLIC

The transport statistics in the Czech Republic is ensured at a top level by the Ministry of Transport and Communications and the Czech Statistical Office. Before political and economical changes in 1989 when passenger and freight transport was realized more or less by few big operators, data collection on transport statistics was ensured by the Statistical Office. After 1990 new laws have been adopted which liberalised the access to the market to a maximum degree. This manifested itself in all transport modes. At present there are about 100 air operators (of which 7 commercials), more than 45 000 carriers in the road transport of goods and in the inland waterway transport approximately 100 operators have been established. Because the Czech Statistical Office collected data only from reporting units having 25 (later 20) employees and many small operators with few employees were established, the methods needed to be changed. Therefore the Ministry of Transport and Communications introduced the survey using different methodology.

Based upon the agreement between the above mentioned institutions the Czech Statistical Office ensures at present information of cross-sectional nature used for national account purposes and the assessment of the national economy as a whole while Ministry of Transport and Communications ensures the collection of data on transport volume and transport performance (on goods transport and passenger transport) and data about infrastructure including infrastructure investment of all transport modes.

Aviation statistics

Statistical data on Air transport is collected in the Czech Republic for national purposes as well as for the purposes of international statistics (ICAO). Data collection for national use (which includes all air operators and airports – together about 180) is carried out annually. The requested questionnaire includes information on transport volume and performance of airlines and airports, on aircraft movements, on number of aircraft etc. After having completed the statistical questionnaire, the reporting units send it to the Civil Aviation Department, Ministry of Transport and Communications and the received data is then processed in the Transport Research Centre, which is a subsidized organization of the Ministry of Transport and Communications. All the statistical surveys carried out by the Ministry of Transport and Communications has to be approved according to the Act No. 89/1995 Coll. On the State Statistical Service by the Czech Statistical Office.

The data collection for international purposes - ICAO - is provided in accordance with the ICAO Doc 9080. The separation of the Czech and Slovak Republic in 1993 caused the ending up of the membership of former Czechoslovakia in ICAO. Both countries became new members in the same year. So starting from this date the statistical collection was renewed and the above mentioned countries started to report to ICAO separately. Therefore the statistical data for the Czech Republic concerning air operators, airports and provider of navigation services of the C. R. has been regularly transmitted to the Statistical Section of the ICAO since 1993.

Exchanging of the electronic data files has been ensured by e-mail since 1996. The flag air carrier CSA transfers monthly the data on air traffic performance (scheduled, non-scheduled traffic), quarterly the data On-flight Origin and Destination, yearly the traffic by flight stage, data on fleet and personnel and financial data. Czech Airport Administration manages and provides airport services of the four largest airports: Prague, Ostrava, Brno and Karlovy Vary. The data on airport traffic, separately for each airport, is sent to ICAO quarterly in month classification. Two types of files concerning air navigation data: en-route services traffic flights and financial figures (revenues, expenses, gross capital investments) are completed yearly. Yearly the file of the aircraft on register is collected as well. Additionally once a year the traffic data of small air operators and airports are completed.

The Czech Republic is able to supply all the information required for dataset C1 of the EC Draft Regulation.

For the Flight Database (set A1 of Annex I of the Draft Regulation) the Czech Republic would be able to supply all the information required with some reservation about passenger seats available. With the current systems, the information on seat capacity would be according to the aircraft manufacturers specification. With the proposed new system seat capacity would be according to the data held on the unified system database for each flight held in the database. Where a new aircraft was used that was not in the database the seat capacity would be according to manufacturers specification.

Dataset B1 (the On-flight origin/destination database) could be provided from the current system for all flights by Czech airlines and for all departures from Czech airports (only Prague has flights with more than one flight stage). For arrivals by foreign airlines it would depend on whether the relevant information was sent to Prague by the handling agent from the dispatching airport. In the current system this data is sent sometimes but not in all cases. There is no operational requirement at Prague airport to know the airport of origin for arriving passengers other than the previous airport.

All data would use the definitions and ICAO codes set out in the Regulation, although for operational purposes the Czech Airports Administration systems use IATA codes rather than ICAO codes. Data could be provided quarterly or monthly. The Czech Republic is able to provide the first set of data in prescribed format for the first half of the year 2002. However due to confidentiality reasons dissemination of some information may be omitted.

4.3 ESTONIA

The Statistical Office of Estonia is the main producer of maritime and aviation statistics. In this area it produces aggregate statistics on passenger and freight transport through Estonian airports/ports and on transport performed by Estonian air/sea enterprises. In general, definitions and classifications adopted correspond to the EC standards, but major features such as the partner airport or the port of loading/unloading are lacking. Other competent national authorities have their proper data collections, which may be more detailed as compared to that of the Statistical Office, but they are used only for internal purposes.

Aviation statistics

There are five airports for open international traffic in Estonia: Tallinn, Tartu, Pärnu, Kuressaare and Kärdla. The airport of Tallinn is by far the largest, handling about 97% of the annual passenger transport. The other airports are mainly used for domestic traffic and they may service some charter flights (mostly during the summer season).

In the case of airports, the data collected is broken down by international/domestic traffic and by arrival/departure. The number of direct transit passengers, the number of commercial and total flights, the number of training flights, the number of serviced airlines and the number of regular flights per week are also requested. In the case of Estonian air enterprises, breakdowns concern regular and charter flights and international/domestic, and passenger-km/tonne-km are also requested. This data is entered in a FoxPro database where it can be processed and extractions are made regularly for publication. Part of the data is used for national accounting purposes.

In the case of aviation, the Statistical Office's current data production would be able to cover the table on airport traffic (dataset C1) of the EC Draft Regulation. However, more data seems readily available from Tallinn airport. The airport has a fairly comprehensive database including most of the data required, although this might not always be in the appropriate format. The airport processes data on each flight according to information supplied by the handling or airline companies. Regular reports on origin-destination of passengers are prepared for ICAO. The information on partner airports and on airlines is available in the Tallinn Airport database, but details on the number of seats available would have to be estimated on the basis of aircraft types.

The definitions adopted for aviation statistics are mostly based on ICAO standards. There are no comparability problems for variables such as passengers, direct transit passengers and scheduled flights. For non-scheduled flights, the statistics produced include both commercial and non-commercial flights, while the data required by the EC Draft Regulation only covers commercial aviation. Passengers are persons carried on an aircraft, excluding the on-duty members of flight crew and cabin staff (i.e. including infants and other non-revenue persons). This is the same definition adopted in

the EC Draft Regulation. The present data collection (both at the Statistical Office and at Tallinn Airport) does not include any information on the number of seats available.

Maritime statistics

Although there are over 30 commercial ports in Estonia, only five ports handle more than 1 million tonnes of goods or recording more than 200 thousand passenger movements annually, i.e. within the scope of detailed statistics according to the EC Maritime Statistics Directive. The ports over the traffic threshold are: Tallinn, Kunda, Vene Balti, Pärnu, and Miiduranna.

The Statistical Office collects aggregate statistics on total vessel traffic, passenger and cargo loaded/unloaded in Estonia, as well as on the performance of Estonian maritime enterprises. The sources for these statistics are the Port Authorities and Estonian maritime enterprises. The statistics are collected through monthly, quarterly and/or annual paper questionnaires and concern:

- Loading and unloading of cargo in Estonian ports (monthly)
- International passenger traffic through Estonian ports (quarterly and annually)
- Goods transported through Estonian ports (quarterly and annually)
- Vessel movements in Estonian ports (quarterly and annually)¹
- Maritime transport by Estonian shipping enterprises: number of passengers and paxs-km, tonnes and tonne-km, number of vehicles and containers (quarterly and annually)
- Number of maritime accidents and casualties in Estonian maritime enterprises (annually)

The questionnaires are posted to the respondents by regular mail and the replies may be send back by fax. The resulting data is entered into a FoxPro database where it is compiled and extractions for publications are produced on a regular basis. The Statistical Office also receives (annually) data on maritime accidents of Estonian vessel and/or within Estonian territorial waters, as well as some data on the ship register from the National Maritime Board.

The data currently available allows for a description of maritime transport by commodity type and direction (loaded/unloaded) specifying whether it is export, import or transit traffic. It allows for statistics on the number of full and empty containers and ro-ro units and on the number of containers transported to the port by road and by rail. Passenger traffic can be divided into passengers carried by Estonian ships or foreign flags (but no distinction between nationalities) and according to the major relation countries (i.e., Finland, Sweden and Germany). Vessel traffic can be detailed by direction (incoming/outgoing), type of vessel and main flag countries. Aggregate figures are also available for total gross tonnage (GT) of vessels calling at the ports. These statistics are available at least quarterly.

¹ Only quarterly since the year 2002

However, as compared to the EC Maritime Statistics Directive, elements such as the port of loading/unloading, the type of cargo and a full description of the nationality of registration are currently not available. A more complete description of the vessel in terms of classes of gross tonnage is also lacking. The commodity classification adopted by the Statistical Office is NSTR, although no detail on commodity is currently available for goods in containers and ro-ro units. Moreover, the data freight refers to the total weight of the goods, including the tare weight of containers and ro-ro units “gross gross” weight) while for comparability reasons the tare weight should be excluded.

Statistical information and structured databases are processed by Estonian Ports to a variable extent (in some cases there might only be manually treated data). In some cases the Port Authorities do not even have access to data on the port of loading/unloading as it is not relevant to their operational tasks. Moreover, in cases where the Ports do receive such information from the stevedore/cargo handling companies, it might not always be processed and they could be reluctant to provide it for wider dissemination.

4.4 LATVIA

Aviation statistics

Airline companies or their agents send electronic SITA messages to Riga airport. This data is entered into the airport information database. Other information required for operational purposes is added to the database. The database system is an integrated system covering all information requirements of the airport, including ground handling operations and public flight display systems. Flight delay information, with reasons for delay, is also included in the system.

Information held in the Riga airport database relevant to the statistics required for the EC Draft Regulation are: arrivals/departures; type of movement; type of service; type of aircraft; type of flight; airline company and airport of relation for commercial aircraft movements; passengers divided into adults, children and infants and each if in transit; freight and mail separately. All flights at the airport are also available.

The Riga airport database is able to use ICAO codes for airports, airlines and aircraft types even though in the case of airports it displays text in its current output. Definitions of variables are as in the Eurostat Glossary except that for seats available the figure used is the number of seats usually provided (manufacturers design) for that type of aircraft.

Maritime statistics

The ports of Riga and Liepaja have the same database system. At Ventspils the system is paper-based at present but a study is in progress to consider an electronic database system.

Data are supplied by ships' agents from the ship manifest to the Harbour master by fax. At Riga and Liepaja the Harbour master's office enters information into an electronic database.

The information in the port database includes details of vessel (flag, type, dwt, grt, last/next port of call) type of cargo at the 1-digit level of the EC Maritime Statistics Directive classification for cargo types. Information on commodity is restricted to the top-10 commodities for the non-unitised types of cargo. Size of container and whether empty is recorded. The number of units is also recorded. Information on other port of load/unload is not collected. Tonnage recorded includes the weight of all packaging and transport equipment tare weight.

Ship type and flag are defined in the same way as the EC Maritime Statistics Directive. Codes for ship type are 3-digit alpha and flag is coded to 2-digit ISO. Last/next port of call of vessel is recorded in textual format. The port of Riga would be able to link the textual names of ports to a table of UNLOCODES. Type of cargo and commodities (where identified) use a national code.

The database of the port of Riga has recently been extended to include detailed textual information of commodity for non-unitised cargo but not in coded format. This information is not collected at Liepaja or Ventspils.

4.5 LITHUANIA

Aviation statistics

Lithuania Statistics undertake a great deal of collection in the aviation and maritime transport sector. For aviation, the key set of data for meeting the requirements of the EC Draft Regulation is that provided by Vilnius Airport with its complete coverage of traffic through the airport. The collection of data relating to the activities of Lithuanian carriers is of less relevance in the context of the draft regulation but remains important for understanding the performance of the Lithuanian air transport sector. For direct collection from airports, Inquiry form TO-01 collects monthly data for aircraft movements for domestic and international traffic, broken down by scheduled, non-scheduled and other flights. Passenger arrivals and departures are also collected in the same way. Numbers of international transit passengers are also collected but nothing on freight and mail. Inquiry form TO-12 collects quarterly data from airports on aircraft movements, passengers, goods and mail by individual air carrier for international scheduled traffic. The detailed information shows numbers of arrivals and departures for aircraft and passengers and kg loaded and unloaded for freight and mail. The numbers of direct transit passengers is also collected. For international non-scheduled, domestic scheduled and non-scheduled traffic, an all air carriers total is collected in the same detail. Information about aircraft movements on other flights is also collected. Inquiry form TO-10 collects annual data from airports by airport pairs. For each route, the total number of aircraft movements and passenger arrivals and departures is requested together with the number of direct transit passengers. For freight and mail, the amount loaded and unloaded is collected. The information is gathered separately for scheduled and non-scheduled traffic.

The basic source of information for compliance with the EC Draft Regulation is the data compiled by the airport. Flight level data is held on paper by month and year and partially on the airport computer system. Vilnius airport has no information, nor any interest in on-flight origin/destination, as such traffic was a minor element at Vilnius. There are some flights from Palanga, which touch down at more than one airport and for these flights on-flight origin/destination data is available. Discussion with Lithuanian Airways in its role as a ground handling agent showed that the flight level data was already in computer readable form from their systems. It could be assumed that the other ground handling agent, Litcargus, and Lithuanian Airlines Cargo would have similar computer held records. The current coding of the data by hand for inclusion on the Vilnius Airport computer system is not therefore necessary.

While the Vilnius Airport system forms a starting point, Lithuania's ability to provide the detail necessary for the draft regulation will be hampered by the inflexible nature of the computer software available to the airport staff responsible for statistical returns. A substantial and sustained investment in an improved computer system and in data acquisition, including on-flight origin/destination data, will be required to respond to the demands of the Draft Regulation.

Maritime statistics

For maritime transport, the position is somewhat better in that Lithuania Statistics' main collection is directed to the handling agents (stevedores etc). These handle all of the trade through Klaipeda so that the problem of collecting detail only for Lithuanian shipping lines does not emerge as it does for aviation statistics. Indeed some of the collection, for example in terms of mode of hinterland transport and nationality of passengers, goes beyond what the directive requires. Form TJ-01 collects monthly data on goods, vehicles, containers, passengers and ship movements in total by direction. Form TJ-10 is used to collect data on cargo loaded and unloaded by NST/R category and type of cargo. Container data in TEU including whether empty is also collected. Total passengers embarked/disembarked (of which foreigners) and total Lithuanian imports and exports (for the identification of transit traffic) are also included. Half yearly form TJ-11 collects goods loaded and unloaded by NST/R and country of loading/unloading and containers (of which empty) loaded/unloaded by country of loading/unloading. Form TJ-17 collects information about containers, rail wagons and vehicles, loaded and unloaded, by container size and vehicle type. For compliance with the EC Maritime Statistics Directive, the crucial missing element is port of loading/unloading. Including this in form TJ-11 on a quarterly basis would fulfil the requirements of Table A2. Tables A1 and C1 could be met by collecting forms TJ-10 and TJ-17 by port of loading/unloading. However, Table E1 virtually needs a database constructed at a vessel call level and needs the full co-operation of the Klaipeda port community.

It was therefore very encouraging to hear the plans of the Klaipeda State Seaport Authority. The Authority is already implementing a Ship's declaration as part of a Ship Information System. This will collect the full range of data needed for compliance with the EC Maritime Statistics Directive. In particular, details of the ship in terms of flag, size, both GT and DWT, shipping line and owner or charterer will be collected. The new form is currently undergoing trials as a paper collection exercise but an electronic version is shortly to be made available. Full implementation of the system is planned for 2002. While the Ship's declaration has space for some information about the cargo loaded and unloaded, this is severely limited. As a result, there is uncertainty about whether the port of loading/unloading will be properly recorded for ships on a rotation through a number of ports where cargo may be loaded/unloaded at each port call. All this makes a more comprehensive dedicated cargo system desirable, so that it was promising to hear that the Klaipeda State Seaport Authority intends to begin initial work on a Cargo Information System once the Ship Information System is in full operation. If these developments were successful, they would make a review of Lithuania Statistics' collection in this area possible in order to reduce and simplify the processing burden on both Lithuania Statistics' staff and the enterprises supplying the current data. What will be important is to encourage Klaipeda State Seaport Authority to pursue this 'Port Community' based approach.

4.6 HUNGARY

Hungary has only one major airport - Budapest/Ferihegy - that accounts for over 99% of the total air passenger traffic. A number of small regional airports exist but they are mainly used for general aviation purposes and for a very limited number of charter flights. There is basically no commercial domestic air traffic in Hungary.

The Hungarian Central Statistical Office (HCSO) has the overall responsibility for statistics in the country. Most of the transport data collected by the HCSO concerns transport enterprises and contributes to the compilation of national accounts. In the field of aviation statistics the HCSO collects and publishes data on total passenger and freight transport through the main airport (Budapest/Ferihegy) and on transport performed by Hungarian air enterprises. Other competent national authorities such as the Air traffic and Airport Management Body (LRI) and the Civil Aviation Administration have their proper data collections. These are more detailed as compared to that of the Statistical Office, but they are used only for internal purposes or for transmission to international organizations within the aviation industry such as ICAO, IATA, ACI and Eurocontrol.

In the current system the HCSO collects data on airports through an annual questionnaire where the following statistics are included:

- the number of incoming/outgoing flights, number of incoming/outgoing passengers, tonnes of incoming/outgoing freight and mail with breakdowns by airline company
- the number of incoming/outgoing flights and passengers for scheduled and non-scheduled traffic and by airline company
- the number of incoming/outgoing flights and passengers for scheduled and non-scheduled traffic by partner airport (with indication of the country as well)

For Budapest/Ferigeby airport the data is provided by the LRI's statistical department, which gets it, in turn, from three distinct origins. About 80% of the data is provided by the MALEV airline company that is the ground handling agent for Terminal 2A, while the remaining 20% comes from LRI itself, in quality of ground handling agent for Terminal 2B, and from the authorities in charge of general aviation.

Definitions and classifications adopted correspond to the EC standards, but major features such as the number of direct transit passengers, breakdown by partner airport and airline companies, and the number of seats available are currently not available. The current data production would be able to cover partially, and on an annual basis, both the table on airport traffic (dataset C1) and on air traffic by flight stages (dataset A1) of the EC Draft Regulation.

More data seems available from the LRI's statistical unit although this might not always be in the appropriate format. In particular, the breakdown by both the partner airport and airline company are available at the LRI, with airports coded according to IATA three letter codes. Moreover, the LRI Air Traffic

Control Department has a very comprehensive database resulting from the processing of data on each flight according to SITA messages sent by the handling companies or airlines. Information on partner airports and on airlines could be extracted from this system, but details on the number of seats available would in some cases have to be estimated on the basis of aircraft types.

On January 1st 2002 the LRI is changing its status and will be split into two separate entities – one in charge of the air traffic control and one of the airport management. The internal organisation of the new bodies might be subject to change and new procedures might effect the production of statistics.

4.7 POLAND

The collection of statistics in Poland is governed by the programme of statistics adopted by the Government each year. Of course, many of the inquiries are ongoing and continues as part of the programme from year to year and this applies to the inquiries for maritime and aviation statistics. All the inquiries in transport are conducted under the programme and there are no voluntary inquiries.

The current collection of **maritime statistics** relevant to the directive is conducted through inquiries to cargo handling agents at the ports. These can be pure service providing enterprises or manufacturers handling their own goods. An example of the latter is the chemical company operating at Police. The CSO has no way of identifying the enterprises concerned and utilises a mixture of information from ports and local knowledge to establish a list annually. The annual form, T13, collects information about vessel movements by arrival/departure, then by with laden/unladen. For each of these categories, data was collected on the number of calls, Net tonnage and, since 2001, Gross tonnage. An overall total for each data item in every category for all vessel port calls was broken down by flag of vessel. There was no collection of ship type and size class information.

A pair of forms, T10 annual and T42 monthly, dealt with the collection of goods. Only T10 was available for study and collected total cargo movements in thousand tonnes divided into international and domestic. The international total was broken down into a total, goods loaded and unloaded. For domestic traffic, tonnage data was collected in total and, since 2001, for maritime traffic because the total included some non-maritime movements handled in the ports. However, as domestic traffic accounted for around one per cent of the total, this did not represent a big problem. These headings were then cross correlated against the Polish maritime goods classification. To improve the match with the directive's 'cargo classification', the general cargo heading had recently been subdivided to show unit load items such as containers, pallets etc. separately. For unit load items, in addition to tonnes, information on numbers of units (and TEU for containers) in total and for units loaded and unloaded was also collected. Unit load items was also extended to show details of units with cargo and empty. T10 also had a section on transit trade, important for Polish ports. Data was collected in tonnes in total and split between sea-to-land, land-to-sea and sea-to-sea with each item divided between goods loaded and unloaded. These items were then cross tabulated against a total and selected commodity headings. In another section, the same selected type of cargo headings were collected by the country supplying the transit goods or taking delivery of them. A final section gathered data about the length of quays in total and for those currently in use. Form T42 collected a simplified version of T10.

The Statistical Office at Szczecin also collects information from Polish shipping lines about their traffic in both Polish flagged ships and foreign flagged ships. Goods carried in terms of tonnes and tonne kms is collected in total and for movements in chartered foreign flagged ships. The total was also

broken down by regular (scheduled) services and non-regular (non-scheduled) services. The scheduled services were divided into deep sea, European short sea and Baltic short sea with this last category split to show the total for ferries. Non-scheduled had tankers broken out and then divided again into deep sea, European short sea and Baltic short sea. Information on tonnes of goods in total and for containers and TEU for containers was collected for movements involving Polish ports with outward and inward movements shown separately. The same detail was collected for movements between foreign ports and for movements between Polish ports. The same tonnage and TEU headings were collected for the carriage of Polish foreign trade cargo with exports and imports separately identified. In addition, movements between foreign ports and movements between Polish ports were also shown as well as the carriage of transit cargo with movements between Polish ports broken out. The form also covered goods trade in tonnes by commodity and passenger traffic.

It is clear that the existing Polish system for the collection of maritime statistics does not meet the requirements of the directive and will need much effort on the part of the statisticians to bring it into line. It was encouraging to see a draft ship's declaration which would provide the basis for a vessel call level database. If such a base could be established, it would meet the requirements of the directive but would need time to run in before the Polish CSO could be certain about the quality of the data collected. In this respect, Poland would be in no different a position to that currently facing the existing Member States in the introduction of the new system at European level.

For **aviation statistics**, the CSO conducts two sets of inquiries of interest. One set goes to airlines and the second set to airports. In the first set, Form LOT-1 goes to scheduled airlines, which, in the case of Poland, means Lot Polish Airlines. This is an annual form and asks for details of the airline's fleet, the number of aircraft, its utilisation in terms of hours flown and kms flown by type of flight, e.g. commercial scheduled etc. In addition, it collects aircraft seat capacity by broad aircraft types. Other data collected was information about the number of flights, the network served, passenger numbers and freight carried with each main category broken down.

Form LOT-2 went to all the other non-scheduled airlines annually, asking similar but shorter questions as those in LOT-1. There were some additions such as sightseeing trips.

In the airports area, annual form PL-1 was sent to the Polish Airports State Enterprise, PLL. It was originally intended to collect data for all airports but the recent and continuing restructuring of the airports means that data for only a very limited number was available in the most recent year. For each airport, it asked for aircraft movements, passengers embarked, disembarked and in transit and freight and mail loaded and unloaded. All this was divided between Polish and foreign carriers. A final split repeated the data broken down between scheduled and non-scheduled traffic. PL-2 asked for the same data as PL-1 but designed for the collection of a single airport's information.

A final form was sent annually to the General Inspectorate of Civil Aviation to collect information about the Polish Aircraft Register. The aircraft fleet was divided into various categories of aircraft such as jet and turboprop and by the number of engines, separately identifying aircraft used for hire and reward and own account use.

As the above description shows, the collection of aviation data undertaken by the CSO falls far short of meeting the requirements of the draft regulation. The response to the pilot project aviation questionnaire also shows that the required detail may not easily be available within the systems operated by the airports so that there is much work to be done in preparation for eventual compliance. The problem is complicated by the current restructuring and privatisation of the Polish airport system, which is moving from one state owned authority to individual and eventually privately owned and operated airports. Well judged use of the license conditions and careful attention to the drafting of the new aviation act will be necessary to ensure that the airports under an obligation to meet the European statistical requirement. Action is also needed to ensure that the airports are informed and consulted at every stage.

4.8 ROMANIA

The Statistical Office of Romania is the main producer of maritime and aviation statistics. In this area it produces mainly aggregate statistics on passenger and freight transport through Romanian airports/ports and on transport performed by Romanian air/sea enterprises. Other national authorities have their proper data collections, which in certain domains may be more detailed as compared to those of the Statistical Office, but they are not made available to the public and mainly used only for internal purposes.

Aviation statistics

Romania has four international airports, of which two are located in Bucharest: Otopeni and Baneasa airport. Bucharest-Baneasa is to be considered as the main airport for national traffic (99%). Baneasa airport will be closed completely in the future; Otopeni airport will integrate the entire traffic of Baneasa within the next five years. Bucharest-Otopeni is responsible for 87.9% of all international passengers (2000). The other airports, Timisoara and Constantza, take a share of 5% or less. In addition, there are ten more airports in Romania which mainly handle domestic air traffic. The two Bucharest airports and Timisoara are over the threshold for detailed reporting.

Data available at the Statistical Office are collected on the basis of quarterly paper questionnaires. The content of these questionnaires has been adapted a couple of times and has been notably inspired by the content of the EC Draft Regulation 95/C 325/08 for aviation statistics. One questionnaire is addressed to Romanian airports; the other to the air transport enterprises. Every year, an updated list of air traffic enterprises is obtained from the business register. Both questionnaires are completed at quarterly intervals. The questionnaires are sent to the regional statistical offices, data are entered in files and transmitted to the National Statistical Office in Bucharest via an Intranet link, where data are compiled and aggregated.

The information requested in the questionnaire addressed to the airports covers passenger as well as freight/mail traffic, broken down by international/domestic traffic and by arrival/departure. The total number of flights, broken down by national and foreign operators is also covered. The information is given according to the Origin-Destination principle.

The current data collected through the questionnaire addressed to the airports by the Romanian Statistical Office can be used to compile large parts of dataset B1. For dataset B1 (on flight origin/destination), the airline code would however not be included nor could a differentiation between passenger services and all-freight and mail services be made. It seems that all the elements are available for Dataset C1 (Airport dataset). Confidentiality matters remain to be discussed. Furthermore, data are not readily structured as required in the Draft Regulation, both with regards to the internal treatment of the data and the format in which it should be transmitted.

Maritime statistics

Romania features a limited amount of ports: 3 are located on the Black-Sea coast (Constantza, Midia, Mangalia), the other ports and are either on the Black Sea-Danube channel (Cernavoda) or on the Danube in the Danube Delta (Galati, Tulcea, Braila). Sea-going vessels are capable to either navigate upstream to reach port installations (through the natural Sulina Canal) or access the Black Sea – Danube canal through the port of Constantza (locks). Via the Bosphorus and the Marmara-Sea, Romania has access to the Mediterranean Sea.

Only the port of Constantza and Galati were over the threshold of 1 million tonnes of cargo in 2000. Both ports together handle 96 % of the maritime traffic (2000). Although a very limited passenger transport does exist, numbers are low and there is no collection on maritime passenger traffic.

The Statistical Office is the only official producer of maritime statistics. Romanian maritime enterprises and cargo handling companies are at present the only sources of data for the Statistical Office. The Statistical Office collects aggregate statistics on total vessel traffic and cargo loaded/unloaded in Romania, as well as of the performance of Romanian maritime enterprises via two quarterly questionnaires. One questionnaire is addressed to maritime transport enterprises, the other to stevedores.

Data on maritime transport through Romanian ports is currently supplied for the single ports with regards to goods loaded and unloaded and goods in transit, by group of goods.

With regards to origin and destinations of goods handled, details are published only at national level although the questionnaires ask for port-port relations. The Statistical Office confirmed that the partner ports listed are those where the cargo was loaded/unloaded originally and not the next/last port of call. The available details also specify the type of cargo (solid bulk, liquid bulk, goods in containers and 'other cargo'). It is recalled that only global figures exist for incoming and outgoing vessels, the only differentiation is made between vessels sailing under Romanian flag and foreign flag. Furthermore there is no classification for the type of vessels.

There is no collection on passenger traffic: dataset D1 does not apply to Romania since there is no port with passenger traffic over the threshold. However, aggregate data required for small ports as requested in dataset A3 are presently impossible to obtain.

4.9 SLOVENIA

Aviation statistics

Over 99 per cent of the air traffic of Slovenia is performed through Ljubljana airport. The flight information display system (FIDS) at this airport in use in 2001 was developed over 10 years ago, using the COBOL programming language. This system requires most of the basic data to be re-typed into the system and does not take advantage of electronic capture of information; also there are problems in linking data between the various parts of the system. Sources of basic data are flight plan requests and agreements, load messages and SITA messages.

The statistics currently collected and published by the Statistical Office are aggregate figures of flights, number of passengers arriving, departing and in transit, tonnes of freight and mail by type of service, national or international, and by direction. The Civil Aviation Office collects the data for ICAO from airports.

Although the present system does include all of the information required to meet the needs of the ECraft Aviation Statistics Draft Regulation and to the stated definitions, much of it is not coded and where codes are used they are generally IATA codes. Furthermore, the extraction of any additional statistics to those currently in the system would require the writing of specific COBOL programs.

A new system is under development for Ljubljana airport, using Oracle, that will provide for electronic transfer of basic data, an integrated flight information system for all airport operations, and flexibility in the abstraction of statistical information. The aim is to start the new system in March 2002 running in duplicate with the current system until May 2002. Live running of the new system would start in June 2002. The Statistical Office hope to plan a pilot project to obtain data on the lines of that required for datasets A1 and B1 of the Draft Aviation Statistics Regulation starting in July 2002. The aim is for the Statistical Office to have data available, monthly, to meet all the requirements of the Draft Aviation Statistics Regulation from January 2003.

Maritime statistics

From the year 2000, the Statistical Office of the Republic of Slovenia has expanded the forms used for the collection of maritime data for Slovenia to meet the needs of such data for the EU Maritime Directive. The forms collect data for each ship arrival and departure from ports in Slovenia. However, the information published for the year 2000 will be in the same format as previous years. The new data collected for 2000 will be examined with the aim of developing new tables for publication in 2002.

The collection of data is carried out through the Maritime Directorate of the Ministry of Transport. For each ship arrival, the ship's agent completes a form giving information on the vessel, any passengers dis-embarked and goods

unloaded. A similar form is completed by the ship's agent for vessel departures. The source of information is the ship manifest. The completed forms are sent daily to the Maritime Directorate (located near the port). A check that all forms have been returned is made against a separate record of ship arrivals and departures. The Maritime Directorate code the textual data and send completed forms to the Statistical Office within a few days of the end of the relevant month. The Statistical Office checks the forms, processes the data and publishes the information. Future developments are for the Maritime Directorate to prepare electronic versions of the coded forms for submission to the Statistical Office and, later, to obtain electronic versions of the forms from ship's agents.

The data collected for 2000 include all the statistical elements required by the EC Directive on Maritime Statistics and use the same definitions, classifications and codes with the following exceptions:

Relation port is recorded textually but not coded at present. A pilot trial will be carried out in 2002 to code ports to UNLOCODES (maritime coastal areas are coded currently).

Type of commodity is coded to NST/R only for non-unitised cargo. There are no plans to attempt to code unitised cargo to NST/R. The burden of that work would be unreasonable.

4.10 SLOVAK REPUBLIK

The activity of the Statistical Office of the Slovak Republic (SO SR) is governed by the Law 322/1992 on official statistics. The task of the SO SR is to gain statistical information needed for judging the social and economic development in SR as well as for international comparisons. SO SR provides data not only to governmental organisations but also to international organisations, such as EUROSTAT, OECD, OSN, World Bank, etc.

SO SR annually publishes the „Programme of official statistical surveys“ to be undertaken in the year ahead in the Collection of Laws. These are SO SR surveys but Ministries also undertake surveys. Together with the „Programme of official statistical surveys,“ brief characteristics of particular questionnaires are also publicised in Collection of Laws. The protection of individual data is ensured.

Aviation statistics

Aviation data is collected by the SO SR monthly, quarterly and annually. The monthly Dop 1-12 questionnaire goes to all transport sectors and asks air carriers to supply information about tonnes and tonne kms for freight and passengers and passenger kms, employment data and the receipts from their own air transport activities and goods. There is in addition a common element which deals with staff, payroll and receipts for freight and passenger transport. Quarterly questionnaires, Prod 3-04 and P 13-04 collect national accounts and employment data and transport sectors are included (Council Regulation 1165/98 Conjunctural Statistics in Enterprises). There is no specific transport content.

In addition to a specific questionnaire focusing on air transport, all organisations, including those providing air transport and air transport services, provide annual data to SO SR within the meaning of the Council Regulation 58/97 Structural Statistics in Enterprises (Roc 1-01 Units with 20 employees or more, Roc 2-01 Units with employment less than 20, Roc 3-01 Registered Traders).

The collection of annual performance indicators for all carriers including air carriers and those providing air transport services is provided for by SO SR in its annual questionnaire Dop P6-01 (freight transport by NST/R, import/export by countries of destination – passengers, passenger kms, goods, tonne kms, city transport, passenger numbers by fare type, transport of dangerous goods, employment by professional group).

An annual questionnaire, Dop P9-01, deals specifically with the air transport sector. It asks operators for details of any aircraft used by them included on the Slovak register. Carriers are also asked to provide details of kms and hours flown by their aircraft, the number of flights and passengers carried. For freight and mail, tonnes carried are also required together with tonne kms for both categories and passenger kms. The data is requested for scheduled and non-scheduled, international and domestic flights. Information about general

aviation operations is also collected. A final module, completed by the Slovak Airports Authority - airport activity, including movements (scheduled/non-scheduled, international/domestic), number of passengers (arrival/ departure/transit, scheduled/non-scheduled, international/ domestic), freight and mail figures (loaded/unloaded, scheduled/non-scheduled, international/domestic).

The SO SR publishes monthly and quarterly data in the Results of Quarterly Surveys for Enterprises of Transport, Posts and Telecommunications and the yearly data in the Statistical Yearbook of the Slovak Republic, Yearbook of Transport, Posts and Telecommunications.

The Ministry of Transport, Posts and Telecommunications (Ministry) is responsible for collection and dissemination of statistical information primarily to the international organisations (ICAO etc.). The obligation to file statistical information with ICAO is set out in the Article 67 of the Convention on International Civil Aviation:

„Each contracting State undertakes that its international airlines shall, in accordance with requirements laid down by the Council, file with the Council traffic reports, costs statistics and financial statements showing among other things all receipts and the sources thereof.“

Based on this principal the following statistical information is filed with the ICAO:

Commercial air carriers

Traffic	- Reporting Forms A, A-S (monthly, yearly)
On Flight Origin and Destination	- Reporting Form B (quarterly)
Traffic by Flight Stage	- Reporting Form C (yearly)
Fleet and Personnel	- Reporting Form D (yearly)
Financial Data	- Reporting Form EF (yearly)

Airports and Air Traffic Services Provider

Airport Traffic	- Reporting Forms I, I-S (quarterly, yearly)
Airport Financial Data	- Reporting Form J (yearly)
En-Route Facility Financial Data	- Reporting Form K (yearly)
En-Route Facility Traffic Statistics	- Reporting Form L (yearly)

Civil Aviation Authority

Civil Aircraft on Register	- Reporting Form H (yearly)
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The bilateral air transport agreements contain a standard text on Communication of Operating Information and Statistics:

The designated airlines shall communicate to the aeronautical authorities of the Contracting Parties at least one month prior to the initiation of air services on the route specified the type of service, the types of aircraft to be used and the flight schedules. This shall likewise apply to later changes.

The aeronautical authorities of either Contracting Party shall furnish to the aeronautical authorities of the other Contracting Party at their request such periodic or other statistical data of each designated airline as may be reasonably required for the purpose of reviewing the capacity provided by any designated airline of the first Contracting Party on the specified routes. Such data shall include all information required to determine the amount of traffic carried and the origins and destinations.

This is an instrument for obtaining statistical information dealing with scheduled services provided by designated carriers. It is only used on an ad hoc basis.

The Law 143/1998 on Civil Aviation, Art. 50 on submission of Statistical and other data sets out:

Holders of licenses and permissions to perform air transport, aircraft operators, operators of airports, legal entities and natural persons authorised to do aviation work and other business in civil aviation, as well as persons providing air traffic services are obliged to supply to the Ministry and the Aviation Authority statistical and other data concerning their activities or participation in civil aviation.

The scope and manner of supplying, collecting and publishing statistical and other data shall be stipulated by the Ministry and the Statistical Office of the Slovak Republic.

Apart from individual data of specific air carriers, great attention is given to the aviation activity data provided by the Slovak Airports Authority (monthly, quarterly and annually). The information covers individual flights with identification of the air carrier, flight number, numbers of passengers (embarked, disembarked, total, transit), freight (loaded, unloaded, total) and all other movements. This provides the bases for the response to the ICAO Reporting Form I. The same database allows for reporting traffic from Airport1 to Airport2 structured as follows: airline code, number of passengers (Arrival/Departure, Scheduled/ Non-Scheduled, Total), freight (A/D, Sch/Non-Sch, T), mail (A/D, Sch/Non-Sch, T), number of flights (Sch/Non-Sch, T) and aircraft type. This provides the basis for the response to the demands as originally requested by the ECAC and amended by the Ministry in the light of requirements presented by EUROSTAT at an ICAO/EUROSTAT workshop held in Helsinki in 1995.

The Ministry publishes an Annual Report that also includes some aviation performance data.

In order to unify the basic statistical information both for internal and international reports, there is close co-operation between the SO SR and the Ministry.

The major source of aviation performance data is the Slovak Airports Authority (SAA), which collects data at the five major airports in the country. This is carried out in its role as airport operator and used for marketing as well as for the preparation of invoices to collect charges from the carriers using the airport facilities. In addition, the invoices will cover the handling charges, should the carriers use the handling service provided by the SAA subsidiary. The information collected and stored at flight level covers full details of the flight, such as arrival/departure, origin/destination, scheduled/non-scheduled, passenger/all cargo, airline/carrier and aircraft type. It also includes details of the passengers carried, freight and mail as well as details of services provided such as refuelling. Where the SAA handling agent is used, some information about on-flight origin/destination may also be available. Where an alternative

agent is used, such information may be less easily available for commercial reasons.

At Bratislava and Košice, computerised systems are used to gather and process the data from a variety of sources, including SITA messages, crew reports and load control and operation control. A central unit in SAA is responsible for consolidating the individual airport data to an SAA total, effectively a Slovak total for commercial air transport operations. From the consolidated database, reports can be produced to meet the requirements of the Statistical Office of the Slovak Republic (SO SR) and the various international organisations interested in the data. There are plans to improve and centralise the IT system for co-ordinating and processing the data at Bratislava airport to improve its value in airport operations. This should improve the already high quality of the data.

An aggregated version of the database is supplied to the Ministry of Transport, Posts and Telecommunications of the Slovak Republic (Ministry) and Statistical Office of the Slovak Republic (SO SR), to allow the Ministry and SO SR to fulfil their reporting obligations to various international bodies and for their own analysis. The structure of the data would seem to meet the requirements of the draft regulation with the exception of the on-flight origin/destination element. The large majority of Slovak flights are point to point and the previous/next airports are the on-flight origin/destination. For those that are not, it is suggested that a sub record of the flight level record is developed to provide the detail required. This would be a necessary step to move towards complying with the draft regulation. However, it is clear that the SAA does not currently have the power to enforce the collection of such information.

Co-operation between Eurostat and the candidate country for fulfilment of the „Proposal for the Council Regulation (EC) on Statistical Returns in Respect of Carriage of Passengers, Freight and Mail by Air“ (95/C 325/08) will fall under the umbrella of the SO SR.