



Transport in the Euro-Mediterranean region

Data 1990-2001



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Foreword

Transport lies at the very heart of the Euro-Mediterranean Partnership. Flows of passengers and goods are bound to increase considerably over the next decade, partly as a result of increased international trade and of the progressive establishment a Euro-Mediterranean free trade area by 2010. Within this framework there is a growing need for reliable, harmonised and up-to-date statistics for informed decision making, research and communication, both within countries and also across the whole Mediterranean region. This publication attempts to respond to these data needs by providing an updated statistical overview of transport for the twelve Mediterranean partners (Morocco, Algeria, Tunisia, Egypt, Jordan, Israel, Palestinian Authority, Lebanon, Syria, Turkey, Cyprus and Malta).

Since 1997, the MEDSTAT/MED-Trans regional statistical co-operation project has been active in promoting a dialogue on transport statistics between the European Union and the Mediterranean partners. It has also encouraged the establishment of a Euro-Mediterranean database on the transport of passengers and goods by air, sea and land. Thanks to the active involvement of the National Statistical Institutes and other national authorities dealing with transport in the Mediterranean countries, this database now contains a collection of relatively detailed statistics on aviation and maritime transport for the period from 1997 to 2001. More aggregated data are available for road, rail, pipelines and road accidents, some since 1990.

The publication aims to meet the information needs of a large range of users. It includes a series of tables and figures on infrastructure, equipment and transport to place the Mediterranean countries with respect to the 15 European Union Member States and the 10 Central and Eastern European candidate countries. More detailed statistics on the flows of passengers and goods by air and sea allow a wider analysis of the main developments within the region. A small section on accidents addresses the concerns for improved transport safety. There are also methodological notes to guide the reader through the definitions and classifications adopted and the degree of comparability of the data.

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User Guide

The data presented in this publication are provided by national statistical offices and other concerned national administrations of the Mediterranean partner countries within the framework of the MEDSTAT/MED-Trans statistical co-operation programme. A complete list of these sources is provided in the annexe. Statistics referring to the European Union countries and Central and Eastern European Accession Countries are part of Eurostat's regular statistical collection.

All data used in this publication can be found in Eurostat's Internet Database New Cronos, although in some cases they have been further elaborated to calculate specific indicators or estimates. In very few special cases the available data was supplemented by statistics published by other international producers. In such case the source is explicitly mentioned in the notes under the table.

Most data cover the period 1990 to 2001 or at least 1997 to 2001. This enables the reader to compare the countries over time as well as over space. However, not all statistics featuring in the publication are fully harmonised and some have become available only recently. The data collection was closed in March 2003.

In the tables and figures countries are presented according to the alphabetical order of their abbreviation code.

Countries and groups of countries

EU	Total of 15 Member States of the European Union
B	Belgium
DK	Denmark
D	Germany
EL	Greece
E	Spain
F	France
IRL	Ireland
I	Italy
L	Luxembourg
NL	Netherlands
A	Austria
P	Portugal
FIN	Finland
S	Sweden
UK	United Kingdom

EFTA	Total of the 4 countries of the European Free Trade Association
-------------	---

CH	Switzerland
IS	Iceland
LI	Liechtenstein
NO	Norway

MED	Total of 12 Mediterranean Partners, signatories of the Barcelona Declaration in November 1995.
------------	--

CY	Cyprus
DZ	Algeria
EG	Egypt
IL	Israel
JO	Jordan
LB	Lebanon
MA	Morocco
MT	Malta
PS	Palestinian Authority
SY	Syria
TN	Tunisia
TR	Turkey

CEC	Total of 10 Central and European Accession Countries
------------	--

BG	Bulgaria
CZ	Czech Republic
EE	Estonia
HU	Hungary
LV	Latvia
LT	Lithuania
PL	Poland
RO	Romania
SK	Slovakia
SI	Slovenia

Symbols and abbreviations

:	not available
-	nil (zero)
.	not applicable
Mio	million

Introduction

Transport is a priority field of action for the Euro-Mediterranean Partnership between the 15 European Union (EU) countries and their 12 Southern and Eastern Mediterranean partners (MED: Algeria, Morocco, Tunisia, Egypt, Jordan, Lebanon, Syria, Israel, the Palestinian Authority, Cyprus, Malta, Turkey). The Partnership (or so-called "Barcelona Process") aims at establishing a region of peace and shared prosperity around the Mediterranean Sea also through the progressive establishment of a free-trade area by 2010. Within this context the development of efficient and interoperable transport links between the EU and MED countries and between the MED countries themselves is a crucial element to support the good operation of the Barcelona Process (see Box 1.1). By the time the Euro-Mediterranean free-trade area is completed, up to ten Central and Eastern European Candidate Countries (CEC: Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania,

Slovak Republic and Slovenia) are expected to have joined the EU, further expanding the potential movements and trade transactions.

The MED countries are a very diverse group. There are considerable differences in terms of size, geography, population and GDP. The largest country in terms of area is Algeria (2.4 million square kilometres) that accounts for close to half the total MED area, but population-wise Turkey and Egypt are twice as big (68 and 65 million respectively, against 31 million in Algeria). Moreover, Israel and Turkey alone represent more than half of the total GDP of the region (124 and 164 billion Euro). Malta is the smallest country in terms of area (316 square kilometres) and population (395 thousand) but its GDP (4 billion Euro) is comparable to that generated by the Palestinian Authority for a population nearly ten times larger.

Table 1.1: Area, population and GDP, 2001

	Area (km ²)	Population (1 000)	Average population growth rate (%)	Population projection in 2025 (1 000)	GDP at current prices (in million Euro)
CY	9 251	759	0.57	900	10 159
DZ	2 381 740	31 040	1.43 ⁽¹⁾	42 583	61 050
EG	1 001 450	65 336 ⁽²⁾	2.00	90 883 ⁽³⁾	90 735
IL	22 145	6 509 ⁽⁴⁾	2.20	8 673 ⁽⁵⁾	123 513
JO	89 342	5 182	2.80	8 088	9 856
LB	10 400	4 385	1.30	:	18 655
MA	710 850	29 170	1.60	39 188	37 823
MT	316	395	0.82	405	4 037
PS	6 020	3 299	5.30	7 402	4 561 ⁽⁶⁾
SY	185 180	16 720	2.45	27 623	86 485 ⁽¹⁾
TN	163 610	9 674	1.14	11 592	22 302
TR	769 604	68 618	1.67	92 271	164 453
MED	5 349 908	241 087		329 608	633 629
EU	3 154 120	377 995		388 254	8 633 677
EFTA	468 610	12 024		12 894	467 595
CEC	1 078 439	104 315		:	395 200 ⁽¹⁾

Source: Eurostat, Euro-Mediterranean statistics - n° 1/2002.

Population on 1st January unless otherwise stated.

(1) 2000

(2) Mid year and excluding Egyptians abroad.

(3) Projection for the mid-year 2021.

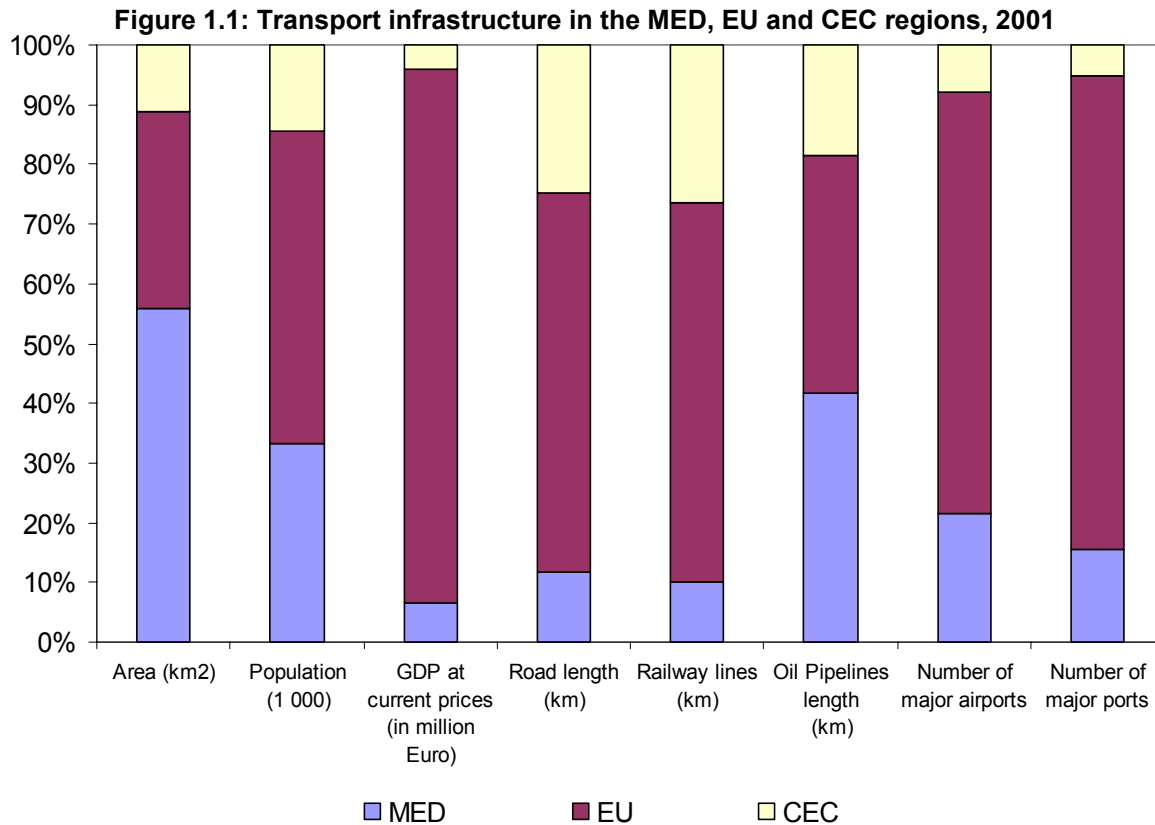
(4) End year

(5) Projection for the year 2020

(6) 1999

The MED region as a whole covers 5.3 million square kilometres and is home to about 241 million people, as compared to the 3.1 million square kilometres of the EU populated by 378

million. Population density in the MED region ranges from as low as 13 inhabitants per square kilometre in Algeria to 1 250 inhabitants in the Maltese island.



*Note: 2000 data for road length, railways lines and oil pipelines.
Major ports: over 1 million tonnes per year; major airports: over 100 thousand passengers per year.*

Four MED countries are well above the EU average of 119 inhabitants per square kilometre and three more lie around the same value. GDP figures are 8.6 trillion Euro in the EU against 0.6 trillion for the MED region. This is not much more than the 0.5 trillion Euro generated by the EFTA countries and 0.4 trillion Euro by the CEC, although in these regions it is distributed over a much smaller total population.

Considerable differences exist between these regions also in terms of the availability of basic transport infrastructure. Inland waterways are significant in various EU and CEC countries, but besides the 3 500 km navigable network of the Nile and its delta in Egypt¹, no such transport mode exists in the rest - and in several areas desert - MED region. Railways are available in only eight MED countries (Algeria, Egypt, Israel, Jordan, Morocco, Syria, Tunisia, and Turkey) for a total length of 25 thousand km. The EU rail network is more than 6 times longer although it serves a population only 1.5 times greater. The Central and Eastern European countries with half the MED inhabitants also make use of railway infrastructure which is about 2.5 times longer.

¹ Despite the great potential of this mode of transport, its use seems to be declining: goods transported by the public sector on inland waterways in Egypt decreased from 3 106 thousand tonnes in 1995 to 2 072 in 1999 (source: CAPMAS).

Put aside Turkey, road is mostly a domestic issue for the MED countries. Comparability between figures on road lengths is limited; nevertheless the EU network is at least 5 times longer than the MED network, where motorways are not always available. Oil pipelines are the only domain where infrastructure availability in the MED and EU regions are basically equivalent in length.

In the MED region 57 ports handle over 1 million tonnes of goods and/or 200 thousand passengers annually. They all lie on the Mediterranean shores, apart from the port of Aqaba in Jordan (on the Red Sea) and the ports of Trabzon, Samsun and Ereğli in Turkey (on the Black Sea). In the CEC countries there are 19 ports of similar size, but only Koper in Slovenia is on the Mediterranean Sea. Major ports in the EU count up to 357 and about one third of them are on the Mediterranean basin.

Commercial airports with over 100 thousand passengers per year are 57 in the MED area and 21 in the CEC. Several countries in both of these regions have only one or two major airports. In the EU and EFTA the core air network includes 60 major airports (covering over 70% of the total traffic) and at least 188 airports handle a volume of over 100 thousand passengers per year.

BOX 1.1 - Extracts from the Barcelona Declaration, adopted at the Euro-Mediterranean Conference held on 27-28 November 1995, Work Programme Annex point III

Transport

Efficient interoperable transport links between the EU and its Mediterranean partners, and among the partners themselves, as well as free access to the market for services in international maritime transport, are essential to the development of trade patterns and the smooth operation of the Euro-Mediterranean partnership.

The Transport Ministers of Western Mediterranean countries met twice in 1995 and, following the Regional Conference for the Development of Maritime Transport in the Mediterranean, the Mediterranean Waterborne Transport Working Group adopted a multi-annual programme.

Cooperation will focus on:

- development of an efficient Trans-Mediterranean multimodal combined sea and air transport system, through the improvement and modernization of ports and airports, the suppression of unwarranted restrictions, the simplification of procedures, the improvement of maritime and air safety, the harmonization of environmental standards at a high level including more efficient monitoring of maritime pollution, and the development of harmonized traffic management systems;
- development of east-west land links on the southern and eastern shores of the Mediterranean, and
- connection of Mediterranean transport networks to the Trans-European Network in order to ensure their interoperability.

Trade and transport

In 2001, the MED region accounted for 6.6% of the total value of EU worldwide imports and 7.8% of the exports. Despite the fact that the MED region lies behind other traditional EU commercial partners such as the US, the Central and Eastern European Candidate countries and the EFTA countries (Switzerland, Iceland, Liechtenstein and Norway), this group of countries is more important than China and Japan. In fact, exports worth

77 billion Euro to the MED region are twice the value of goods exported to China or to Japan and more than what was sold to the whole African continent. The solid trade links already existing between the EU and their 12 MED Partners are bound to be strengthened through the establishment of a Euro-Mediterranean Free-Trade area.

Table 1.2: EU major trading partners, 2001

World regions (*)	in million Euro		%	
	Imports	Exports	Imports	Exports
AMERICA	269 397	326 823	26.20	33.17
of which USA	195 668	239 905	19.03	24.35
MED	68 110	77 042	6.62	7.82
EFTA	108 531	103 302	10.56	10.48
CANDIDATE COUNTRIES	134 088	152 817	13.04	15.51
AFRICA	87 057	69 929	8.47	7.10
ASIA	345 999	253 335	33.66	25.71
of which China	75 914	30 099	7.38	3.05
of which Japan	76 311	44 920	7.42	4.56
TOTAL EXTRA-EU trade	1 028 071	985 354		

Source: Eurostat Comext Database – EEC Special Trade domain

(*) There is some overlap between the MED and Candidate Country regions as both aggregates include Cyprus, Malta and Turkey.

The challenge for MED Partners is even greater as the EU is their leading trade partner and they exchange only a small part of their trade among themselves. The EU share in Mediterranean imports ranges from 71% for Tunisia to 30% for

Syria, and is greater than 50% for Malta, Morocco, Algeria, and Cyprus. The EU also absorbs up to 80% of the Tunisian exports, three quarters of the Moroccan exports, 65% of the Syrian exports and 63% of the Algerian. It covers only a small part of

exports from Jordan (3%) and the Palestinian National Authority (4%), but represents a share of at least 24% of exports for all other MED Partners. Turkey alone represents 31% of the area's 290 billion Euro trade and Israel about 25%. The great disparity in the MED countries' trade situation is also visible by looking at their trade's contribution to GDP. Malta, Tunisia, Jordan, the Palestinian Authority and Israel present the most open economies of the region; while Syria and Egypt lie on the other end of the line.

The total quantity of goods exchanged between the EU and the MED region has grown from 135 460 thousand tonnes in 1990 to 188 386 in 2001, representing a 39% increase over little more than a decade. In 2001 the EU-MED trade accounted for the equivalent of 145 125 million Euro, that is about 2 and a half times more than the value exchanged in 1990. The volume of exchange increased at a steady rate of 3% in average per year in the past decade, but has produced an even more notable 8.4% average annual increase in the correspondent value.

The great majority of the EU imports and exports to and from the MED countries are transported by sea. Maritime transport was the vehicle for the 143 833 thousand tonnes worth 77 billion Euro exchanged in 2001, characterizing 76.4% of the total flows in terms of tonnage and 53.1% in terms of value (the tonnage exported from the EU to the MED region by sea is even higher than the imports, with close to 90% against 71%). After maritime transport, in terms of the volume of goods traded, road and rail cover a small but noticeable share; in terms of value, road (20%) and aviation (16%) come forward as more significant modes. The share of air transport in value of is 80 times larger than its share in the tonnage exchanged since high-valued added products with relatively low weight are often transported by plane. The average unit value of goods traded by the EU by air is about 62 thousand Euro per tonne, as compared to 536 Euro per tonne for goods carried by sea and 401 by rail. The other modes registered in external trade statistics include a combination of inland waterways, the post, fixed mechanism and self-propulsion.

Table 1.3: MED countries external trade, 2000

	Total trade (million Euro)		EU share (%)		Contribution ⁽¹⁾ to GDP %
	Imports	Exports	Imports	Exports	(imp+exp)/GDP
CY	4 172	1 034	51.6	36.5	51.2
DZ	9 933	23 860	57.3	62.6	55.4
EG	15 178	5 116	34.1	40.0	22.4
IL	38 706	34 001	43.3	27.3	58.9
JO	4 977	1 651	33.0	3.3	67.2
LB	6 743	773	45.9	24.1	48.7
MA	12 485	8 032	57.9	74.7	54.2
MT	3 687	2 644	60.0	34.4	156.8
PS	2 467 ⁽¹⁾	349 ⁽¹⁾	15.4 ⁽¹⁾	4.1 ⁽¹⁾	61.7 ⁽¹⁾
SY	4 367	5 088	29.6	65.0	10.9
TN	9 264	6 323	70.5	79.9	69.9
TR	59 449	30 182	48.8	52.2	54.5
MED	171 428	119 053	47.4	48.7	45.8

Source: Eurostat, Euro-Mediterranean statistics - n° 1/2002.

(*) GDP records the net margin of external trade and not the total figures for imports and exports. This is why the figure can exceed 100, particularly in small economies.

(1) 1999 data

Table 1.4: EU external trade with the MED region by mode of transport

Mode of transport	in thousand tonnes				in million Euro				2001
	1990	1994	1998	2001	1990	1994	1998	2001	Euro/Tonnes
Sea	106 244	118 500	132 815	143 833	31 496	38 680	56 506	77 071	536
Rail	1 868	577	952	3 715	1 022	530	914	1 489	401
Road	4 761	6 114	6 264	6 464	13 303	16 503	26 214	28 940	4 477
Air	504	330	331	379	8 701	12 654	17 919	23 364	61 613
Inland Waterways	3 299	2 220	1 225	794	828	539	407	233	293
Others	18 112	23 371	31 141	30 066	3 735	4 383	6 508	9 741	324
Unknown	672	1 999	1 778	3 135	744	1 061	2 025	4 287	1 367
TOTAL	135 460	153 111	174 506	188 386	59 829	74 350	110 493	145 125	770

Source: Eurostat Comext Database – EEC Special Trade domain

Note: Before 1995 Austria, Finland and Sweden are not included

Transport in the Euro-Mediterranean region

Although maritime transport is undoubtedly dominant in Euro-Mediterranean trade, its relative position respect to other modes has remained very stable in the past ten years. The same holds for air and road transport as regards the tonnage carried; while rail transport experienced a visible

decrease in the mid-nineties and a recovery in 2001. As regards the trade value, a slight drop can be noticed for all modes between 2000 and 2001 reflecting the general slowdown in growth experienced worldwide, but this has not much affected the modal-split.

Figure 1.2a: Volume of EU external trade with MED countries by mode of transport, 2001

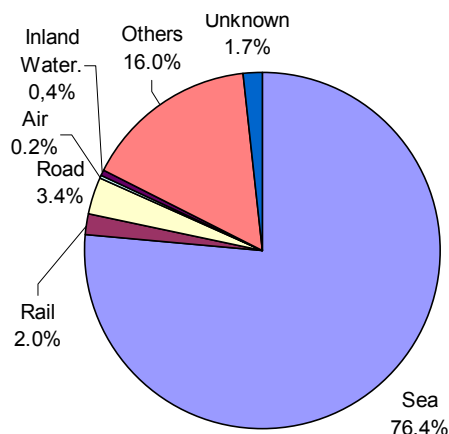


Figure 1.2b: Value of EU external trade with MED countries by mode of transport, 2001

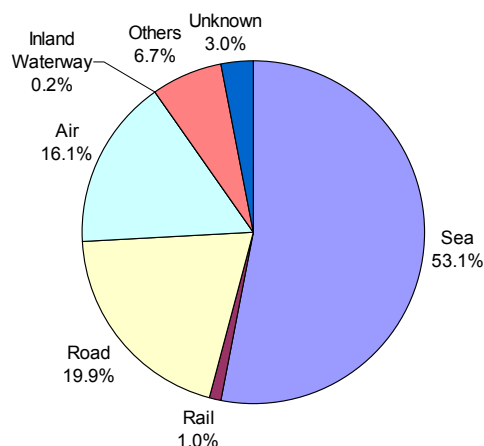
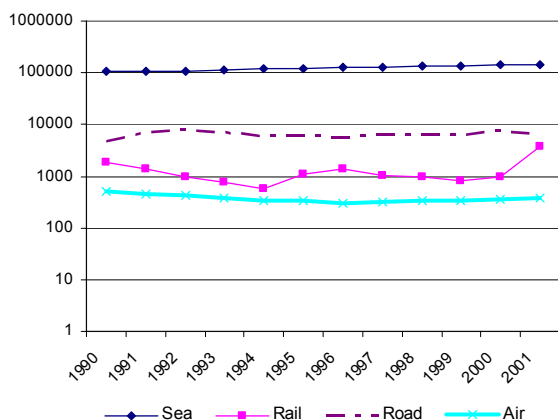


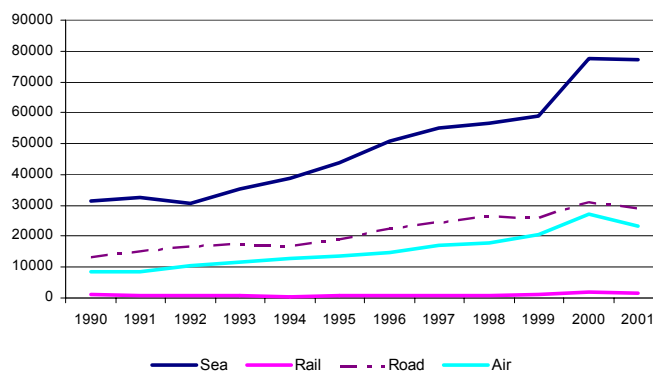
Figure 1.3a: Trend of EU-MED trade volume by sea, air, rail and road, 1990-2001



Note: Logarithmic scale.

Among the EU countries, Italy, France, Spain and Germany are leading partners in Euro-Mediterranean trade. In fact 34% of the total tonnage of goods imported from the MED region is directed towards Italy, 19% towards Spain, 16% towards France and 10% towards Germany. These countries also represent respectively 21%, 11%, 19% and 13% of the exports absorbed by the MED region. Over 80% of the exports of individual EU countries to the MED region are shipped by sea; the only exceptions being Germany (71%) and, obviously, Luxembourg (37%) and Austria (33%) given that these two

Figure 1.3b: Trend of EU-MED trade value by sea, air, rail and road (in million Euro), 1990-2001



countries do not have any direct access to the sea. As regards imports, maritime remains the dominant mode for all EU countries. However, 63% of the imports to Italy are by sea and only 52% of those to the Netherlands. The figure for Germany might also seem lower than expected (13%) but this is also a consequence of the large part of sea-to inland waterways transport.

The unit value of goods exported by the EU to MED countries is in average three times greater than the value of goods it imports (1521 Euro/tonne for exports against 494 Euro/tonne for

imports). This holds for most individual EU countries and is particularly noticeable for those lying on Mediterranean shores and sharing stronger trade relations with the MED region. In countries like Denmark, Finland, Luxembourg and Sweden the converse relation holds, but, on the

other hand these countries, share only a minor part of their trade with the MED region. The lowest unit value for imported goods is 268 Euro/tonne for Portugal and the highest 5 721 Euro/tonne for Luxembourg; as regards exports unit values range from 487 for Greece to 6 521 in Ireland.

Figure 1.4: Unit value of goods in EU trade to/from the MED region (Euro/Tonnes), 2001

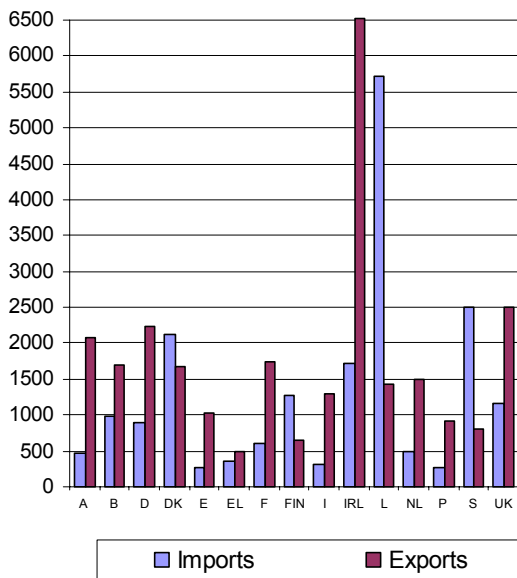
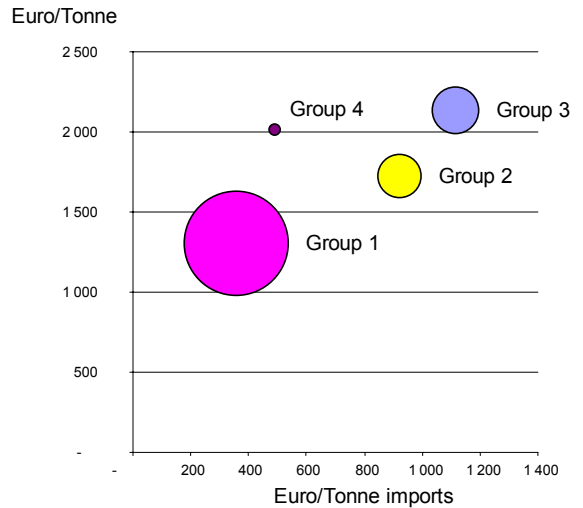


Figure 1.5: EU sub-regions: unit value of goods traded with MED partners, 2001



Note:
 Group 1 = E, EL, F, I, P (with Mediterranean shore);
 Group 2 = D, FIN, S (with Baltic shore);
 Group 3 = B, DK, IRL, NL, UK (with other shores);
 Group 4 = A, L (with no access to sea)

Table 1.5: Trade between EU countries and the MED region, 2001

Countries	% share in total tonnage		% carried by sea	
	Imports	Exports	Imports	Exports
Austria (A)	1.6	1.0	2.9	32.6
Belgium (B)	3.5	7.6	90.6	81.5
Germany (D)	10.3	13.1	12.4	70.7
Denmark (DK)	0.1	0.9	84.1	92.5
Spain (E)	19.2	10.5	94.5	97.8
Greece (EL)	2.3	6.8	91.1	91.7
France (F)	15.9	19.4	96.5	91.6
Finland (FIN)	0.1	2.8	98.2	99.6
Italy (I)	33.7	21.2	62.8	97.0
Ireland (IRL)	0.2	0.3	97.9	89.4
Luxembourg (L)	0.0	0.1	12.4	37.1
Netherlands (NL)	6.4	5.5	52.1	83.1
Portugal (P)	2.0	1.0	99.8	97.0
Sweden (S)	0.2	3.9	94.3	97.4
United Kingdom (UK)	4.3	5.7	97.4	98.6
TOTAL EU	100.0	100.0	71.5	89.7

Source: Eurostat Comext Database – EEC Special Trade domain.

Tourism and transport

The MED countries have strong population growths, represent significant migrant communities in the EU and are an important tourist destination especially for Europeans, thus providing for an increased demand for mobility. Air transport is particularly important to the Mediterranean countries in which tourism is a major sector of the economy.

The number of tourists visiting the MED countries has been growing at average annual growth rate of 3.6% in the last nine years, increasing from

about 24.9 million in 1992 to over 34.2 million in 2001. Average growth rates were considerably higher in Lebanon (17%) due to its recovering from the 1982-1991 civil war and Jordan (9%), while Israel (-2.6%) and Algeria (-2.4) have followed a slightly negative trend. Although international arrivals in the Mediterranean countries have been usually increasing from one year to the other, a clear drop occurred in Egypt, Israel and Syria between 2000 and 2001. This can be related to the September 11 events as well as to the political instability in the Middle East.

Table 1.6: Annual tourist arrivals in the Mediterranean countries and share of EU tourists

	Total tourists (1000)					Share of tourists from the EU (%)			
	1992	1997	2000	2001	average annual growth	1992	1997	2000	2001
CY	1 991	2 088	2 686	2 697	3.4	81.8	72.8	79.7	82.4
DZ ⁽¹⁾	1 120	635	866	901	-2.4	12.2	7.2	10.6	11.3
EG ^{(1) (2)}	3 207	3 961	5 506	4 648	4.2	43.1	44.1	53.7	53.4
IL	1 510	2 010	2 417	1 196	-2.6	50.3	45.6	45.9	41.2
JO	669	1 127	1 427	1 478	9.2	15.8	18.5	20	11.9
LB ^{(1) (3)}	210	558	742	837	16.6	18.6	26.0	27.1	:
MA	4 390	3 072	4 113	4 223	-0.4	28.3	46.8	42.7	42.0
MT	1 002	1 111	1 216	1 180	1.8	86.7	84.6	82.5	82.8
PS	:	:	:	:	:	:	:	:	:
SY	684	891	909	879	2.8	6.6	12.0	:	:
TN ^{(1) (4)}	3 540	4 263	5 058	5 387	4.8	49.1	58.5	64.3	60.1
TR	6 584	9 063	9 587	10 784	5.6	40.1	54.8	53.6	57.0
MED ^(*)	24 907	28 779	34 527	34 210	3.6				

Source: Eurostat, Euro-Mediterranean statistics - n° 1/2002.

(1) Arrivals of visitors

(2) Tourists and same-day visitors

(3) Lebanese and Syrians excluded

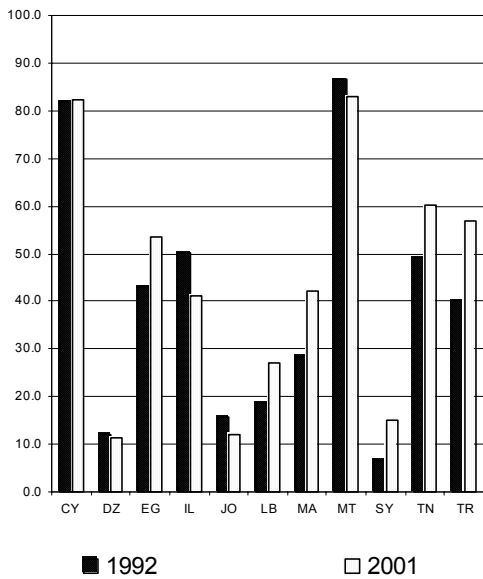
(4) Excluding Tunisians residing abroad

(*)MED total excludes tourists to the West Bank and Gaza Strip

The share of tourists coming from the EU was as high as 83% in Malta and Cyprus and well over 40% in most of the other MED countries. However, the EU tourist presence rated as low as 11% in Algeria, 15% in Syria (1999 figure), 12% in Jordan, which are typical destinations for visitors coming from the Middle East and Arab countries. In Jordan EU tourists dropped from 20% in 2000 to 12% in 2001, whilst in most other MED countries the figures remained stable or slightly increased between the two last years.

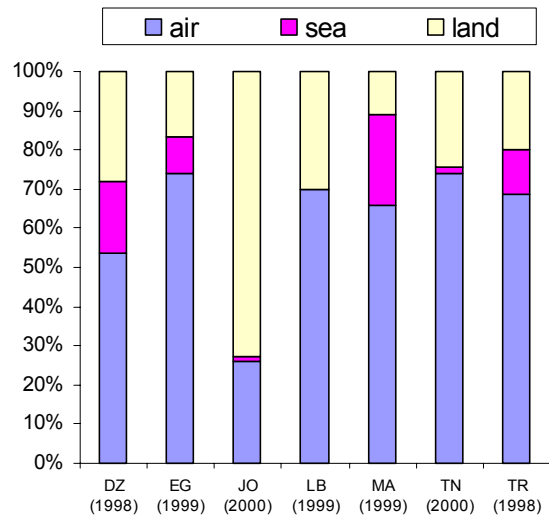
Although the development of the cruise industry and ferry traffic plays an important role in the Mediterranean islands such as Cyprus and Malta, as well as in Morocco and Tunisia, most of the tourists travel to MED countries by air. In Egypt the share of tourist arrivals by air is 74%, in Lebanon 70%, in Turkey 69% and in Morocco 66%.

Figure 1.6: European tourists in the MED countries (in % of total), 1992 and 2001



Note: 2000 figure for Lebanon and 1999 figure for Syria

Figure 1.7: Tourist arrivals by mode in selected MED countries



Source: Trends in Tourism in the Mediterranean, Eurostat 2001. For Jordan and Tunisia data from NewCronos.

This brief overview highlights that air and sea are the key modes of the transport system serving the Euro-Mediterranean region. Land transport links are mostly a domestic issue in the MED countries (with the notable exception of Turkey) the reasons for this being political instability, the closure of borders between some neighbouring countries, and the very feeble amount of South-South trade within the region. However, in order to sustain the

expected growth of trade and mobility within the region, an efficient multi-modal network, supplemented by performing land transport modes linking ports and airports with their hinterland is necessary. An efficient Euro-Mediterranean transport system is not only a matter of physical infrastructure, but also of cost, flexibility and reliability of services (see Box 1.2).

BOX 1.2 – Some instruments of the Euro-Mediterranean Partnership in the Transport Sector

The Ministers of Transport of the Mediterranean Partner countries and of the EU Member States met on 23-24 January 1997 in Lisbon for a Mediterranean Transport Conference where a number of resolutions were made in the so-called “**Lisbon Declaration**”. Among other issues, these Euro-Mediterranean policy makers remarked that:

- *“participants should co-operate to plan multimodal trans-Mediterranean transport networks which reflect real and anticipated flows of goods and passengers, taking into account an evaluation of the environmental impact of the balance between transport modes in the Mediterranean Partner countries....”*
- *“participants should concentrate on the identification of bottlenecks and impediments to smooth traffic flows on these networks as well as missing links.”*
- *“to facilitate private participation and public-private partnerships in transport systems, attention should be paid to the establishment of consistent, permanent and transparent judicial, fiscal and regulatory frameworks..”*
- *“software solutions to bottlenecks (such as the improvement/rationalisation of logistical and administrative procedures) should be given priority over new infrastructure construction”*
- *“emphasis should be given to the means to improve the efficiency and competitiveness of maritime transport in the region [...]. A weak link in multi-modal transport chains is often the link between ports and their hinterland.”*
- *“the modernisation of the air transport system, including aviation and airport infrastructures and ancillary systems (air traffic control) should be encouraged in order to increase its overall capacity while enhancing its level of safety. Harmonisation and integration between systems should be an objective.”*

In 2001 the European Commission issued a **Communication** to the Council and Parliament on “Enhancing Euro-Mediterranean Cooperation on Transport and Energy”. Its main aim is to define the broad lines of Euro-Mediterranean cooperation in the field of transport and energy for the period 2000-2006 indicating areas in which specific measures could be taken.

The **Euro-Mediterranean Transport Forum**, which was set up at the end of 1998, is a major reference for developing regional cooperation in the transport sector within the Euro-Mediterranean Partnership. The Forum meets annually and is composed of representatives of the 27 Euro-Mediterranean partner countries, the European Commission, international financial institutions (EIB, World Bank) and the international organizations concerned (notably IMO, ICAO, UNECE). Its mandate is to draw up an action plan for transport in the Mediterranean area - covering proposals for measures, the resources to carry them out and a timetable - to monitor its implementation, promote exchanges of information and experience and to ensure that the results of the action taken are disseminated.

The **MEDSTAT/MED-Trans statistical co-operation project** is active since 1998 with the major objective of promoting the establishment of a comprehensive and harmonised database on the traffic of passengers and goods in order to monitor the development of an efficient Euro-Mediterranean multi-modal transport system. More specific objectives of the project are:

- to develop a profitable interaction between the EU and the MED countries for the exchange of experience and best practices on key issues of transport statistics;
- to identify appropriate sources for data collection and set up actions in order to get more informative data;
- to improve the harmonisation of transport data and encourage the MED countries to use standardised and comparable definitions;
- to improve quality and reliability of transport statistics and to guarantee the production of up-to-date data on passenger and freight transport;
- to create and consolidate a regional harmonised database with a view to promoting data exchange and making it available to users.

A four-year **Euro-Mediterranean Transport project** is being set up to improve the functioning and increase of efficiency of the transport system in the region and prepare a regional transport action plan with a view of forming a common approach to the development of the transport sector in the region.

Air Transport

Aviation is known to be one of the fastest growing segments of the transport industry. It plays a critical role worldwide in moving people for business, holidays, visiting family and friends and other purposes. The bond between air transport and tourism is particularly strong within the Euro-Mediterranean region, since several Southern Mediterranean Partners are major vacation destinations, especially for Europeans. In 2001 the MED countries attracted an estimated 50 million passengers flying from and to the EU. In various areas of the world aviation is also emerging as an efficient mode for the transportation of high-value added and perishable

goods. In addition to the general economic recession, the September 11 events put the aviation industry under stress in 2001, with the number of tourists dropping and traffic volumes bending downwards. In the MED region tourism and travel have also been affected since 2000 by the increased political instability in the Middle East. Nevertheless, the demand for air travel is still robust. According to ICAO (the International Civil Aviation Organisation), in the longer term, traffic growth is expected to proceed at about 5 percent annually, in line with pre-2001 trend projections.

Table 2.1: Air Transport in the MED countries

	Number of passengers (a+d+direct transit)					Tonnes of freight and mail					
	1994	1997	2001		1994-2001 annual growth (%)	1997-2001 annual growth (%)	1994	1997	2001	1994-2001 average annual growth (%)	1997-2001 average annual growth (%)
			% direct transit								
CYPRUS (CY)	4 391 000	4 799 179	6 810 013	4.1	6.5	9.1	34 387	31 799	32 236	-0.9	0.3
ALGERIA (DZ)	6 876 720	7 990 942	8 078 595	0.8	2.3	0.3	38 646	28 259	26 281	-5.4	-1.8
EGYPT (EG)	9 514 450	13 816 927	17 385 146	3.5	9.0	5.9	105 405	145 400	179 055	7.9	5.3
ISRAEL (IL) ⁽¹⁾	6 215 000	8 770 014	8 020 212	:	3.7	-2.2	242 328	276 089	302 965	3.2	2.3
JORDAN (JO)	1 804 051	2 234 321	2 254 014	1.5	3.2	0.2	73 335	92 245	78 847	1.0	-3.8
LEBANON (LB)	1 489 429	2 006 956	2 444 881	2.9	7.3	5.1	54 007	55 037	62 789	2.2	3.3
MOROCCO (MA)	4 644 824	5 305 324	6 936 572	2.7	5.9	6.9	49 340	47 879	50 126	0.2	1.2
MALTA (MT) ⁽²⁾	2 564 661	2 752 635	2 802 022	:	1.3	0.4	10 147	11 659	13 699 ⁽⁴⁾	4.4	4.1
PALESTINIAN AUTH. (PS) ⁽³⁾	-	-	-	-	-	-	-	-	-	-	-
SYRIA (SY)	1 495 207	1 850 842	2 214 839	4.4	5.8	4.6	20 548	24 249	29 390	5.2	4.9
TUNISIA (TN)	6 978 169	8 333 400	9 695 900	:	4.8	3.9	32 316	31 142	25 156	-3.5	-5.2
TURKEY (TR)	22 261 011	34 343 798	35 825 977	5.8	7.0	1.1	229 723	229 424	208 298	-1.4	-2.4
MED	68 234 522	92 204 338	102 468 171	3.3	6.0	2.7	890 182	973 182	1 008 842	1.8	0.9

Notes:

(1) Only international traffic.

(2) Passenger figures include direct transit.

(3) Gaza Airport was inaugurated end of 1998 and traffic disrupted in 2001. Average annual growth between 1999 and 2000 was 10.9.

(4) 2000 data in place of 2001.

With 36 million passenger arrivals and departures Turkish airports handle alone more than one third of the total passengers in the MED region. Egypt follows with 17 million accounting for one sixth of the total; Tunisia, Algeria and Israel each represent between 8 and 9.7 million passengers; both Cyprus and Morocco are close to 7 million while Malta, Jordan and Lebanon individually handled volumes of 2 to 3 million passengers. Direct transit (see Box 1) is a very limited phenomenon in MED airports and in many cases it is virtually non-existent. Turkey stands out with a close to 6% share of direct transit passengers. Although usually related to major air hubs, in countries like Jordan and Syria this passenger-type is restricted to smaller airports serving tourist locations - Aqaba and Aleppo - on flights continuing to the capital city.

In 2001 MED airports handled the arrival and departure of over 102 million passengers and 1 million tonnes of freight and mail, and operated about 1 million landings and take-offs. This is one and a half times the amount they managed in 1994 and 11% greater than the number of passengers in 1997.

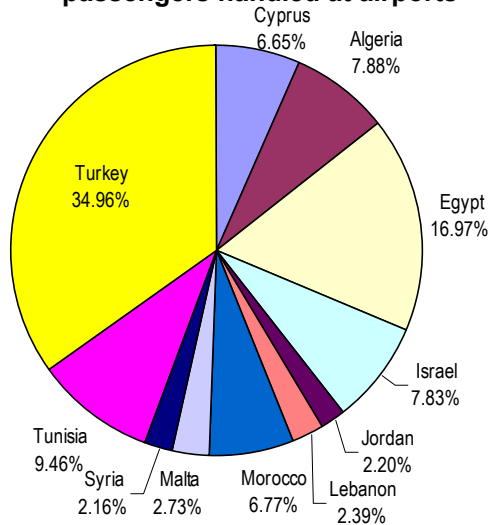
In average, the volume of arrivals and departures¹ to/from MED airports have been increasing at a rate of 6% per year since 1994 and at a slower pace of 2.7% since 1997. Differences from these trends are remarked in several countries. Cyprus and Morocco, for example, report faster growths since 1997 rather than since 1994.

¹ Including direct transit passengers (counted once); see Table 2.1.

Algeria experienced a marked drop during the first half of the nineties, recovered in 1997, but the volume of passengers declined again in the

following years, until a significant upturn occurred in 2001.

Figure 2.1: MED country share in total passengers handled at airports



Turkish airports saw numbers increase in average by 7% annually since 1994, but the total volume remained stable in the last few years. Israel is the only country with a falling rate (-2.2%) reported since 1997. This negative development is all due to the sharp decrease experienced between 2000 and 2001, mostly as a consequence of the situation in the Middle East.

The most affected were Israel (-16.5%), Jordan (-12.8%) and Egypt (-10.8%). The single international airport in Malta also suffered a visible decrease, while Morocco and Turkey saw smaller setbacks. Despite a generally negative or stagnant situation across the region, the number of passengers in Algerian airports soared by an incredible +26.8% between 2000 and 2001 (with Alger/Houari Boumediene increasing alone by 22%) thanks to the entry on the market of new private national carriers and the return of foreign airlines. Few other countries can report a positive growth, such as Syria (8.3%), Cyprus (7.4%) and Lebanon (4.3%).

Between 2000 and 2001, the overall volume of passengers flying to and from airports in the MED region dipped by 1.9%. However, there were marked differences in change experienced by individual countries.

Figure 2.2: Average annual passenger growth at MED airports, 1994-2001 and 1997-2001

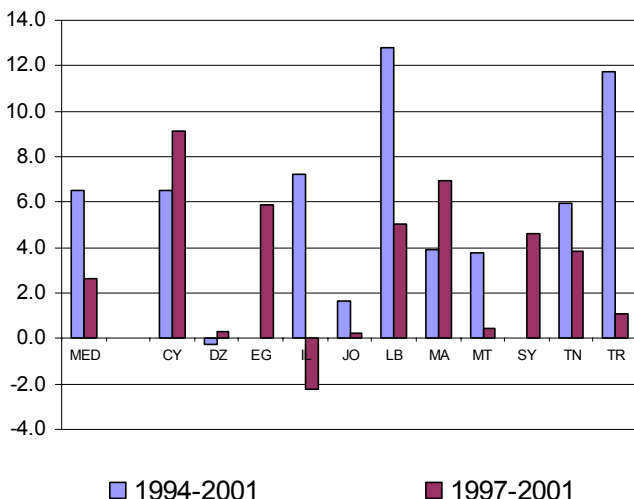
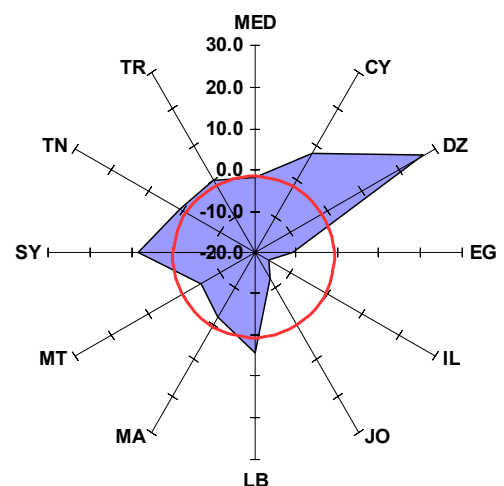


Figure 2.3: Change (%) in air passengers by MED country between 2000 and 2001



Transport in the Euro-Mediterranean region

As a whole the MED region was affected just like the EU in the drop of air transport volumes, losing close to 2% of the overall number of passengers handled at their airports. The Central and Eastern European airports have proved

basically untouched by the 2000-2001 worldwide contraction of the aviation industry thanks to an overall 5.8% growth reported during the same period.

Table 2.2: Comparison of air transport indicators in the MED, EU, EFTA and CEC regions, 2001

	Passengers (1000)	% change 2000 to 2001	Number of airports with over 100 000 passengers
MED	102 468	-1.86	57
EU	886 107	-1.92	188
CEC	25 386	5.81	21

Note: Estimated figures for Denmark in 2000 and for Greece in 2001. These figures represent the total arrivals and departures handled at airports and may therefore contain passengers counted twice.

Table 2.3: Number of passenger arrivals and departures and number of direct transit passengers at MED airports by country (in thousands)

		CYPRUS (CY)	ALGERIA (DZ)	EGYPT (EG)	ISRAEL (IL) ⁽¹⁾	JORDAN (JO)	LEBANON (LB)	MOROCCO (MA)	MALTA (MT) ⁽²⁾	PALESTINIAN AUTHORITY (PS) ⁽³⁾	SYRIA (SY)	TUNISIA (TN)	TURKEY (TR)	TOTAL MED
1990	Passengers (A+D)	3 393	8 218	:	3 720	1 890	650	4 250	1 870	-	:	5 006	:	:
	Direct transit	:	118	:	:	:	:	286	:	-	:	119	:	:
	Total	3 393	8 336	:	3 720	1 890	650	4 536	1 870	-	:	5 125	:	:
1992	Passengers (A+D)	4 115	6 482	:	5 219	1 521	1 100	3 892	2 089	-	1 441	5 430	:	:
	Direct transit	:	144	:	:	:	:	312	:	-	84	110	:	:
	Total	4 115	6 625	:	5 219	1 521	1 100	4 203	2 089	-	1 525	5 540	:	:
1994	Passengers (A+D)	4 391	6 764	9 357	6 215	1 804	1 438	4 458	2 565	-	1 411	6 841	22 125	67 370
	Direct transit	:	113	157	:	:	51	186	:	-	84	137	136	864
	Total	4 391	6 877	9 514	6 215	1 804	1 489	4 645	2 565	-	1 495	6 978	22 261	68 235
1996	Passengers (A+D)	4 412	6 662	12 908	7 358	2 066	1 645	4 688	2 565	-	1 595	7 252	30 498	81 649
	Direct transit	167	108	590	:	:	70	170	:	-	45	100	132	1 382
	Total	4 579	6 770	13 498	7 358	2 066	1 715	4 857	2 565	-	1 640	7 352	30 630	83 031
1997	Passengers (A+D)	4 673	7 939	13 175	8 770	2 234	1 940	5 164	2 753	-	1 804	8 333	34 043	90 827
	Direct transit	126	52	642	:	:	67	142	:	-	47	:	301	1 377
	Total	4 799	7 991	13 817	8 770	2 234	2 007	5 305	2 753	-	1 851	8 333	34 344	92 204
1998	Passengers (A+D)	5 092	6 038	11 529	9 508	2 169	1 996	5 965	2 743	2	1 827	8 842	33 801	89 512
	Direct transit	112	73	554	:	:	64	182	81	-	62	:	452	1 580
	Total	5 204	6 111	12 083	9 508	2 169	2 060	6 147	2 824	2	1 889	8 842	34 253	91 092
1999	Passengers (A+D)	5 544	5 761	16 236	9 863	2 415	2 111	6 602	2 882	79	1 907	9 374	29 265	92 040
	Direct transit	89	100	568	:	:	112	139	54	-	118	:	377	1 558
	Total	5 633	5 861	16 804	9 863	2 415	2 222	6 742	2 937	79	2 025	9 374	29 642	93 598
2000	Passengers (A+D)	6 118	6 305	18 918	9 608	2 562	2 245	6 936	2 913	88	1 929	9 471	34 322	101 413
	Direct transit	222	67	581	:	24	99	133	38	-	117	126	1 590	2 996
	Total	6 339	6 372	19 498	9 608	2 586	2 343	7 069	2 951	88	2 045	9 597	35 912	104 409
2001	Passengers (A+D)	6 530	8 012	16 773	8 020	2 220	2 373	6 747	2 802	-	2 118	9 696	33 743	99 034
	Direct transit	280	66	612	:	34	72	190	:	-	97	:	2 083	3 434
	Total	6 810	8 079	17 385	8 020	2 254	2 445	6 937	2 802	-	2 215	9 696	35 826	102 438

Notes:

(1) Only international traffic; 1993 data instead of 1992 (source: ICBS).

(2) Before 1998 and in 2001 passenger (a+d) include direct transit.

(3) Gaza Intl Airport was inaugurated in November 1998 and traffic was disrupted in 2001.

Table 2.4: Tonnes of freight and mail handled at MED airports by country

	CYPRUS (CY)	ALGERIA (DZ)	EGYPT (EG)	ISRAEL (IL) ⁽¹⁾	JORDAN (JO)	LEBANON (LB)	MOROCCO (MA)	MALTA (MT)	PALESTINIAN AUTHORITY (PS) ⁽²⁾	SYRIA (SY)	TUNISIA (TN)	TURKEY (TR)	TOTAL MED
1990	26 776	42 377	:	198 658	67 477	:	49 666	7 329	-	:	29 501	96 400	
1992	26 441	30 537	:	227 809	63 107	40 000	49 115	7 862	-	:	28 824	104 000	
1994	34 387	38 646	105 405	242 328	73 335	54 007	49 340	10 147	-	20 548	32 316	229 723	890 182
1996	34 857	27 225	135 093	271 267	91 441	46 505	48 351	10 314	-	21 457	29 922	263 514	979 946
1997	31 799	28 259	145 400	276 089	92 245	55 037	47 879	11 659	-	24 249	31 142	229 424	973 182
1998	35 614	23 980	150 354	285 900	86 000	54 300	49 171	11 989	-	30 496	31 096	203 081	961 981
1999	32 986	24 148	162 566	304 957	77 453	52 439	52 310	12 489	104	30 721	27 613	235 068	1 012 854
2000	33 473	21 788	188 782	342 799	85 620	59 243	51 522	13 699	245	31 075	22 609	276 166	1 127 021
2001	32 236	26 281	179 055	302 965	78 847	62 789	50 126	:	-	29 390	25 156	208 298	1 008 842 ^(*)

Notes: (1) Only international traffic; 1993 data instead of 1992 (source: ICBS).

(2) Gaza Intl Airport was inaugurated in November 1998 and traffic was disrupted in 2001.

(*) In MED total 2000 data was used for Malta.

Table 2.5: Number of commercial aircraft movements handled at MED airports by country

	CYPRUS (CY)	ALGERIA (DZ)	EGYPT (EG) ⁽¹⁾	ISRAEL (IL) ⁽²⁾	JORDAN (JO) ⁽³⁾	LEBANON (LB)	MOROCCO (MA)	MALTA (MT)	PALESTINIAN AUTHORITY (PS) ⁽⁴⁾	SYRIA (SY) ⁽³⁾	TUNISIA (TN) ⁽⁵⁾	TURKEY (TR)	TOTAL MED
1996	43 518	79 152	174 650	51 072	29 317	21 004	:	27 733	-	24 545	:	317 829	
1997	45 669	74 409	154 443	53 556	24 687	23 051	71 715	28 869	-	26 270	80 732	323 104	906 505
1998	47 174	77 712	141 420	55 974	26 133	25 010	88 231	27 843	80	26 642	86 121	327 204	929 544
1999	45 559	83 434	168 288	61 866	30 660	27 878	89 470	29 595	2 028	27 181	89 619	306 948	962 526
2000	48 705	98 255	187 101	66 726	34 181	29 707	97 376	30 696	2 128	32 553	93 582	318 340	1 039 350
2001	51 896	118 191	202 968	57 960	29 501	30 627	93 544	27 448	-	38 736	91 466	313 686	1 056 023

Notes:

(1) 2001 refers to total movements.

(2) Only international traffic; obtained as two times the number of landings (source: ICBS).

(3) 2000 and 2001 refer to total movements.

(4) Gaza Intl Airport was inaugurated in November 1998 and traffic was disrupted in 2001.

(5) Total movements.

Main features of aviation in the MED countries.

Turkey holds 14 airports with over 100 thousand passenger arrivals and departures a year. Algeria can boast a similar number (13) although the total volume of passengers handled in its airports is a fifth of the amount handled in Turkish airports. Egypt, Morocco and Tunisia all display 7 major airports, while the other MED countries only have 1 or 2. Some of these major airports are really on the borderline of the 100 thousand passenger threshold. This is the case of Aqaba in Jordan, which featured above the threshold in 1999 and 2000, but dropped back in 2001. Lebanon and Malta are single-airport economies, as well as the Palestinian Authority. In the latter case, the Gaza International Airport opened at the end of 1998 and totalled 88 thousand passengers in 2000, serving a limited selection of destinations. Air transport was however disrupted in 2001.

In several MED countries air transport is highly concentrated at biggest airport. Often the main

airport serves the capital city. For seven countries out of twelve the share of total passengers handled in the main airport is well over 75%. Air transport proves to be more decentralised across countries like Morocco, Egypt, and Tunisia where the tourism industry is strong and key airports are located in proximity of famous holiday resorts. The biggest airport in terms of the volume of passengers handled in Tunisia is in fact Monastir, while Tunis/Carthage serving the capital city is in terms of passengers the second airport of the country. In Egypt the second biggest airport is Hurghada on the Red Sea; in Morocco, following Casablanca (51%), the airports of Marrakech and Agadir concentrate together another 36% of the total passengers. Similar remarks also hold for Turkey but here the large size of the country and importance of domestic transport also motivate a different pattern of traffic concentration.

Table 2.6: Name, number of passengers and share (%) at the main airport in each MED country, 2001

Country	Name of top airport	Passengers at top airport	Share of traffic at top airport %	Number of airports with over 100 000 passengers
CYPRUS (CY)	Larnaca	5 271 787	77.4	2
ALGERIA (DZ)	Alger/Houari Boumediene	3 413 800	42.3	13
EGYPT (EG)	Cairo International Airport	8 228 201	47.3	7
ISRAEL (IL)	⁽¹⁾ Ben Gurion/Tel Aviv	7 811 382	97.4	2
JORDAN (JO)	Amman Queen Alia International	2 119 638	94.0	1
LEBANON (LB)	Beirut International Airport	2 444 881	100.0	1
MOROCCO (MA)	Casablanca/Mohamed V	3 515 189	50.7	7
MALTA (MT)	Malta International Airport	2 802 022	100.0	1
PALESTINIAN AUTH. (PS)	⁽²⁾ Gaza International Airport	88 009	100.0	-
SYRIA (SY)	Damascus International Airport	1 870 467	84.5	2
TUNISIA (TN)	Monastir/Habib Bourghiba	3 926 740	40.7	7
TURKEY (TR)	Istanbul/Ataturk	14 459 014	40.4	14
MED		55 951 130	54.6	57

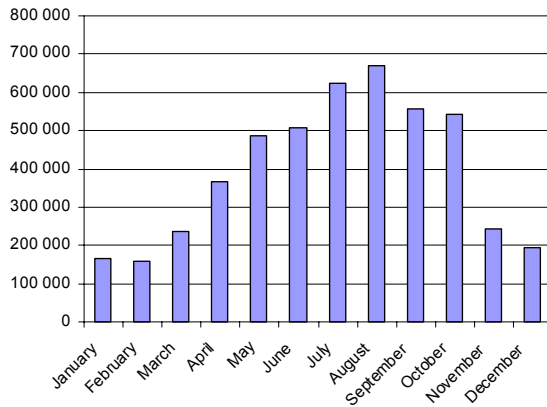
Notes: Passenger arrivals+departures+direct transit (counted once). Aqaba (Jordan) handled over 100 thousand passengers in 1999 and 2000, but passengers dropped under the threshold in 2001
(1) Only international traffic. (2) 2000 data.

Monthly data on passengers identify the seasonal features of this transport mode and highlight, once more, the strong relation between this industry and tourism within the MED region. The summer season tends to be the most crowded at the major Mediterranean airports and August the peak month. A bell-curve pattern over July, August and September is particularly pronounced in Malta's single airport, in Larnaca (Cyprus) and in Monastir (Tunisia). The spring (March and April) also brings a heavy amount of passengers in Istanbul Ataturk (Turkey), Casablanca (Morocco), Queen Alia International (Jordan) and Cairo International

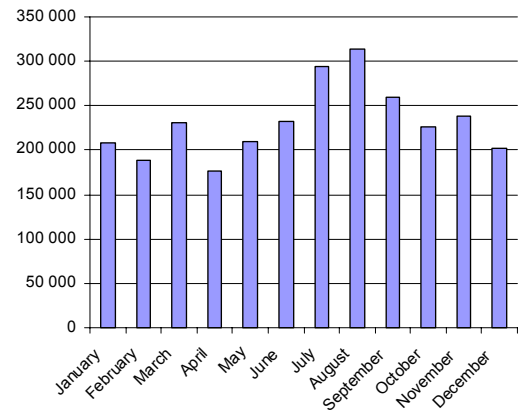
(Egypt). There are of course several exceptions: in Hurghada (Egypt) the summer season is less intense than the spring and autumn, and Eilat airport (Israel) is most bustling in April and during the first four months of the year. The charts hereafter show the patterns of monthly trends for 2000. Similar seasonal patterns can be found in 2001, although the overall volumes handled were in some cases affected by severe drops respect to the previous year and particularly in the last few months. Side-effects of September 11th were felt worldwide, including the MED region.

Figures 2.4: Number of passengers (arrivals, departures and direct transit) handled monthly in major MED airports, 2000

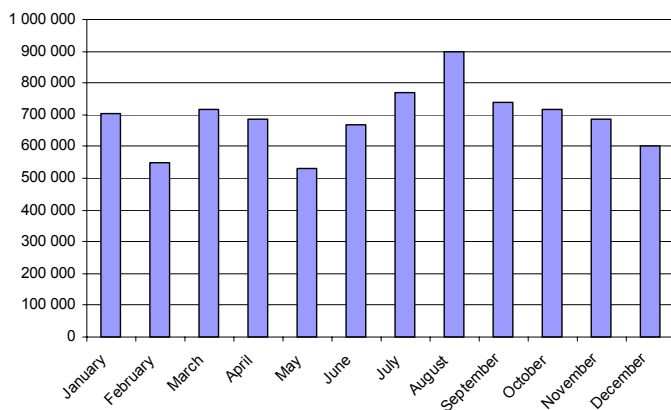
LARNACA (CY)



ALGER HOUARI BOUMEDIENNE (DZ)

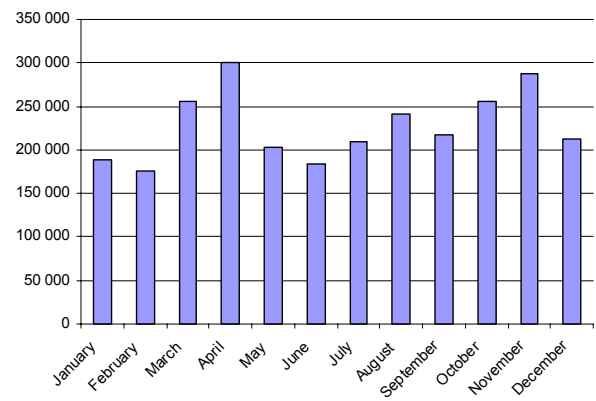


CAIRO INTERNATIONAL AIRPORT (EG)



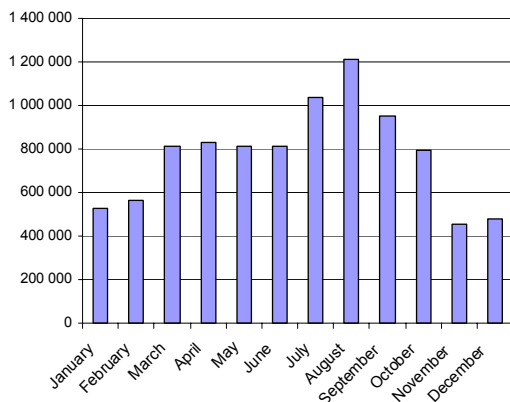
Note: Cairo International Airport data refer to 1999.

HURGADA (EG)

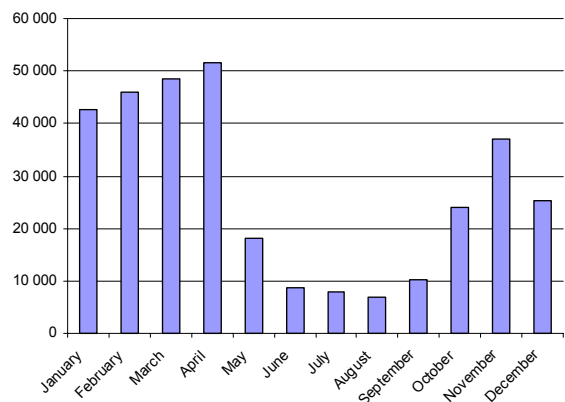


Note: Only international traffic.

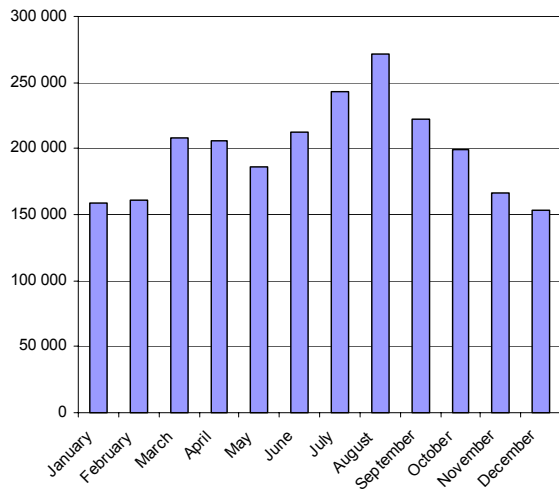
BEN GURION AIRPORT (IL)



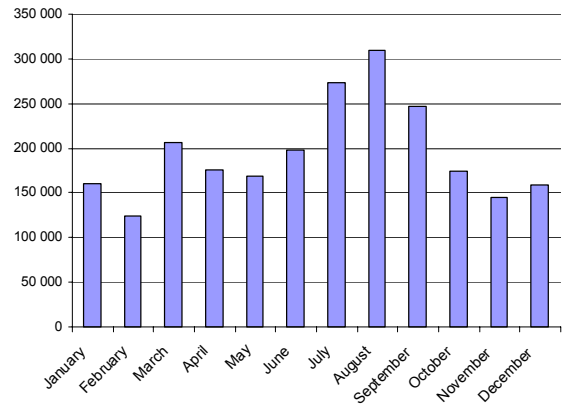
EILAT AIRPORT (IL)



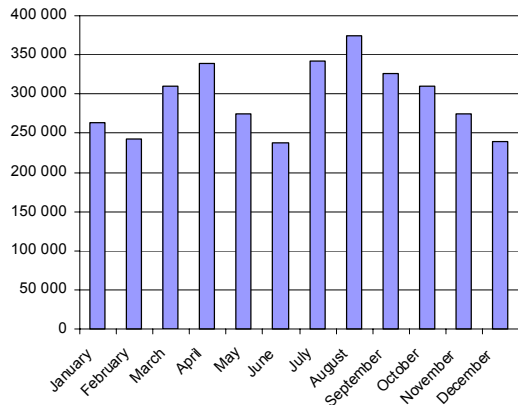
QUEEN ALIA INTERNATIONAL (JO)



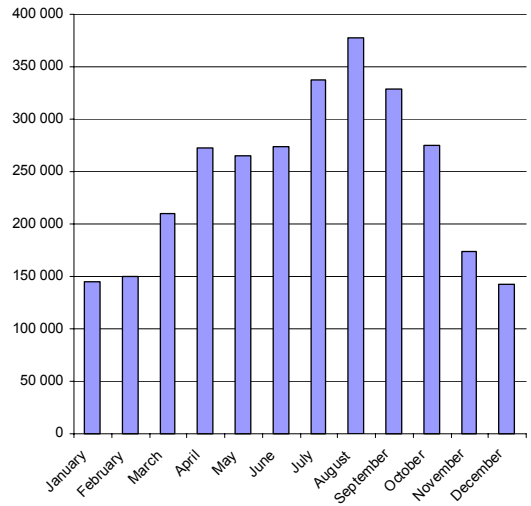
BEIRUT INTERNATIONAL AIRPORT (LB)



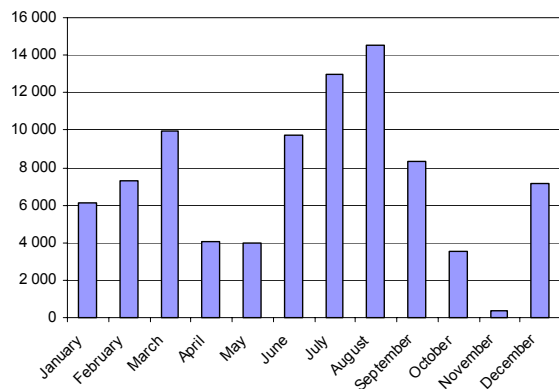
CASABLANCA MOHAMED V (MA)



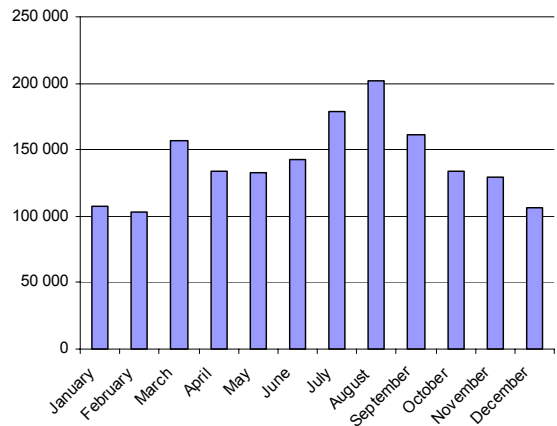
MALTA INTERNATIONAL AIRPORT (MT)

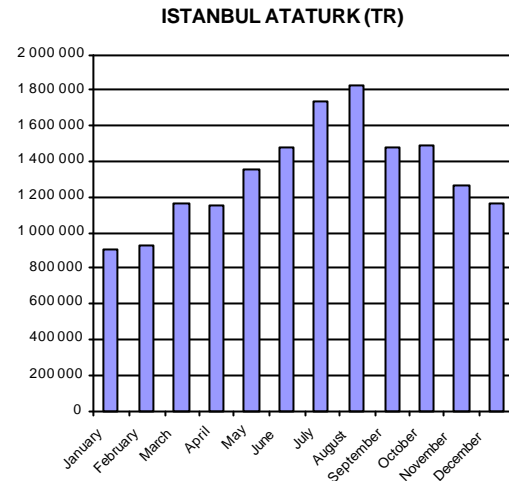
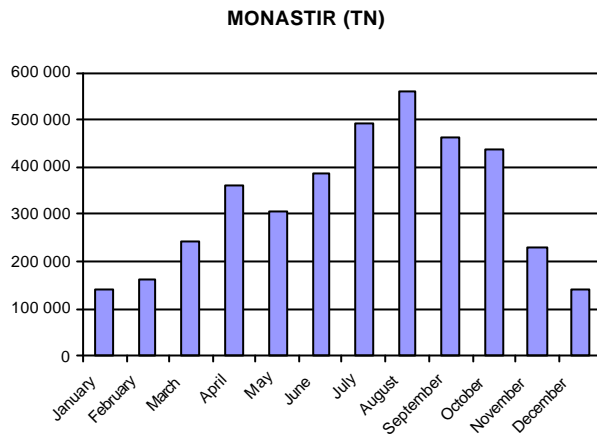


GAZA INTERNATIONAL AIRPORT (PS)



DAMASCUS INTERNATIONAL AIRPORT (SY)





The available data allows for 2000-2001 monthly comparisons only for the major airports of seven MED countries. A set of fourteen MED airports were selected for a more detailed analysis of the possible effects of September 11th 2001 on the aviation industry in this region of the world (see table 2.7 and figures 2.5).

All countries except Algeria experienced a decrease in the monthly volume of traffic handled from September onwards in 2001 respect to 2000. The percent variation of the number of passengers carried in September, October and November of 2001 compared with the same month in 2000 was negative in nearly all of the airports under consideration and in some cases it fell as much as -80%. The trend of the percent variation produced a steeper slope for airports located in Israel, Jordan and Turkey than in Algeria, Morocco, Malta, Lebanon and Syria.

Security concerns among travellers for certain destinations in the Middle East have resulted in considerable declines of the monthly passenger turnovers in 2001 respect to 2000 since the very beginning of the year. In fact, Israeli and Jordanian airports had already seen a marked decline of passengers during the first semester of 2001 with respect to the first semester of 2000, and in most cases the divide continued to increase during the following months. The Turkish airports of Istanbul and Ankara also featured a negative record as regards the number of passengers handled the first semester which continued during the last months of the year, intensifying considerably after September. Malta international airport also saw a smaller passenger volume during the first semester of 2001 as compared to 2000, but here the initial decline was weaker and there was a slight increase in the number of passengers handled during the three summer monthly comparisons.

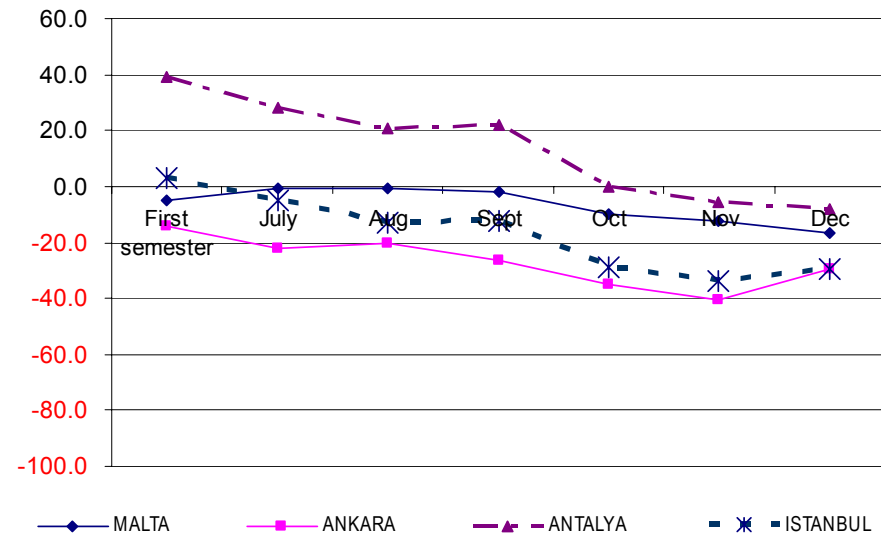
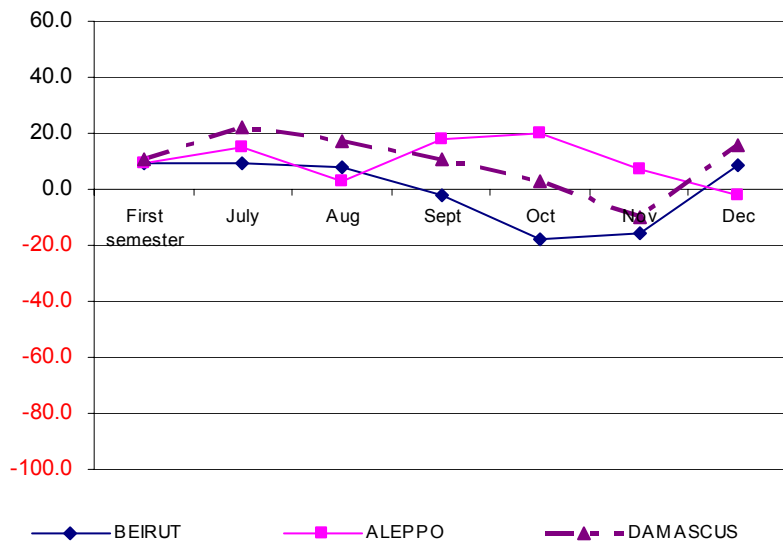
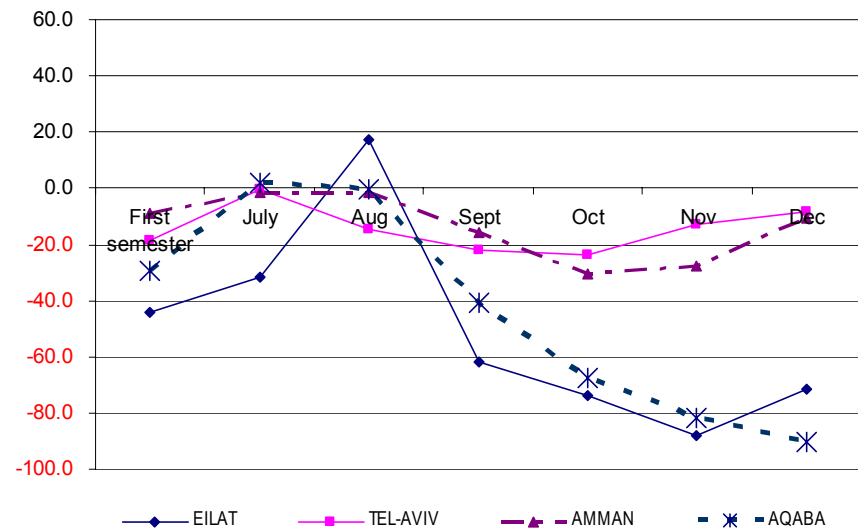
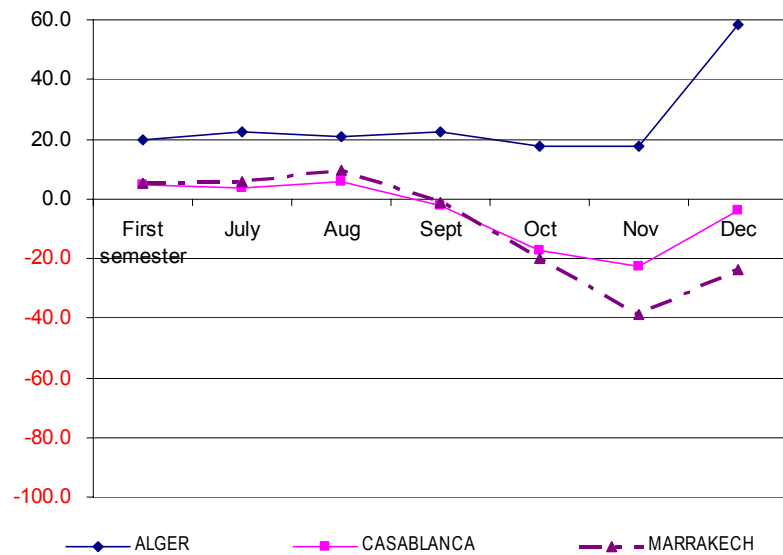
It is worth noticing that airports serving typical tourist destinations suffered a sharper loss of travellers after September 11th 2001. The number of passengers at the airports of Aqaba (Jordan) and Eilat (Israel) in the last four months of 2001 saw a drop of 60 to 80% of the volume handled during the same months of 2000. Marrakech (Morocco) and Aleppo (Syria) also experience more dramatic losses in the number of passengers than the airports located in their major cities, Casablanca and Damascus. The airport of Alger (as several other Algerian airports) was basically untouched as the variation of monthly passengers between the two years reached the significant rate of 20% in the first semester and continued to increase in all subsequent months, showing a 59% growth in December when the Muslim holiday of Aid Al-Fitr at the end of Ramadan was celebrated in 2001². The same reason explains the considerable recovery in December in Arab country airports (the only exception shown here is Aleppo in Syria where traffic fell even more strongly), while the same cannot be said for Tel Aviv and Malta and is less pronounced in the three Turkish airports under consideration.

² The Muslim calendar is based on a lunar system; therefore holidays change dates every year.

Table 2.7: Variation in the number of passengers handled monthly in 2000 and 2001 at selected MED airports

Airport	First semester	July			August			September			October			November			December		
	% change	2000	2001	% change	2000	2001	% change	2000	2001	% change	2000	2001	% change	2000	2001	% change	2000	2001	% change
ALGER/HOUARI BOUMEDIENE (DZ)	19.8	294	359	22.4	314	379	20.8	259	318	22.4	226	266	17.8	238	279	17.6	202	320	58.6
EILAT/J. HOZMAN (IL)	-44.0	8	5	-31.5	7	8	17.1	10	4	-61.6	24	6	-73.8	37	4	-88.0	25	7	-71.7
TEL-AVIV/D. BEN GURION (IL)	-18.3	1 039	1 036	-0.2	1 212	1 036	-14.6	953	746	-21.7	795	605	-23.9	453	396	-12.7	476	438	-8.1
AMMAN/QUEEN ALIA (JO)	-9.0	243	239	-1.4	271	267	-1.5	222	188	-15.5	199	138	-30.7	166	120	-27.6	153	137	-10.4
AQABA (JO)	-29.2	4	4	2.1	9	9	-0.5	10	6	-40.8	16	5	-67.5	16	3	-81.5	5	0	-90.4
BEIRUT/INTL (LB)	9.3	274	299	9.2	310	334	7.7	247	242	-1.8	174	143	-17.8	146	123	-15.4	158	173	8.9
CASABLANCA/MOHAMED V (MA)	4.8	342	354	3.7	374	395	5.7	326	318	-2.4	311	257	-17.2	275	213	-22.5	240	231	-3.7
MARRAKECH/MENARA (MA)	5.4	94	100	6.0	111	121	9.4	123	121	-1.4	134	108	-20.0	106	65	-38.9	87	66	-23.9
MALTA/LUQA (MT)	-4.8	338	335	-0.7	377	375	-0.5	329	324	-1.7	275	247	-10.1	173	152	-12.2	142	118	-16.5
ALEPPO/INTL (SY)	9.5	34	40	15.3	37	38	3.1	31	36	17.5	21	26	19.9	21	22	6.8	22	22	-2.0
DAMASCUS/INTL (SY)	10.9	178	217	22.0	202	236	16.9	161	178	10.6	134	138	3.1	130	117	-10.2	106	123	15.4
ANKARA/ESENBAGA (TR)	-14.1	467	363	-22.3	487	388	-20.3	393	290	-26.2	328	213	-35.3	301	180	-40.3	251	176	-29.7
ANTALYA (TR)	39.0	1 080	1 381	27.9	1 172	1 419	21.1	1 037	1 268	22.3	1 007	1 006	-0.0	425	401	-5.6	197	181	-8.2
ISTANBUL/ATATURK (TR)	2.7	1 729	1 646	-4.8	1 825	1 588	-12.9	1 488	1 309	-12.0	1 492	1 060	-29.0	1 261	836	-33.7	1 165	823	-29.4

Figures 2.5: Percent change in the number of passengers handled monthly in 2001 compared to previous year



The average number of passengers travelling to or from MED airports was about 100 per flight in 2001. This is slightly lower than the 2000 average; however it is about twice the average number of passengers on flights travelling to or from Central and Eastern European countries (estimated 50 in 2001).

Several MED countries rated well below the regional average. This partly depends on the types and sizes of aircraft used but also on their occupancy rate. The limited number of flights to/from Gaza International Airport in 2000 carried in average 41 passengers each. The lowest

average in 2001 concerns flights connecting with Syria (60). Performances within the range of 69 to 89 passengers are displayed for Algeria, Morocco, Lebanon and Egypt. Israel outclasses the other countries with a rate well above the regional average (138 passengers per flight); closely followed by Cyprus (137) and not much further from Turkey (121). With respect to the performances in 2000, the average number of passengers per flight has visibly decreased in 2001 in Egypt, and to some extent in Syria and Israel.

Table 2.8: Average number of passengers per flight

	2000	2001
CYPRUS (CY)	134.7	136.6
ALGERIA (DZ)	65.5	68.9
EGYPT (EG)	107.3	88.7
ISRAEL (IL) ⁽¹⁾	144.0	138.4
JORDAN (JO)	76.3	76.4
LEBANON (LB)	82.2	82.2
MOROCCO (MA)	74.0	76.2
MALTA (MT)	97.4	102.1
PALESTINIAN AUTH. (PS)	41.4	-
SYRIA (SY)	66.4	59.7
TUNISIA (TN)	103.9	106.0
TURKEY (TR)	117.8	120.8
MED	103.3	100.2

Notes:

The average number of passengers per aircraft is calculated here as the total number of passengers (including direct transit twice) divided by the number of flights.

(1) Only international traffic.

National carriers have a leading role in each country's air industry. Royal Air Maroc and Air Malta carried over 50% of the total passengers travelling to Morocco and Malta respectively.

Although Turkish Airlines carried up to 10 million passengers in 1999, they accounted a more limited 34% of the total passenger volume.

Table 2.9: Passenger transport by national carriers

		Number		share (%) on total	
		1999	2000	1999	2000
Air Algerie	DZ	2 911	2 737	47.6	43.0
MEA Airlines	LB	795	:	35.8	:
Israeli companies ⁽¹⁾	IL	4 009	4 365	40.6	45.4
Royal Air Maroc	MA	3 046	3 676	45.2	52.0
Air Malta	MT	1 760	1 649	59.9	55.9
Turkish Airlines	TR	10 097	10 277	34.1	28.6

Sources: Statistical Yearbooks of the National Statistical Offices or Ministry of Transport.

(1) Only international traffic.

The busiest airports in the Euro-Mediterranean region

The skies above the European Union are considered among the busiest in the world³. About 30 major EU airports handle three quarters of the total passengers flying and 90% over the total extra-EU international air transport. The top-15 EU airports all handled over 19 million arrivals and departures and up to 60 million passengers at London/Heathrow. The top-15 MED airports handled over 2.2 million passengers each, Istanbul/Ataturk being by far busiest with 12.7 million. The list includes five Turkish airports, three Tunisian airports and two Egyptian airports, while Syrian, Jordanian and the Palestinian airports do not figure. Put aside airports servicing capital cities, several favourite Mediterranean holiday destinations are among the top-15, such as Antalya (9 million arrivals and departures), Monastir (3.9 million), Hurgada (2.6 million), Izmir (2.5 million) and Jerba (2.2 million). However, the overall turnover handled in busy MED airports is relatively small when compared to those managed in the EU, and even to Stockholm/Aralanda (18 million) which holds the last position of the top-15. Taking into account both national and international passengers, in a common EU-MED ranking of airports, the busiest MED airport would figure in 22nd position just after Athens (Greece) and just before Wien (Austria) and the second busiest airport would compete with Lisboa (Portugal) for the 28th position.

Nevertheless, at least four major MED airports would be standing before the busiest airport in the Central and Eastern European countries, Praha (6 million passengers).

The ranking of top-MED airports has been quite stable over the last five years. Istanbul/Ataturk has been the leading airport throughout the whole period. In 2001 Tel Aviv/Ben Gurion lost its second position in favour of Antalya. This Turkish airport also outperformed Cairo International which holds the 3rd position since 1998. Alger/Houari Boumediene has also recently accomplished a jump forwards gaining the 8th position in 2001 from the 11th in 2000, to the expenses of Tunis and Malta. On the other hand, Ankara slipped down to the 10th position after covering for several years the 5th or 6th.

³ North America handles more passengers and cargo than any other region and accounts for more than half of the world's busiest 20 airports. The biggest airport in the world is Atlanta (USA) with over 75 million passengers handled in 2001.

Table 2.10: Top-15 airports in terms of passenger transport in the MED, EU and CEC (in thousands), 2001

No.	MED Airports	Number of passengers (a+d)	EU Airports	Number of passengers (a+d)	CEC Airports	Number of passengers (a+d)
1	ISTANBUL/ATATURK (TR)	12 685	LONDON/HEATHROW (UK)	60 447	PRAHA/RUZYNE (CZ)	6 078
2	ANTALYA (TR)	9 170	FRANKFURT/MAIN (D)	48 196	BUDAPEST/FERIHEGY (HU)	4 582
3	CAIRO/INTL (EG)	8 080	PARIS/CHARLES-DE-GAULLE (FR)	47 918	WARSAWA (PL)	4 326
4	TEL-AVIV/D. BEN GURION (IL)	7 811	AMSTERDAM/SCHIPHOL (NL)	39 309	BUCARESTI/OTOPENI (RO)	1 982
5	LARNACA (CY)	4 994	MADRID/BARAJAS (ES)	33 870	SOFIA (BG)	1 102
6	MONASTIR/HABIB BOURGIBA (TN)	3 927	LONDON/GATWICK (UK)	31 099	VARNA (BG)	933
7	CASABLANCA/MOHAMED V (MA)	3 457	ROMA/FIUMICINO (IT)	24 151		
8	ALGER/HOUARI BOUMEDIENE (DZ)	3 414	MUNCHEN (D)	23 413		
9	TUNIS/CARTHAGE (TN)	3 336	PARIS/ORLY (FR)	22 991		
10	ANKARA/ESENBAGA (TR)	3 166	BARCELONA (ES)	20 542		
11	MALTA/LUQA (MT)	2 806	BRUXELLES/NATIONAL (B)	19 789		
12	HURGHADA (EG)	2 586	PALMA DE MALLORCA (ES)	19 123		
13	IZMIR/ADNAN MENDERES (TR)	2 468	MANCHESTER/INTL (UK)	19 069		
14	BEIRUT/INTL (LB)	2 373	MILANO/MALPENSA (IT)	18 662		
15	JERBA/ZARZIS (TN)	2 204	STOCKHOLM/ARALANDA (S)	18 481		

Notes:

All figures include national traffic (except for Ben Gurion Airport) and exclude direct transit. 2000 data for Belgium, Italy, and Switzerland.

Table 2.11: Top-15 MED airports in 2001 and their ranking in previous years

Airport	Country	Rank in				
		2001	2000	1999	1998	1997
ISTANBUL/ATATURK	TR	1	1	1	1	1
ANTALYA	TR	2	4	4	4	4
CAIRO/INTL	EG	3	3	3	3	2
TEL-AVIV/D. BEN GURION	IL	4	2	2	2	3
LARNACA	CY	5	5	5	6	6
MONASTIR/HABIB BOURGIBA	TN	6	7	:	:	10
CASABLANCA/MOHAMED V	MA	7	8	7	7	11
ALGER/HOUARI BOUMEDIENE	DZ	8	11	9	10	9
TUNIS/CARTHAGE	TN	9	9	:	:	8
ANKARA/ESENBAGA	TR	10	6	6	5	5
MALTA/LUQA	MT	11	10	8	9	12
HURGHADA	EG	12	12	11	16	19
IZMIR/ADNAN MENDERES	TR	13	13	10	8	7
BEIRUT/INTL	LB	14	15	13	13	15
JERBA/ZARZIS	TN	15	17	:	:	16

Note: Missing data on individual Tunisian airports in 1999 and 1998.

BOX 2.1 – Statistics on traffic handled at airports collected within the MED-Trans project.

Statistics on air transport collected within the framework of the MED-Trans project are based on a common framework to guarantee comparability with statistics produced by the 15 European Union Member States, the EFTA countries, and the ten Central and Eastern European Accession countries. In the EU these statistics are shaped according to the requirements of the Draft EC Council Regulation 95/C 325/08 on statistical returns in respect of the carriage of passengers, freight and mail by air (recently passed at the European Council and Parliament to become a full legal act within the EU).

The first dataset – the “Airports database” - concerns passengers, freight and movements at the MED airports according to the following variables:

- number of passenger arrivals and departures;
- number of direct transit passengers;
- tonnes of freight and mail loaded and unloaded;
- number of commercial aircraft movements (landings and take-offs);
- number of commercial and general aircraft movements.

The definitions adopted are those internationally agreed and defined by the ICAO. In particular:

Direct transit passengers are passengers who continue their journey on a flight having the same flight number as the flight on which they arrived. These are different from transfer or passengers connecting between two different flights. Figures for this other and emerging category of passengers are difficult to obtain.

Freight and mail refer to any property loaded or unloaded to or off an aircraft other than stores and baggage, including express and diplomatic bags but not passenger baggage.

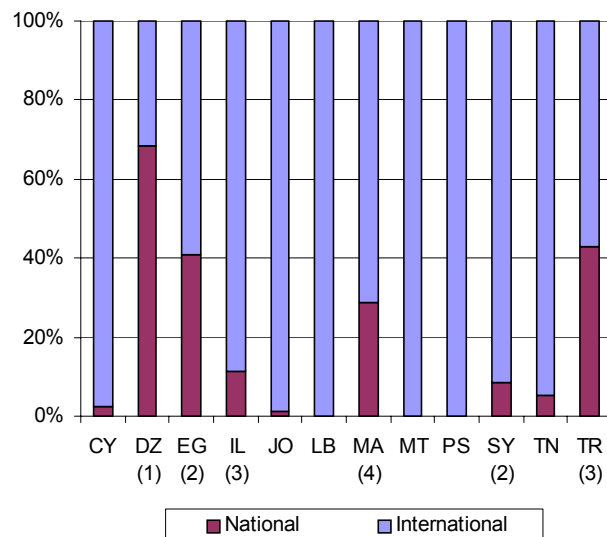
Both national and international commercial traffic is taken into consideration. All 12 MED countries are regularly supplying such data, annually or monthly.

Tables 2.1 to 2.11 and figures 2.1 to 2.5 are based on this dataset.

Highlights on flows between European Union and Mediterranean countries

Domestic air traffic is notably less significant than international traffic throughout the Mediterranean region, and in several countries it is practically non-existent. This is straightforward in countries with a single airport economy such as Lebanon, Malta² and the Palestinian Authority and in smaller countries such as Cyprus (where only 2.4% of the total passengers travelled on a domestic flight in 2001) and Jordan (1.2%). National passenger transport is also limited in Tunisia (5.2%) and Syria (8.6%). There is one notable exception, Algeria, where 69% of the passenger volume handled is domestic. Egyptian and Turkish airports also manage a consistent amount of internal traffic given that at least 40% of the arrivals and departures handled refer to domestic flights.

Figure 2.6: National and international passengers by air, 2001



(1) Source: *Annuaire Statistique 2001, Direction de la Planification et de la Coopération, Ministère des Transports.*

(2) 2000 data.

(3) 1999 data.

(4) 1998 data.

² In Malta domestic air services are operated between the main island and Gozo. In 2001 the total passengers reported on such a route were 53 thousand.

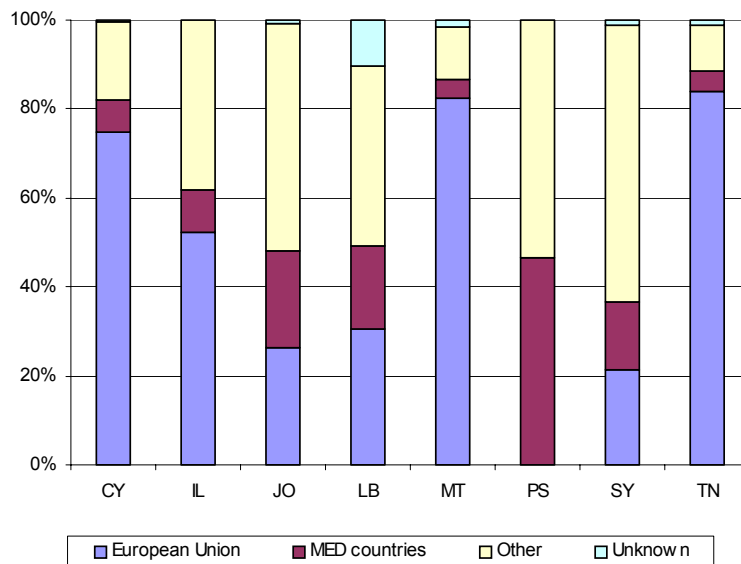
When it comes to international transport, the European Union is the major air partner for most Mediterranean countries. In 2001 passengers flying between MED and EU airports represented an estimated 49% of the overall MED air turnover and 51% of the total freight and mail volume. Turkey dominated in numerical terms over these flows catching 16.5 million travellers from/to the EU, although these represented only 46% of the total volume of passengers for Turkey. On the other hand, with 2.3 million passengers carried by air between Malta and the EU, Malta is the country where the share of EU-directed routes is the heaviest (83%). Tunisia and Cyprus follow as regards the importance of these flows over the total passenger turnover, with respectively 78% and 73%. For only five of the MED partners the estimated share is less than 50% and, with the exception of the Palestinian Authority, the share is never under the 25% displayed by Algeria. The situation presented in 2001 is for most countries similar to that of 2000; it is nevertheless worthy of notice that European Union routes lost some weight in Jordan's passenger volumes, passing from 30% to 26%, while they gained more importance in Tunisia's, where they have gone from 76% to 80%. As for freight and mail transported across the Euro-Mediterranean region, about 160 thousand tonnes flew to/from Israel (representing 53% of the Israeli turnover). Although smaller volumes are involved, these

flows were the most significant for Tunisia (79%) and Cyprus (63%).

Germany, France and the United Kingdom figured prominently as partner countries for the MED airports. These countries account for respectively 29%, 19.8% and 17.6% of the overall Euro-Mediterranean passenger flows. The estimated 8.5 million passengers travelling between Turkey and Germany in 2001 make up the most intense route. The next major links are those between Tunisia and France (2.9 million), Tunisia and Germany (2.4 million), Turkey and the United Kingdom (2.1 million). Among the other six corridors with more than 1 million passengers, Germany, France and the United Kingdom continue to be the only EU destinations, with just one exception, that is the 1.6 million flying between Egypt and Italy.

The United Kingdom dominates in the share of EU flows to/from Cyprus (representing 42% of the total passengers flying between this country and the EU) and Malta (33%); France covered the major share for Algeria (85%), Morocco (51%) and Tunisia (28%, here closely followed by Germany). Italy comes forward as Lebanon's major EU partner (33%) and Egypt's (26%), while Germany accounts for this role in Turkey (49%). No single EU country dominates in the external trade of Jordan and Israel.

Figure 2.7: International passenger transport to/from the EU, MED and other regions of the world



Note: 1999 data for IL (only Ben Gurion airport) and LB; 2000 data for PS.

Figure 2.8: Mediterranean origin/destination of total passengers flying between the EU and MED countries (in %)

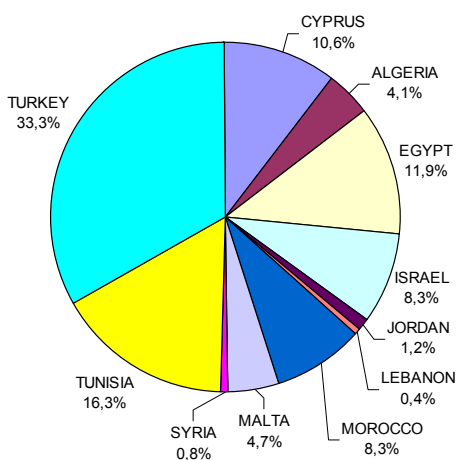
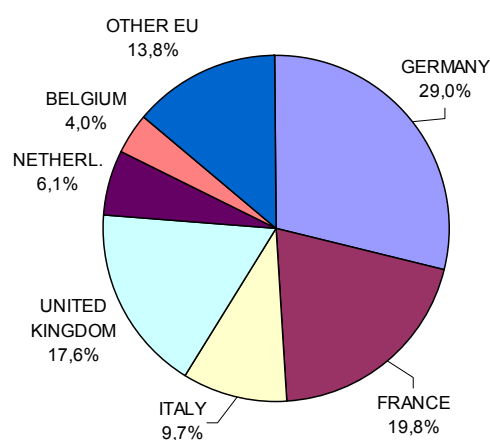


Figure 2.9: European origin/destination of total passengers flying between the EU and MED countries (in %).



BOX 2.2 – Statistics on airport-to-airport flows collected within the MED-Trans project: the Flight Stage database and the On Flight Origin/Destination database and the estimation of EU-MED passenger and cargo flows.

In addition to the “Airports database” described in Box 1, statistics collected in the MED-Trans project also concern airport-to-airport passenger and freight flows according to two different viewpoints: the “Flight Stage” database and the “On-Flight Origin-Destination” database. Similar data is reported by EU Member States to Eurostat and, to some extent, by Central and Eastern European Candidate Countries as well.

In the **Flight Stage database** the number of passengers is the number of passengers on board of the flight in arrival or in departure from the reporting airport with reference to next and previous airport; while in the **On Flight Origin/Destination database** traffic is reported on a given flight with the same flight number subdivided by airport pairs in accordance with point of embarkation and point of disembarkation on that flight.

The difference between the Flight Stage database and the On Flight Origin/Destination database can be illustrated by the following example. Considering passengers travelling on a flight operated between airports A, B, and C. Airport A will report 320 passengers on board to airport B for the Flight Stage database, but it will report 140 passengers carried to B and 180 passengers carried to C for the On Flight Origin/Destination database. Airport B will report 320 passengers on board from A and 240 passengers on board to C for the Flight Stage database, but it will report 140 passengers carried from A and 60 passengers carried to C for the On Flight Origin/Destination database. Airport C will report 240 passengers on board from B for the Flight Stage database, but 180 passengers carried from A and 60 passengers carried from B for the On Flight Origin/Destination database.

Several MED countries are regularly reporting data on airport-to-airport routes. Figures presented in tables 2.12 to 2.15 and figures 2.6 to 2.10 are based on the Flight Stage database for Cyprus, Malta, Tunisia and the Gaza International airport and on the On-Flight Origin/Destination database for Jordan and Syria. The Flight Stage database was also reported by Lebanon and Israel in 1999 and for Cairo International airport in 2000.

In order to gain a complete picture of the Euro-Mediterranean flows, estimates were calculated for the MED countries having not provided route data in 2001 (Algeria, Egypt, Israel, Lebanon, Morocco, and Turkey) by using the mirror declarations of their EU partner countries as reported in Eurostat’s regular production of aviation statistics. Figures for Denmark, Italy, Austria, Luxembourg and Sweden, are based on Flight Stage declarations. For all other EU the On-Flight Origin Destination database was used. Furthermore, when 2001 EU partner data was not available the 2000 declarations were used instead (this holds for Belgium, Greece, Italy and Luxembourg).

For MED countries having provided flow data, the percent shares are calculated on the basis of the total number of passengers declared in their flow data; in the case of countries for which estimates were made through the EU mirror flows, the percent shares are calculated on the basis of the total passengers (arrivals and departures) reported in the Airport database.

Although the European Union holds a dominant place in the Mediterranean air relations, for Jordan, Lebanon, Syria and the Gaza International Airport it is second to the Near and Middle East. These are the countries where there are a more consistent number of passengers flying to/from other MED destinations. About 22% of the total Jordanian passenger volume and 18% of the Lebanese travelled on MED-directed routes. In 2000 MED routes represented 46% of the Gaza International Airport passengers; the Palestinian Authority is the only in the MED group with no air connections with the EU. The busiest passenger corridors between Mediterranean countries themselves connect Israel and Turkey (an estimated 495 thousand flyers in 1999), Cyprus and Israel (an estimated 228 thousand flyers in 2001), Jordan and Egypt (200 thousand).

Table 2.13: Freight and mail transport by air between the MED countries and the EU countries, 2001

Country	Tonnes to/from EU	as % of all freight and mail
CYPRUS	20 157	63.0
ALGERIA (*)	13 816	52.6
EGYPT (*)	76 984	43.0
ISRAEL (*)	159 815	52.8
JORDAN	27 373	33.2
LEBANON (*)	2 261	3.6
MOROCCO (*)	24 320	48.5
MALTA (*)	7 715	56.3
PALESTINIAN AUTHORITY	-	-
SYRIA	9 836	36.7
TUNISIA	18 142	78.6
TURKEY (*)	98 924	47.5
TOTAL MED	459 343	51.4

(*) Estimated (see Box 2.2); for Malta percentage is calculated on 2000 total.

Flows are greater than 100 thousand passengers also between Lebanon and Egypt³, Israel and Egypt⁴, and between Tunisia, Algeria and Morocco. Although numbers are smaller, the Indian sub-continent (110 thousand passengers) and the Far East (51 thousand passengers) are also relevant categories for Jordan. The pattern of regional air relations described above is reflected in each country's major passenger airport-to-airport routes. Countries with major air links with the EU present Frankfurt, Paris, London, Athens and Milan as partner airports in their leading routes, while countries with stronger ties in the Near and Middle East feature Jeddah, Dubai and Kuwait within their most important destinations. The major passenger route in Israel stands out from this picture with 763 thousand passengers flying between Tel Aviv/

Table 2.12: Passenger transport by air between the MED countries and the EU countries, 2001

Country	Thousands of passengers to/from EU	as % of all passengers
CYPRUS	5 229	73.0
ALGERIA (*)	2 027	25.1
EGYPT (*)	5 903	34.0
ISRAEL (*)	4 122	51.4
JORDAN	602	26.1
LEBANON (*)	185	7.6
MOROCCO (*)	4 114	59.3
MALTA	2 340	82.5
PALESTINIAN AUTHORITY	-	-
SYRIA	375	21.4
TUNISIA	8 053	79.7
TURKEY (*)	16 487	46.0
TOTAL MED	49 437	48.6

(*) Estimated (see Box 2.2).

Table 2.14: Passenger transport by air between the MED countries themselves, 2001

Country	Number of passengers to/from MED	as % of all passengers
CYPRUS	520 379	7.3
ALGERIA	:	:
EGYPT	:	:
ISRAEL (1)	812 490	8.2
JORDAN	495 519	21.4
LEBANON (1)	408 367	18.4
MOROCCO	:	:
MALTA	115 091	4.1
PALESTINIAN AUTHORITY (2)	41 001	46.6
SYRIA	268 290	15.3
TUNISIA	437 961	4.3
TURKEY	:	:

Note: Excluding domestic traffic.

(1) 1999 data

(2) 2000 data.

Ben Gurion and New York/John F. Kennedy airport⁵. The three busiest MED-airport to EU-airport routes are between Turkey and Germany. In 2001, about 750 thousand passengers flew between Antalya and Dusseldorf, 613 thousand between Antalya and Frankfurt/Main, about 600 thousand between Istanbul/Ataturk and Frankfurt/Main. The fourth largest route was between Tel Aviv/Ben Gurion and London/Heathrow (578 thousand). The top-30 routes all carried over 300 thousand passengers. It is once more clear that the tourist industry guides the patterns of major flows within the region with Antalya figuring 6 times on the list, together with Paphos (Cyprus), Jerba/Zarzis (Tunisia) and Sharm El Sheikh (Egypt).

³ Estimate based on 1999 Lebanese data.

⁴ Estimate based on 1999 Israeli data.

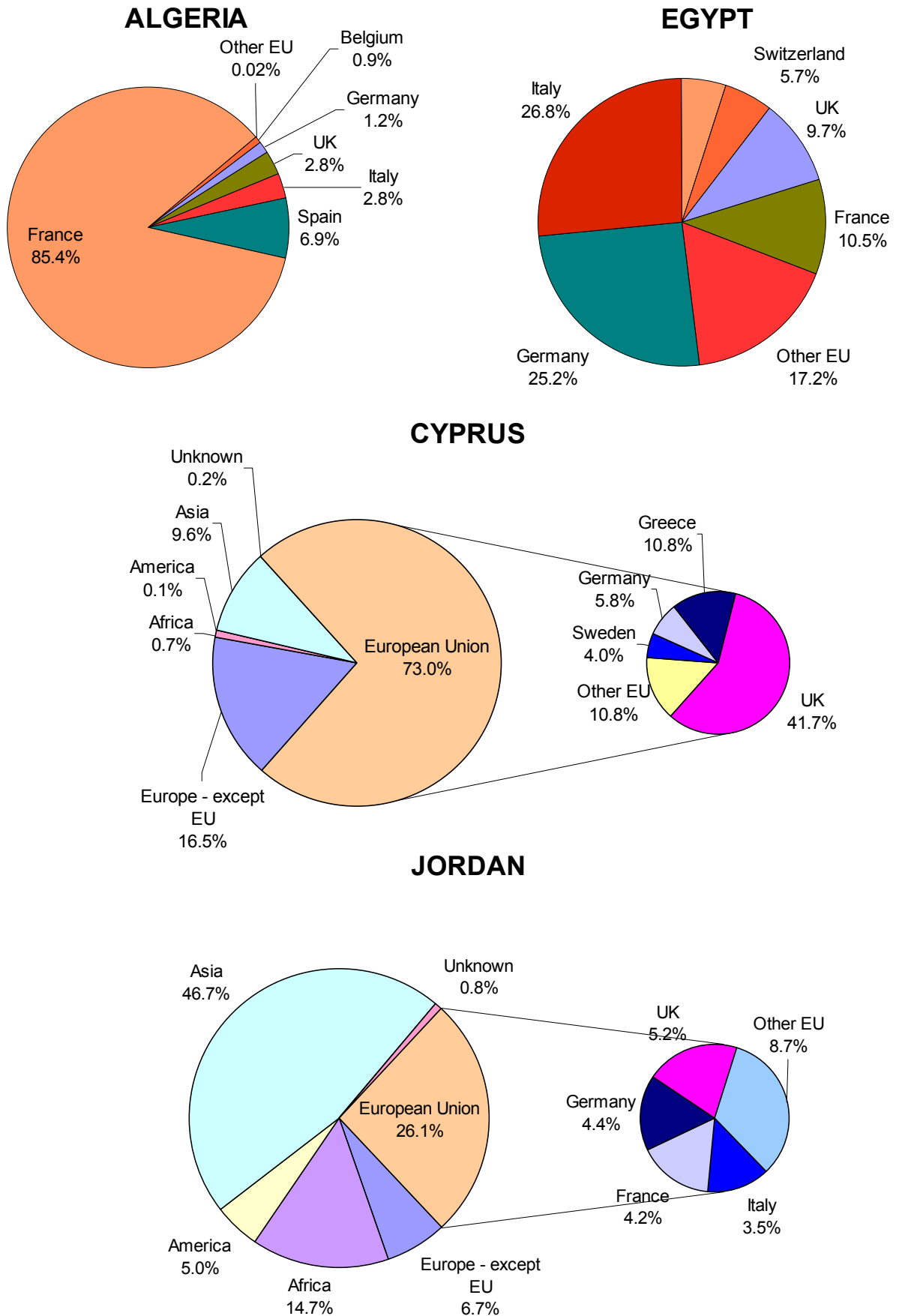
⁵ Estimate based on 1999 Israeli data.

Table 2.15: Top-30 major MED airport to EU airport routes (number of passengers), 2001

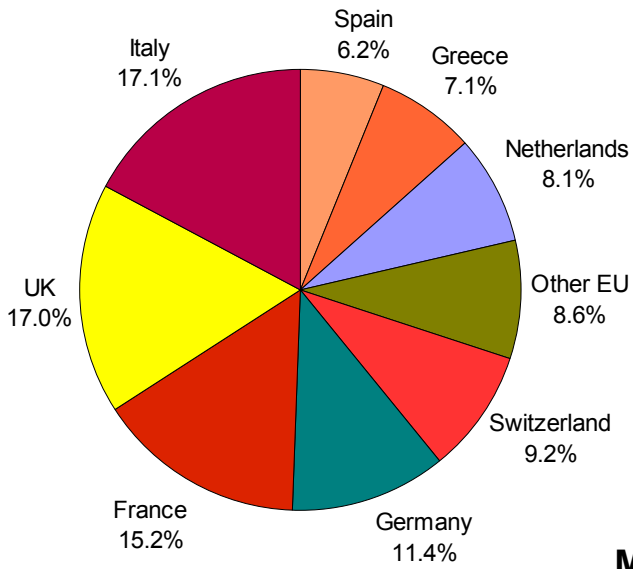
Rank	MED airport	MED country	EEA airport	EEA country	Passengers
1	ANTALYA	TURKEY	DÜSSELDORF	GERMANY	749 847 (*)
2	ANTALYA	TURKEY	FRANKFURT/MAIN	GERMANY	613 890 (*)
3	ISTANBUL/ATATURK	TURKEY	FRANKFURT/MAIN	GERMANY	599 701 (*)
4	TEL-AVIV/D. BEN GURION	ISRAEL	LONDON/HEATHROW	UNITED KINGDOM	577 846 (*)
5	ALGER/HOUARI BOUMEDIENE	ALGERIA	PARIS/CHARLES-DE-GAULLE	FRANCE	538 775 (*)
6	TUNIS/CARTHAGE	TUNISIA	PARIS/CHARLES-DE-GAULLE	FRANCE	486 936
7	ANTALYA	TURKEY	AMSTERDAM/SCHIPHOL	NETHERLANDS	482 259 (*)
8	ISTANBUL/ATATURK	TURKEY	LONDON/HEATHROW	UNITED KINGDOM	457 226 (*)
9	LARNACA	CYPRUS	ATHINAI	GREECE	464 473
10	ANTALYA	TURKEY	MUNCHEN	GERMANY	415 309 (*)
11	LARNACA	CYPRUS	LONDON/HEATHROW	UNITED KINGDOM	442 252
12	ISTANBUL/ATATURK	TURKEY	DÜSSELDORF	GERMANY	401 659 (*)
13	ANTALYA	TURKEY	STUTT GART	GERMANY	384 980 (*)
14	TEL-AVIV/D. BEN GURION	ISRAEL	PARIS/CHARLES-DE-GAULLE	FRANCE	375 778 (*)
15	ANTALYA	TURKEY	HANNOVER UIR	GERMANY	369 048 (*)
16	ISTANBUL/ATATURK	TURKEY	AMSTERDAM/SCHIPHOL	NETHERLANDS	367 398 (*)
17	PAPHOS	CYPRUS	LONDON/GATWICK	UNITED KINGDOM	361 604
18	LARNACA	CYPRUS	MANCHESTER/INTL	UNITED KINGDOM	360 332
19	LARNACA	CYPRUS	LONDON/GATWICK	UNITED KINGDOM	348 877
20	TEL-AVIV/D. BEN GURION	ISRAEL	AMSTERDAM/SCHIPHOL	NETHERLANDS	347 027 (*)
21	ISTANBUL/ATATURK	TURKEY	MUNCHEN	GERMANY	332 093 (*)
22	MALTA/LUQA	MALTA	LONDON/GATWICK	UNITED KINGDOM	325 727
23	TEL-AVIV/D. BEN GURION	ISRAEL	FRANKFURT/MAIN	GERMANY	324 812 (*)
24	JERBA/ZARZIS	TUNISIA	PARIS/CHARLES-DE-GAULLE	FRANCE	318 868
25	TEL-AVIV/D. BEN GURION	ISRAEL	ROMA/FIUMICINO	ITALY	316 506 (*)
26	PAPHOS	CYPRUS	MANCHESTER/INTL	UNITED KINGDOM	312 082
27	SHARM EL SHEIKH	EGYPT	MILANO/MALPENSA	ITALY	311 495 (*)
28	TUNIS/CARTHAGE	TUNISIA	PARIS/ORLY	FRANCE	310 013
29	TEL-AVIV/D. BEN GURION	ISRAEL	MILANO/MALPENSA	ITALY	306 188 (*)
30	CAIRO/INTL	EGYPT	LONDON/HEATHROW	UNITED KINGDOM	300 490 (*)

(*) Estimated (see Box 2.2).

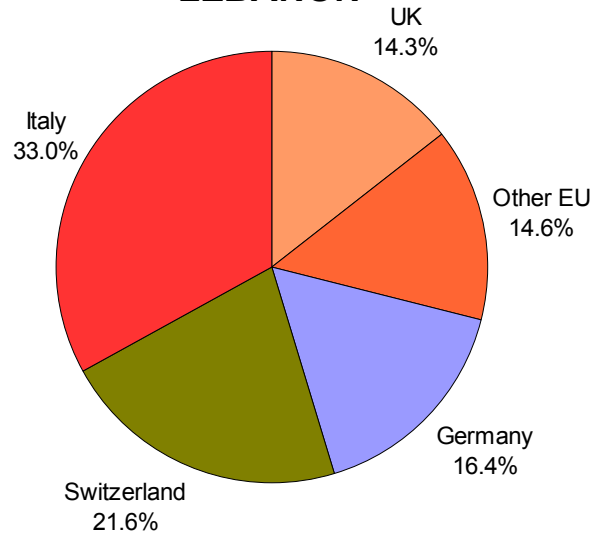
Figures 2.10: Passengers on routes between individual MED countries and the EU (single pie-charts) or world regions and EU (double pie-charts)



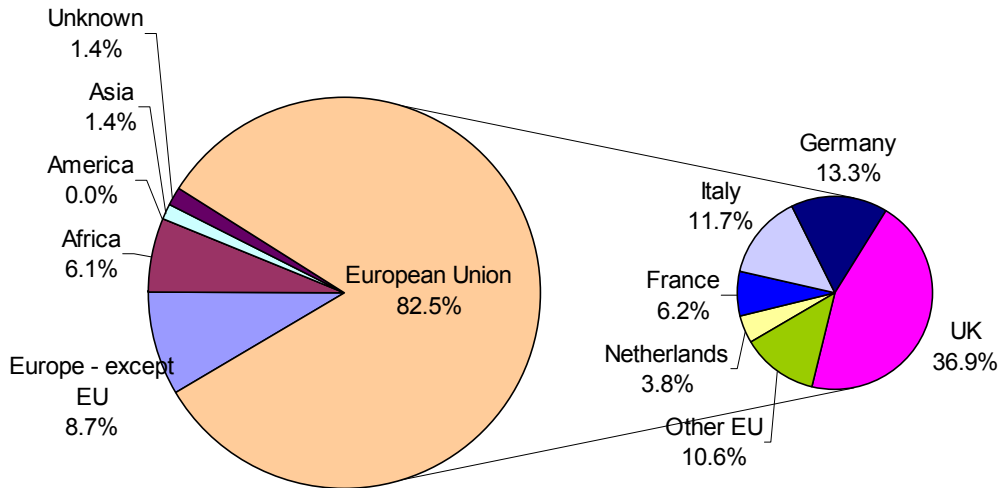
ISRAEL



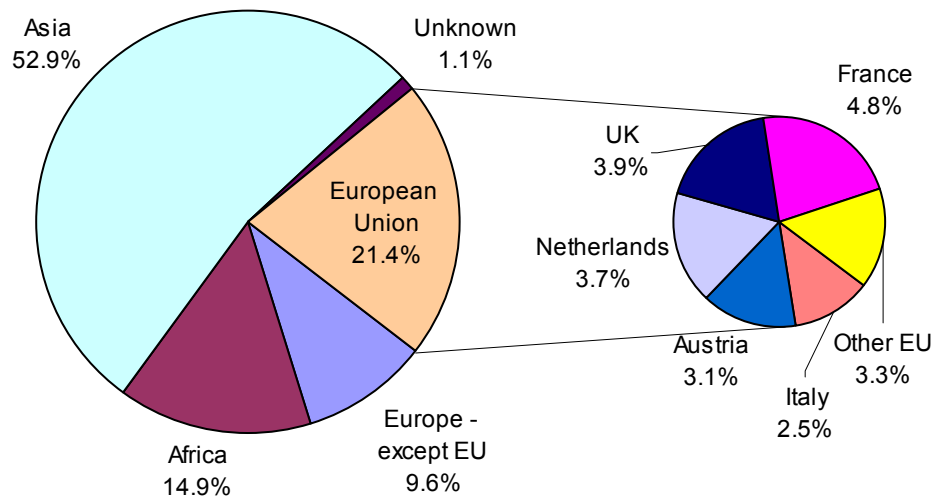
LEBANON



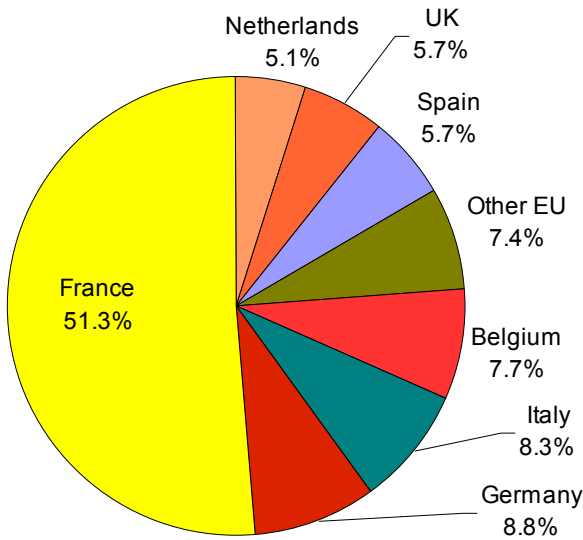
MALTA



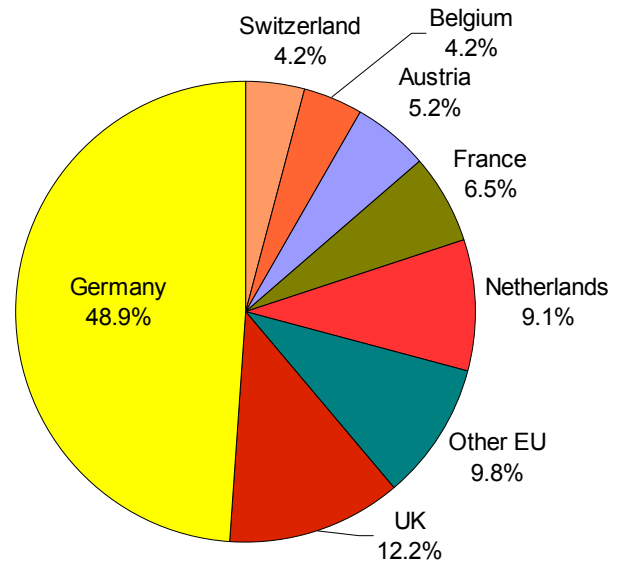
SYRIA



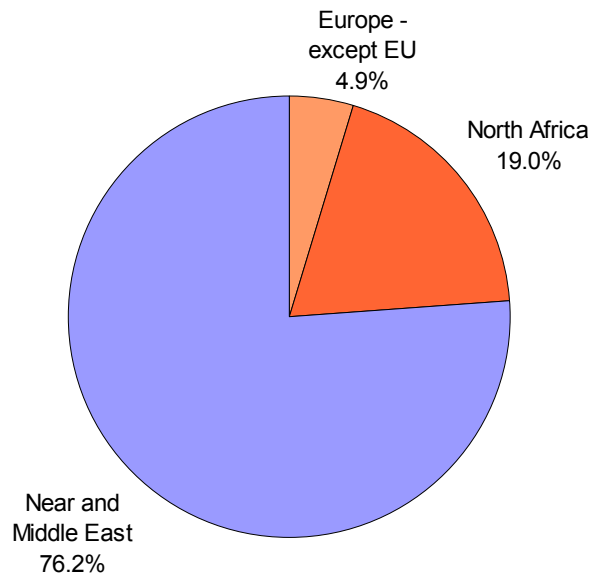
MOROCCO



TURKEY



PALESTINIAN AUTHORITY *



* 2000 data.

BOX 2.3 – Other international sources of statistics on air transport

The **International Civil Aviation Organisation** (ICAO) is a United Nations agency created in 1944 to ensure safe, regular, efficient, and economical air transport. Its main tool towards this goal is a comprehensive series of international rules (standards and recommended practices) which member states agree to follow. The ICAO issues on a regular basis a wide range of publications and statistics, some of which are available on the web site <http://www.icao.org>.

The **International Air Transport Association** (IATA) is the organisation of international airlines founded in 1945 with aims of promoting safe, regular and economical air transport and facilitate co-operation among the companies operating in this sector. Statistics, data and forecasts are published by IATA (see <http://www.iata.org>).

Airports Council International (ACI) is the international association of the world's airports. Created in 1991, it is a non-profit organisation, the prime purpose of which is to foster co-operation among its member airports and with other partners in the world of aviation, including governments, airlines and aircraft manufacturers. ACI has its world headquarters in Geneva, and is made up of six geographical regions: Africa, Asia, Europe, Latin America/Caribbean, North America, Pacific. Some statistics are available on the web at <http://www.airports.org>.

Eurocontrol, the European Organisation for the Safety of Air Navigation, oversees air traffic control in the upper airspace of member states, and works to develop a coherent and coordinated air traffic control system in Europe. Accessible from their web site are air traffic statistics forecasts and delay analysis (<http://www.eurocontrol.be>).

Maritime Transport

The great majority of the world's trade moves by sea and, since the ancient times, the Mediterranean basin has played a key role as it is an important transit route for east-west traffic between Asia and Europe via the Suez Canal and for Black Sea traffic via the strait of Bosphorus. Maritime transport is a relevant part of the economy in eleven of the twelve south and eastern Mediterranean countries¹ and accounts

1 The only exception being the Palestinian Authority where the port in Gaza is not operating.

for the vast majority of their external trade. Seaports also play a crucial role for European Union, channelling over 70% of its external trade and some 30% of its internal trade. Among the cornerstones of the EU transport policy for 2010 (as outlined in the White Paper adopted by the European Commission in 2001), the promotion of short-sea shipping and of inter-modal transport as means to restore a better balance between modes are to have a strong impact on the whole of the Mediterranean basin.

Maritime transport of goods

The MED region features about 57 ports handling over 1 million tonnes per year, of which 17 are located in Turkey, 8 in Algeria and 8 in Morocco. In Lebanon and in Jordan there is only one major port. The number of major MED ports does not compare with the 293 scattered across the EU, but it is nearly three times the number of those operating in the CEC.

The total volume of cargo loaded and unloaded in MED ports reached over 473 million tonnes in 2001, increasing annually by at least 1.7% since 1997. Overall, more rapid growth is reported between 1994 and 1997. As compared to 2000, in 2001 tonnage has increased in some MED countries but not all. A slight decrease in the volumes is reported in Cyprus, Algeria, Israel, Syria and Turkey which have contributed to a negative growth rate between the two years. The overall positive trend observed during the last few years is confirmed by most of the individual MED countries; growth was nevertheless more rapid during the second period (1997-2001) in countries like Malta, Morocco and Egypt. In Lebanon

maritime freight saw a peak in 1995, then declined steadily until 2000, but seems to be recovering in 2001. In Cyprus traffic dipped between 1995 and 1998, but has been slowly rising since. The three Maghreb countries (Algeria, Tunisia and Morocco) have experienced a more or less stable increase since 1990.

In 2001 the EU channelled just over 6 times more goods by sea than the MED countries, reaching close to 3 billion tonnes of freight loaded and unloaded. Maritime transport in the EU has expanded from 2 912 million tonnes handled in 1997 to 2 999 million tonnes handled in 2001, at a slower rate (0.7% per year) than that experienced in the MED region. Total tonnage remained more or less stable between 2000 and 2001. The Central and Eastern European major ports totalled about 221 million tonnes and proved a buoyant trend thanks to a 3.5% increase since the previous year.

Table 3.1: Maritime transport indicators in the MED, EU and CEC regions, 2001

		Mio tonnes	loaded/ unloaded	% change previous year	Number ports with over 1 Mio tonnes	Number passengers (1000)	% change previous year
MED	(1)	477.3	0.9	-2.2	57	9 667	1.6
EU	(2)	2 998.9	0.5	0.5	293	299 988	-10.3
CEC	(3)	221.3	2.8	3.5	21	10 319	-14.5

Note:

(1) Tare weight of containers and ro-ro units included for Morocco.

(2) Including 2000 data in place of 2001 for Greece.

(3) Poland international traffic only; tare weight of containers and ro-ro units included for Bulgaria.

Table 3.2: Maritime Transport in the MED countries

Country	Gross weight of goods (thousand tonnes)					
	1994	1997	2001		average annual growth (%)	
			loaded/	unloaded	1994-2001	1997-2001
CYPRUS (CY)	7 092	7 541	7 024	0.3	-0.1	-1.8
ALGERIA (DZ)	82 226	89 523	99 575	4.2	2.8	2.7
EGYPT (EG) ⁽¹⁾	39 722	46 306	59 102	0.4	5.8	6.3
ISRAEL (IL)	34 604	38 698	42 982	0.4	3.1	2.7
JORDAN (JO)	10 572	12 313	13 043	1.5	3.0	1.5
LEBANON (LB)	6 102	6 436	6 173	0.1	0.2	-1.0
MOROCCO (MA) ⁽²⁾	40 389	48 127	57 504	0.8	5.2	4.6
MALTA (MT) ⁽³⁾	5 208	3 421	4 800	0.1	-1.2	8.8
SYRIA (SY) ⁽⁴⁾	24 005	27 040	27 528	2.0	2.0	0.4
TUNISIA (TN)	22 873	24 818	27 232	0.7	2.5	2.3
TURKEY (TR) ⁽¹⁾	97 566	138 047	132 316	0.6	4.4	-1.1
TOTAL MED	370 359	442 271	477 278	0.9	3.7	1.9

Note:

(1) Covers only major ports.

(2) Tare weight of containers and ro-ro units included for some Moroccan ports.

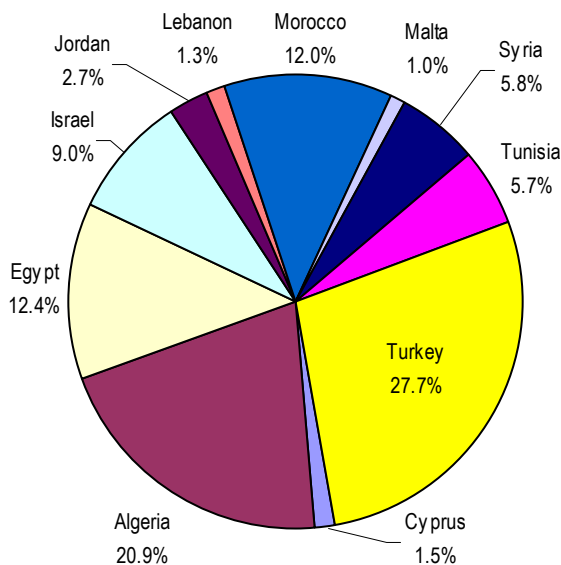
(3) Source of Maltese data UN-ECE/ECMT/Eurostat Common Questionnaire.

(4) Includes estimate for the port of Baniyas 2001.

With a turnover of about 132 million tonnes Turkish ports account alone for close to 28% of the total MED maritime trade, followed by Algeria (100 million), Egypt (55 million in 2000) and Morocco (58 million). These volumes are similar to those achieved by EU countries like Denmark, Finland and Portugal, with respectively 94 million, 96 million and 56 million tonnes in 2001, but they

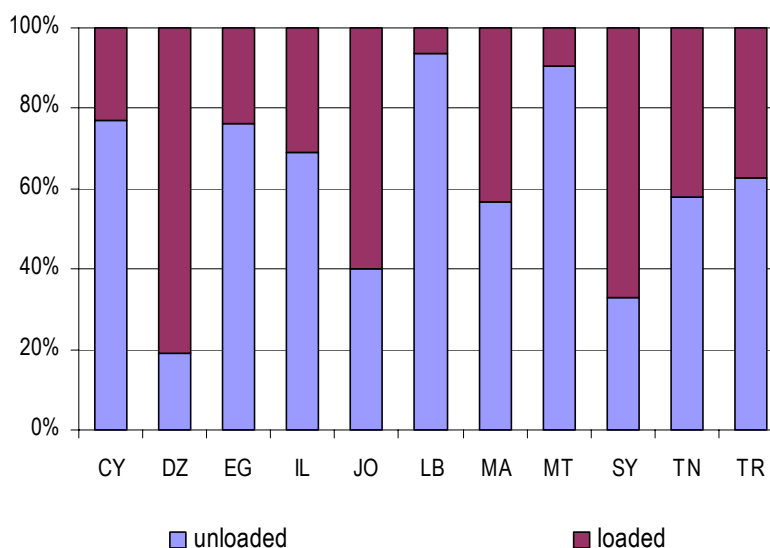
are smaller than the leading EU maritime economies, such as the United Kingdom, Italy, the Netherlands and France with tonnages ranging from 566 million to 317 million tonnes. Volumes handled in the Baltic States and other East and Central European countries vary from a maximum of 57 million tonnes registered in Latvia to a minimum of 9 million in Slovenia.

Figure 3.1: Share of goods handled by sea in MED countries, 2001



In the EU around two thirds of the goods handled are unloaded and one third loaded. All EU Member States unload more than they load. The same does not hold in MED ports; the overall tonnage loaded within the region is slightly smaller than the tonnage unloaded, but the pattern varies largely from one country to another. In Algeria and Syria, where crude oil and petroleum products represent a relevant share of the commodities exported by sea, the volume of cargo moving outwards is respectively 4.2 and 2.4 times greater than the volume of goods discharged. Jordan's only port, Aqaba, has an outward flow equivalent to 1.5 times its inwards flow. The opposite pattern holds for Lebanon where the ratio between unloaded and loaded cargo was about 15 to 1, with 5.8 million tonnes of goods imported by sea as compared to a mere 392 thousand going outwards. Similarly, in Malta, Egypt, Israel, Tunisia and Turkey, the flows of cargo discharged were 2 to 9 times greater in terms of weight than the quantities loaded.

Figure 3.2: Share of goods loaded and unloaded, 2001



In several MED countries maritime traffic is highly concentrated in a few key ports. This is straightforward in Jordan which has the least extended coastline and a single port in Aqaba, but

it holds also for Lebanon where basically all of the maritime traffic is processed through Beirut. The main port in each country gathers at least 20% of the total tonnage as in the case of Tunisia.

Table 3.3: Name, tonnage and share handled at main port, 2001

Country	Name of main port	Tonnage handled at main port	% share over total	Number of ports with over 1 Mio tonnes
CYPRUS (CY)	Limassol	2 878 795	41.0	3
ALGERIA (DZ)	Bethiouia	34 918 745	35.1	8
EGYPT (EG)	Alexandria	32 246 900	54.6	5
ISRAEL (IL)	Haifa	16 719 000	38.9	4
JORDAN (JO)	El Akaba (Aqaba)	13 043 059	100.0	1
LEBANON (LB)	Beirut	5 464 441	88.5	1
MOROCCO (MA)	⁽¹⁾ Casablanca	20 161 354	35.1	8
MALTA (MT)	Marsaxlokk	2 765 038	57.6	2
SYRIA (SY)	⁽²⁾ Baniyas	16 865 000	58.2	3
TUNISIA (TN)	La Skhira	5 483 629	20.1	5
TURKEY (TR)	Izmit	34 621 444	26.2	17
TOTAL MED		185 167 405	38.7	57

Note:

(1) 2000 data in place of 2001.

(2) Tare weight of containers and ro-ro units included for some Moroccan ports.

Table 3.4: Gross weight of goods handled in MED countries (thousand tonnes)

Country	Direction	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
CYPRUS (CY)	Inwards	4 558	4 324	5 928	5 104	4 908	5 027	5 383	5 019	4 746	5 134	5 475	5 414
	Outwards	2 756	1 945	2 066	2 544	2 184	2 229	2 422	2 522	1 697	1 904	1 805	1 610
	Total	7 314	6 269	7 994	7 648	7 092	7 256	7 805	7 541	6 443	7 037	7 281	7 024
ALGERIA (DZ)	Inwards	17 523	17 158	15 246	15 554	18 584	16 188	12 783	15 178	15 960	16 591	18 529	19 039
	Outwards	65 863	64 928	65 956	65 692	63 642	64 506	68 964	74 345	75 471	77 884	81 772	80 536
	Total	83 386	82 086	81 202	81 246	82 226	80 694	81 747	89 523	91 432	94 474	100 301	99 575
EGYPT (EG) ⁽¹⁾	Inwards	:	:	:	:	23 694	27 630	37 562	36 668	30 119	23 180	41 713	41 725
	Outwards	:	:	:	:	16 028	14 386	12 547	9 638	7 185	16 403	13 064	17 377
	Total	:	:	:	:	39 722	42 015	50 109	46 306	37 304	39 583	54 777	59 102
ISRAEL (IL)	Inwards	12 930	13 141	18 787	21 145	22 929	27 402	25 892	26 483	27 271	28 992	29 196	29 697
	Outwards	8 746	8 633	9 003	10 636	11 675	10 880	10 681	12 215	13 488	12 874	13 866	13 285
	Total	21 676	21 774	27 790	31 781	34 604	38 282	36 573	38 698	40 759	41 866	43 062	42 982
JORDAN (JO)	Inwards	6 165	5 548	6 022	5 253	3 924	5 077	4 612	4 778	5 334	5 374	5 360	5 252
	Outwards	8 872	7 677	7 362	6 381	6 648	6 679	7 396	7 535	7 310	7 461	6 999	7 791
	Total	15 036	13 225	13 384	11 634	10 572	11 756	12 009	12 313	12 644	12 835	12 358	13 043
LEBANON (LB) ⁽²⁾	Inwards	:	3 033	4 719	6 071	5 851	7 135	6 499	6 096	5 873	5 899	5 195	5 781
	Outwards	:	88	175	268	251	392	360	340	343	349	352	392
	Total	:	3 121	4 894	6 339	6 102	7 527	6 859	6 436	6 216	6 248	5 547	6 173
MOROCCO (MA) ⁽³⁾	Inwards	17 608	17 914	19 855	21 969	21 081	24 160	22 144	23 775	25 877	28 873	30 208	32 545
	Outwards	20 194	18 305	18 454	18 430	19 308	19 884	20 482	24 352	25 106	26 980	26 150	24 959
	Total	37 802	36 219	38 309	40 399	40 389	44 044	42 626	48 127	50 983	55 854	56 358	57 504
MALTA (MT) ⁽⁴⁾	Inwards	2 471	:	2 776	2 701	5 130	3 501	3 049	3 378	3 709	4 338	4 380	4 334
	Outwards	91	:	94	93	78	46	36	43	30	52	66	466
	Total	2 562	:	2 870	2 783	5 208	3 547	3 085	3 421	3 739	4 391	4 447	4 800
SYRIA (SY) ⁽⁵⁾	Inwards	:	:	:	5 905	4 473	4 592	4 971	5 430	5 998	7 356	8 521	9 055
	Outwards	:	:	:	19 027	19 532	16 629	17 570	21 610	21 624	21 490	20 438	18 473
	Total	:	:	:	24 932	24 005	21 221	22 541	27 040	27 622	28 846	28 959	27 528
TUNISIA (TN) ⁽⁶⁾	Inwards	:	:	:	:	:	:	11 603	13 019	12 994	13 546	14 899	15 760
	Outwards	:	:	:	:	:	:	12 229	11 798	10 699	11 856	11 211	11 472
	Total	19 978	:	20 562	20 960	22 873	23 886	23 832	24 818	23 694	25 402	26 110	27 232
TURKEY (TR) ⁽¹⁾	Inwards	78 577	94 048	70 455	79 168	63 210	73 874	72 181	85 402	85 126	89 365	103 707	82 736
	Outwards	34 984	54 057	40 709	35 026	34 356	35 718	31 877	52 646	36 034	39 573	45 322	49 580
	Total	113 561	148 105	111 164	114 194	97 566	109 592	104 058	138 047	121 160	128 938	149 029	132 316
TOTAL MED	Inwards	:	:	:	:	173 783	:	206 679	225 226	223 007	228 647	267 183	251 338
	Outwards	:	:	:	:	173 703	:	184 564	217 045	198 988	216 827	221 045	225 941
	Total	:	:	:	341 916	370 359	389 820	391 244	442 271	421 995	445 474	488 228	477 278

Notes:

(1) Covers only major ports

(2) Figures for 1991-1992 refer only to Beirut port.

(3) Tare weight of containers and ro-ro units included for some Moroccan ports.

(4) Source of Maltese data UN-ECE/ECMT/Eurostat Common Questionnaire.

(5) Figures for the port of Baniyas estimated in 1995, 1996 and 2001.

(6) Figures for La Skhira port estimated in 1990.

Sea passengers and cruises

Maritime passenger transport (excluding transportation performed in sheltered waters) is small phenomenon as compared to other modes, and it is limited mostly to Egypt, the Maghreb region and Turkey. According to the available data, in 2001 2.7 million passengers were embarked/disembarked in the major Egyptian ports, about 2.9 million in Morocco and 1.3 million in Turkey. Globally the MED region accounted for 9.5 million passengers embarked and disembarked in 2001, proving an increase of about 1 million passengers since 1998. In the EU about 335 million passengers were serviced in 2000, although it must be kept in mind that being intra-EU ferry connections the most relevant part of this traffic, this figure overestimates the actual journeys made as passengers are counted twice (once as they embarked and again as they disembarked).

It is worth noting that while EU-MED maritime passenger transport is limited to a small number of regular ferry routes, there is a growing interest for cruises within the region. According to the World Tourism Organisation², in recent years, cruising has proved to be the fastest growing tourist industry: while the world of international arrivals in the period 1990-1999 grew at an accumulative annual rate of 4.2% that of cruises did by 7.7%. Although it represents only 1.3 per cent of international arrivals, the importance of the cruise industry has to do with the amount of

² World Tourism Organization, "The Cruise Industry" Report, 2000.

revenues generated and its potential for growth. It is believed that North American and European demand will surpass 12 million passengers by the end of 2010. Faster growth is expected in European demand increasing the market of short cruises and boosting the Mediterranean as a strategic destination, packed with historical interest in addition to sun and bathing.

The main ports by traffic and investment in cruise facilities within the north shores of Mediterranean basin are Piraeus (Greece), Barcelona and Palma de Mallorca (Spain), Civitavecchia and Livorno (Italy), and Marseille (France). On the southern shores of the Mediterranean basin cruise passengers are a relevant business not only for islands like Cyprus and Malta, but also for tourist destinations in Israel, Tunisia, Morocco and, most probably, in some Turkish ports. The port of Limassol in Cyprus hosted over 1 thousand cruises in 2000 carrying close to 200 thousand tourists in transit and the large majority of the passengers embarking or disembarking are actually tourists starting or ending a cruise. About 230 cruise vessels called in La Valletta (Malta) and carried a total amount of 165 thousand passengers. Twice as many cruise calls were performed in Sharm El Sheikh. Although the number of regular passengers remained more or less unchanged in Israel between 2000 and 2001 at 150 thousand, passengers on cruises dropped dramatically from turnovers close to 500 thousand cruisers per year in Haifa and Ashdod to a mere 43 thousand. This is a clear consequence of the contraction of the tourism industry due to the political instability of the region.

Table 3.5: Number of passengers at MED ports (in thousands)

Country	1994	1995	1996	1997	1998	1999	2000	2001
CYPRUS (CY)	:	:	670	523	492	561	605	435
ALGERIA (DZ)	279	:	422	391	456	528	587	614
EGYPT (EG)	1 826	1 833	1 965	2 232	2 217	2 568	2 931	2 700
ISRAEL (IL)	121	75	73	74	64	93	158	150
JORDAN (JO)	1 364	1 175	1 107	829	718	676	611	653
LEBANON (LB)	25	21	21	:	23	35	46	40
MOROCCO (MA)	1 565	:	1 621	1 889	2 229	2 489	2 668	2 930
MALTA (MT)	229	:	219	189	270	200	217	182
SYRIA (SY)	9	13	12	21	19	29	31	:
TUNISIA (TN)	288	281	291	318	316	380	414	449
TURKEY (TR)	1 802	1 848	1 688	2 017	1 716	1 034	1 243	1 252
TOTAL MED	:	:	8 090	:	8 521	8 591	9 511	:

Note:

Figures exclude passengers on a cruise stage, however differences in definitions limit the comparability of data.

Table 3.6: Cruise passengers in some major Mediterranean ports

Port		Cruise paxs (home port) in	Cruise paxs (home port) out	Cruise pax transit	Cruise calls
LIMASSOL - CYPRUS	1997	256 579	257 783	91 714	858
	2000	299 192	297 842	197 419	1 138
SHARM EL SHEIKH - EGYPT	1997	260 000	283 000		435
	2000	257 000	278 000		461
HAIFA - ISRAEL	1997	27 989	33 817	193 294	314
	2000 *	50 067	48 229	152 053	:
CASABLANCA - MOROCCO	1997	12 120	13 629	68 575	:
	2000	15 630	13 288	86 698	:
TANGIER - MOROCCO	1997	765 399	729 121	43 969	:
	2000	931 030	686 210	116 690	:
La Goulette (Tunis) - TUNISIA	1997			130 304	177
	2000			170 000	195
VALETTA - MALTA	1997	2 010	3 133	124 898	199
	2000	3 411	2 771	165 996	226

Source:
MEDCRUISE Association.
2000 data for Haifa refer till end of August.

Table 3.7: Number of vessels calling at MED ports (inwards only)

Country	1997	1998	1999	2000	2001
CYPRUS (CY)	4 386	4 476	4 852	5 041	5 019
ALGERIA (DZ)	7 812	7 968	8 352	8 777	8 987
EGYPT (EG)	8 799	8 004	7 977	:	8 361
ISRAEL (IL)	6 256	6 458	6 587	6 042	5 840
JORDAN (JO)	2 997	2 608	2 351	2 505	2 673
LEBANON (LB)	3 671	3 457	3 417	3 064	3 755
MOROCCO (MA) ⁽¹⁾	13 544	13 739	14 959	15 085	15 334
MALTA (MT)	:	5 347	5 372	4 457	:
SYRIA (SY)	3 058	3 021	3 346	3 006	:
TUNISIA (TN)	6 264	6 180	6 228	6 352	6 978
TURKEY (TR)	47 533	35 425	31 312	31 728	26 728
TOTAL MED	104 320	96 683	94 753	86 057	

Note:
(1) Estimated on basis of total inwards+ouwards vessels divided by 2.

The busiest ports in the Euro-Mediterranean region

The 15 biggest ports in the MED region on the basis of the gross weight of goods handled achieved freight turnovers of well over 11 million tonnes each. The list includes three Algerian ports, four Turkish ports, two Egyptian ports, two Moroccan ports and two Israeli ports. A Syrian and the sole Jordanian port also appear, but there are no Lebanese, Tunisian, Maltese or Cypriot ports represented. The top-5 performances were achieved by the ports of Bethioua in Algeria (34.9 million tonnes), of Izmit in Turkey (34.6 million tonnes), of Alexandria in Egypt (28 million tonnes; 2000 figure), of Skikda in

Algeria (24 million tonnes) and of Aliaga in Turkey (21 million tonnes). They accounted for 30% of the total tonnage of the region. In 2001 the five most important EU ports (Rotterdam, Antwerp, Marseille, Hamburg and Le Havre) were responsible for 22% of the total tonnage handled in the EU. Rotterdam alone accounted for 297 million tonnes, a volume of cargo about 8.5 times greater than the leading MED port of Bethioua. Although they do not appear among the top-5 ports, there are four United Kingdom ports which are rated in the EU list of the 15 biggest.

Transport in the Euro-Mediterranean region

In a common EU-MED ranking for the year 2001, the largest MED port would compete with Sulhom Voe and Southampton for the 16th or 17th position. The biggest port of the Central and Eastern European countries, Ventspils in Latvia, has basically the same turnover as Bethouia in Algeria

and is itself a major petrol port. Similarly, the volumes handled in Tallinn (Estonia) match with those handled in Alexandria (Egypt). However in this region, the top-5 ports deal with to close to 60% of the total tonnage.

Table 3.8: Top-15 ports in terms of the gross weight of goods in the MED, EU and CEC, 2001

No.	MED Ports	1000 tonnes	EU Ports ^(*)	1000 tonnes	CEC Ports	1000 tonnes
1	Bethiouia / DZ	34 919	Rotterdam / NL	296 620	Ventspils / LV	37 937
2	Izmit / TR	34 621	Antwerpen / B	114 777	Tallinn / EE	32 063
3	Alexandria (incl. Dekhelia) / EC ⁽¹⁾	28 404	Marseille / FR	89 518	Constantza / RO	25 119
4	Skikda / DZ	23 988	Hamburg / D	82 948	Klaipeda / LT	20 953
5	Aliaga / TR	21 330	Le Havre / FR	65 356	Gdansk / PL ⁽³⁾	16 971
6	Casablanca / MA ⁽²⁾	20 161	Grimsby & Immingham / UK	54 831	Riga / LV	14 820
7	Istanbul / TR ⁽¹⁾	17 469	Tees & Hartlepool / UK	50 842	Burgas / BG ⁽²⁾	12 481
8	Banias / SY ⁽¹⁾	16 865	London / UK	50 654	Szczecin / PL ⁽³⁾	9 988
9	Haifa / IL	16 719	Amsterdam / NL	48 073	Koper / SI	9 110
10	Ashdod / IL	13 574	Trieste / IT	44 712	Swinoujscie / PL ⁽³⁾	8 798
11	Mersin / TR	13 246	Genova / IT	43 134	Gdynia / PL ⁽³⁾	8 348
12	Arzew / DZ	13 147	Dunkerque / FR	41 909	Varna / BG ⁽²⁾	7 711
13	Aqaba / JO	13 043	Forth / UK	41 607	Liepaya / LV	3 261
14	Damietta / EG ⁽¹⁾	13 004	Wilhelmshaven / D	40 850	Vene - Balti / EE	2 852
15	Mohammedia / MA ⁽²⁾	11 142	Bremen/Bremerhaven / D	40 066	Parnu / EE	1 912

Note:

(*) The EU list excludes Greece; however Greek ports do not appear among the top-15 in the previous year.

(1) 2000 data.

(2) Tare weight of containers and ro-ro units included.

(3) Only international traffic.

Main types of cargo and commodities

Maritime activity in the MED countries is still strongly related to bulk cargo and this characterizes the flows, the vessels and the type equipment available in the ports. Algeria hosts three of the biggest oil terminals in the region (Bethioua, Skikda and Arzew) which in 2001 largely contributed to the 83% share of liquid bulk dominating in this country's maritime economy. The same occurs in Syria where over 56% of maritime transport is concentrated in the port of Baniyas, once more an oil port. Liquid bulk is also predominant in Turkey (51 million tonnes in 2001) where it accounts for 38% of the total tonnage performed. Another 25% of the overall activity of Turkish ports is made of dry bulk, with solid mineral fuels, iron ore and cement being the most the relevant commodity categories. In Tunisia 12 million tonnes of liquid bulk represent 44% of the country's maritime traffic turnover and nearly half of it is generated by the port of La Skhira.

Dry bulk is the first cargo type for Jordan's only port, Aqaba (63%), and it is mainly attributed to the carriage of over 6 million tonnes of phosphates, potash and fertilizers. In the Israeli

ports, where agricultural products (mainly citrus fruits) and solid mineral fuels are predominant products, dry bulk is again a predominant cargo category (40%), also thanks to the specialized terminal in Hadera that is importing close to 7 million tonnes of coal per year. Morocco features 54% of dry bulk (mostly phosphates, cereals and crude and manufactured minerals) and 28% of liquid bulk (generally petroleum and chemicals). In the major Egyptian ports, dry bulk accounts for 41% of the goods handled.

About 44% of the cargo handled in the EU (excluding Greece) is made up of liquid bulk and 26% of dry bulk; however, close to half of the remaining 30% is channelled through EU ports by container (13%) and 11% by ro-ro units. The great innovation in the international transport of goods by sea in the last fifty years has been the introduction of the freight container. Containers offer significant benefits in terms of standardisation of transport across different modes of transport and have had a considerable impact on the improvement in efficiency and the reduction in costs of transport. Container transport is particularly significant in EU countries like

Germany (27% of total tonnage) and Belgium (23%) whereas the share of ro-ro units is high in Denmark (26%), Sweden (25%) and Ireland (19%).

Within the MED region, the Israeli and Cypriot ports stand out for their more significant rate of unitised transport loads, together with the port of Beirut in Lebanon. About 31% of the total tonnage in Israel was carried in containers. About 24% of the gross weight of goods handled in Limassol and Larnaca is carried by container and ro-ro units; but in Cyprus liquid bulk still represents most important category (45% of the total cargo). Moreover, containers are the main type of cargo in the port of Beirut where they represent 32% of the total cargo. Although no figures are available here, the Freeport of Marsaxlokk in Malta is a leading transshipment platform in the Mediterranean Sea with an important share of container and ro-ro cargo.

Despite these exceptions, the rate of containerisation is relatively low in the MED countries as compared to EU countries. In Turkey although containers are handled in several ports they represent only 9% of the total traffic. The share of container traffic is even lower in the three Maghreb countries and it is mostly concentrated in a single port. Morocco's unitised transport represents less than 8% of the total and is mainly run through the port of Casablanca (85%). On the other hand, the port of Tangier contributes to a

substantial part of the 3 million tonnes of goods carried by ro-ro and bringing Morocco's share of unitised transport to a global figure of 11.5%. The port of Rades is responsible for basically all (95%) of the Tunisian container transport, which is in total no larger than 1.7 million tonnes, i.e. 6.3% of the total. The 800 thousand tonnes of ro-ro traffic are mostly attributed to La Goulette-Tunis and represent another 3.2% of goods handled in Tunisia. Finally, in Algeria 70% of the container traffic is channelled through the port of Alger, but containers represent only 2.2% of the total volume of goods.

Bulk cargo does not really offer opportunities for containerisation, but general cargo can potentially all be carried in container boxes or ro-ro units. When measured as a share of non-bulk cargo, the differences between EU and MED countries and among MED countries themselves appear to be even wider. Israel (78%) presents a rate comparable to the EU average, followed by Cyprus (75%). In countries like Ireland, Denmark and Germany unitised transport represents more than 85% of non-bulk cargo. Southern European countries like Italy (82%), Spain (74%) and Portugal (59%) feature lower values, but they are still higher than the MED average. Morocco (64%) is still at the higher-end within the MED countries, but in Algeria the share is as low as 24% and in Turkey 27%. Jordan presents the lowest rate with only 9%.

Table 3.9: Main cargo types handled in MED ports (in thousand tonnes), 2001

Country	Liquid bulk	Dry bulk	Containers	Ro-ro	Other general cargo	Not classified	TOTAL
CYPRUS (CY)	3 177	1 616	1 511	163	555	2	7 024
ALGERIA (DZ) ⁽¹⁾	82 262	8 236	2 145	:	6 932	-	99 575
EGYPT (EG) ⁽²⁾⁽³⁾	7 281	22 449	:	:	16 111	8 936	54 777
ISRAEL (IL)	9 233	17 099	13 054	:	3 597		42 983
JORDAN (JO)	429	8 139	218	179	3 963	115	13 043
LEBANON (LB) ⁽⁴⁾	1 435	326	1 764	:	1 963	685	6 173
MOROCCO (MA) ⁽⁵⁾	16 244	30 829	3 628	3 002	3 801		57 504
TUNISIA (TN) ⁽²⁾	12 095	9 916	1 714	879	2 628	:	27 232
TURKEY (TR)	50 726	33 002	11 692	5	32 389	4 501	132 316

Notes:

(1) The category Other General Cargo includes goods carried by ro-ro.

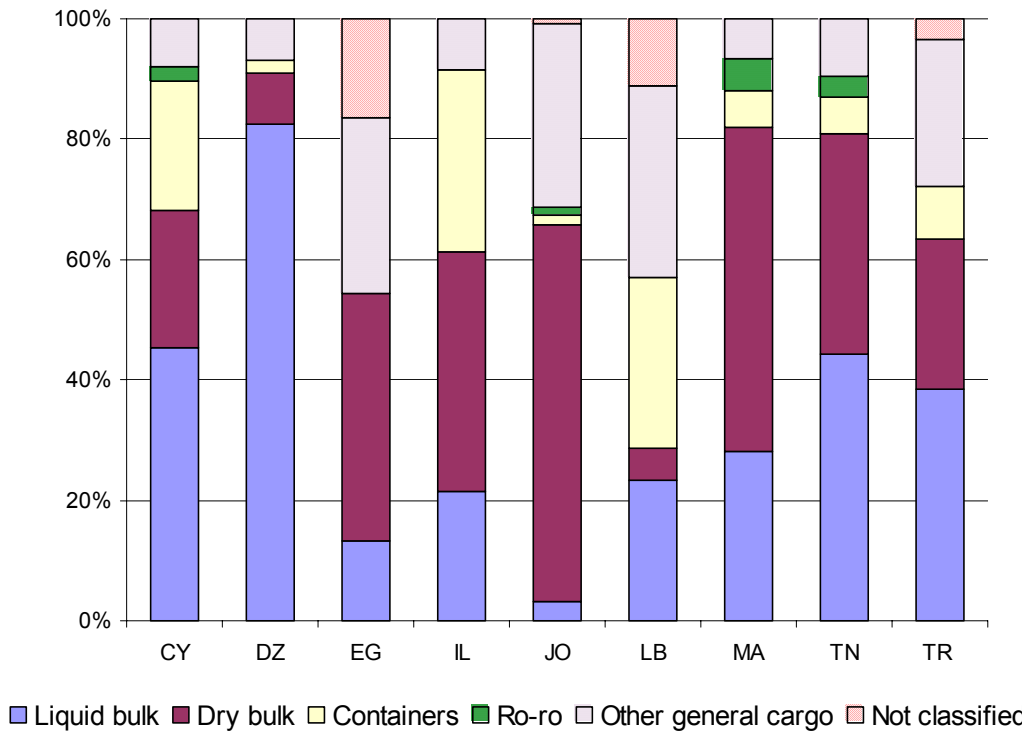
(2) 2000 data.

(3) The category Other General Cargo includes goods carried by container and ro-ro.

(4) The breakdown is available only for the port of Beirut; Tripoli's tonnage is "Not classified".

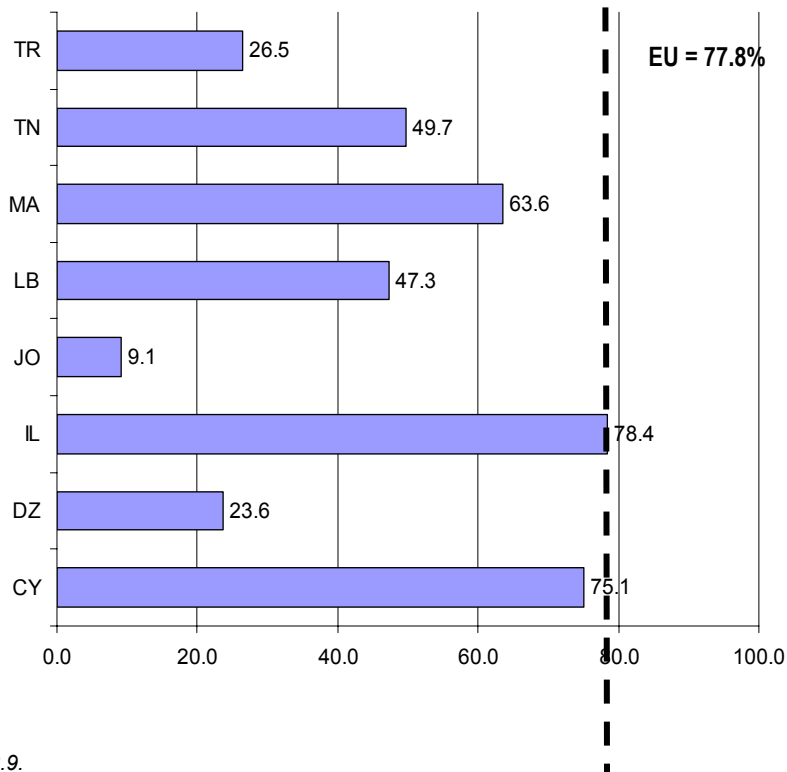
(5) Including the tare weight of containers and ro-ro units.

Figure 3.3: Breakdown of maritime traffic by cargo type, 2001



Notes:
See Table 3.9.

Figure 3.4: Containerisation as share of non-bulk cargo, 2001



Notes:
See Table 3.9.

Table 3.10: Main commodity types carried by sea (thousand tonnes), 2001

Type of Goods	ALGERIA (DZ)		ISRAEL (IL)		JORDAN (JO)		LEBANON (LB)		MOROCCO (MA)		SYRIA (SY)		TUNISIA (TN)		TURKEY (TR)	
	1998	2001	1999	2001	1998	2001	1999	2001	1997	2001	1998	2000	1998	2001	1998	2001
CEREALS	5 613	6 442	-	-	1 579	1 743	600	565	2 742	5 270	1 041	1 678	1 931	2 836	5 464	2 632
POTATOES, OTHER FRESH OR FROZEN																
FRUIT AND VEGETABLES	89	177	4 425	4 084	4	-	30	30	853	315	-	-	109	99	354	517
LIVE ANIMALS, SUGAR BEET	223	347	-	-	34	-	123	132	-	-	-	-	3	0	-	1
WOOD AND CORK	444	681	50	12	78	92	7	11	556	82	296	316	-	-	1 001	677
TEXTILES, TEXTILE ARTICLES AND MAN- MADE FIBRES, OTHER RAW ANIMAL AND VEGETABLE MATERIALS	34	20	-	-	-	-	9	4	-	-	441	467	387	444	209	54
FOODSTUFFS AND ANIMAL FODDER	1 662	2 072	-	-	420	256	308	261	1 218	1 351	975	916	754	1 002	1 295	1 338
OIL SEEDS AND OLEAGINOUS FRUITS AND FATS	506	485	4 228	4 074	170	223	92	86	296	316	36	43	327	355	1 888	1 570
SOLID MINERAL FUELS	574	647	3 042	428	-	-	4	3	2 890	5 260	-	-	92	125	6 963	8 999
CRUDE PETROLEUM AND PETROLEUM PRODUCTS	75 308	80 136	3 077	3 037	20	103	1 715	1 450	8 316	11 503	20 364	20 486	9 736	10 019	53 946	48 238
IRON ORE, IRON AND STEEL WASTE AND BLAST FURNACE DUST	1 474	2 289	-	-	444	544	828	860	135	-	1 253	1 179	862	1 010	10 606	11 290
NON-FERROUS ORES AND WASTE	180	38	-	-	-	-	-	-	280	15	-	-	65	-	1 178	1 879
METAL PRODUCTS	-	-	1 867	1 510	-	-	-	-	1 042	337	-	-	174	437	9 792	13 121
CEMENT, LIME, MANUFACTURED BUILDING MINERALS	560	742	-	-	368	415	230	218	384	405	6	17	700	726	6 074	9 001
CRUDE AND MANUFACTURED MINERALS	119	251	2 338	2 416	613	174	3	1	3 500	4 329	-	-	2 196	2 437	9 569	6 469
NATURAL AND CHEMICAL FERTILIZERS	1 345	869	-	-	5 264	6 396	32	17	12 184	12 940	1 385	1 043	1 580	1 865	2 706	3 159
COAL CHEMICALS, TAR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	716	1 709
CHEMICALS OTHER THAN COAL CHEMICALS AND TAR	654	879	-	-	1 311	174	151	149	4 259	2 961	523	694	2 243	2 378	4 811	3 741
PAPER PULP AND WASTE PAPER	-	-	212	119	-	-	126	123	-	83	149	153	126	219	1 186	228
TRANSPORT EQUIPEMENT, MACHINERY, APPARATUS, ENGINES, WHETHER OR NOT ASSEMBLED, AND PARTS THEREOF	365	401	-	-	47	179	115	131	-	-	471	422	99	113	134	82
MANUFACTURES OF METAL	-	-	-	-	-	-	-	-	-	165	-	-	-	71	75	32
GLASS, GLASSWARE, CERAMIC PRODUCTS	47	42	-	-	-	-	37	38	-	-	-	-	34	44	188	153
LEATHER, TEXTILE, CLOTHING, OTHER MANUFACTURED ARTICLES	28	32	139	178	15	-	77	96	197	40	5	7	345	400	474	239
MISCELLANEOUS ARTICLES	-	-	12 706	13 055	157	428	1 052	1 283	4 611	6 374	1 086	2 398	573	881	2 531	12 930
NOT CLASSIFIED	2 207	3 025	2 985	3 076	2 120	2 318	4	5	-	5 758	21	10	1 357	1 770	-	4 270
TOTAL	91 432	99 575	35 069	31 989	12 644	13 043	5 544	5 464	43 463	57 504	28 052	29 829	23 693	27 232	121 160	132 330

Transport in the Euro-Mediterranean region

Although limited in most MED ports, container and ro-ro transport are growing at a steady rate, especially in countries where these cargo types still have a large potential for development. Between 1998 and 2001 the number of boxes handled in Jordan increased at an average rate of 10.5% per year and in Tunisia at 15.5%, while in Cyprus and Israel the increase has been around 2.6% per year. Lebanon did not see a positive trend as the number of boxes handled slightly dipped from 229 thousand to 227 thousand units. Turkey was also affected by a decrease mostly due to the drop experienced after 2000.

Empty units play an important role in several MED countries proving a considerable volume of unused capacity. In Jordan empty boxes represent 41% of the total number of containers handled and in the port of Beirut (Lebanon) up to 47%. In all countries for which data was provided with the exception of Turkey, the share of empty units is much greater when it comes to outwards traffic. In Jordan boxes are empty exclusively when they are directed out from Aqaba port. This large amount of empty returns is in part a consequence of the imbalance of flows of goods exchanged between the MED and EU countries.

Table 3.11: Container traffic in MED countries

Country	Year	Inwards			Outwards			Total		
		Units	Empty Units	Tonnes (1000)	Units	Empty Units	Tonnes (1000)	Units	Empty Units	Tonnes (1000)
CYPRUS (CY)	1997	88 716	15 507	:	178 354	47 365	:	267 070	62 872	:
	1998	78 969	8 552	:	79 695	47 318	:	158 664	55 870	:
	1999	91 572	9 528	1 031	89 463	32 327	651	181 035	41 855	1 681
	2000	95 039	6 803	1 133	94 635	51 937	614	189 674	58 740	1 747
	2001	86 727	4 958	1 041	84 612	51 693	471	171 339	56 651	1 511
ALGERIA (DZ)	1997	:	:	1 158	:	:	45	:	:	1 202
	1998	:	:	1 322	:	:	36	:	:	1 358
	1999	:	:	1 455	:	:	93	:	:	1 547
	2000	:	:	2 029	:	:	89	:	:	2 394
	2001	:	:	2 041	:	:	104	:	:	2 145
ISRAEL (IL)	1997	411 000	32 000	5 394	398 000	164 000	3 418	809 000	196 000	8 812
	1998	454 000	47 000	5 799	444 000	191 000	3 756	898 000	238 000	9 555
	1999	457 000	36 000	6 030	450 000	195 000	3 754	907 000	231 000	9 784
	2000	490 000	35 000	6 454	485 000	215 000	4 017	975 000	250 000	10 471
	2001	489 000	33 000	6 502	482 000	219 000	3 898	971 000	252 000	10 400
JORDAN (JO)	1997	53 579	:	783	54 903	40 217	231	108 482	40 217	1 014
	1998	62 883	:	915	61 778	49 635	186	124 661	49 635	1 101
	1999	67 910	:	1 010	67 862	54 892	212	135 772	54 892	1 222
	2000	77 397	:	1 179	73 763	60 909	206	151 160	60 909	1 385
	2001	86 154	:	1 296	82 017	68 357	210	168 171	68 357	1 506
LEBANON (LB)	1997	110 505	567	1 503	109 154	98 953	123	219 659	99 520	1 626
	1998	114 826	1 976	1 586	113 819	103 783	121	228 645	105 759	1 707
	1999	104 646	467	1 413	105 653	94 350	150	210 299	94 817	1 563
	2000	102 519	98	1 431	102 419	91 054	152	204 938	91 152	1 582
	2001	114 905	176	1 597	112 458	99 963	168	227 363	100 139	1 765
MOROCCO (MA)	1997	:	:	1 480	:	:	763	:	:	2 243
	1998	:	:	1 767	:	:	818	:	:	2 585
	1999	:	:	1 899	:	:	1 034	:	:	2 932
	2000	:	:	2 178	:	:	1 117	:	:	3 294
	2001	:	:	2 442	:	:	1 186	:	:	3 628
TUNISIA (TN)	1997	:	:	:	:	:	:	106 335	:	868
	1998	:	:	:	:	:	:	124 842	:	1 007
	1999	:	:	:	:	:	:	149 846	:	1 232
	2000	:	:	:	:	:	:	160 049	:	1 471
	2001	:	:	:	:	:	:	192 342	:	1 714
TURKEY (TR)	1997	:	:	:	:	:	:	:	:	:
	1998	523 012	90 639	-	508 684	74 302	-	1 031 696	164 941	:
	1999	489 063	101 167	-	511 131	39 112	-	1 000 194	140 279	:
	2000	542 534	30 983	6 479	571 940	37 710	6 815	1 114 474	68 693	13 293
	2001	401 728	72 452	4 435	514 434	18 903	6 497	916 162	91 355	10 932

Table 3.12: Top-15 ports in terms of total tonnage handled by container

No.	Port	Tonnes (1000)		
		2001	2000	1999
1	Haifa / IL	6 726	6 983	6 469
2	Izmir / TR	3 627	3 585	-
3	Ashdod / IL	3 424	3 269	3 125
4	Mersin / TR	3 225	2 838	-
5	Casablanca / MA	3 181	2 879	2 559
6	Istanbul / TR	2 632	5 523	-
7	Beirut / LB	1 765	1 582	1 563
8	Rades/Tunis / TN	1 586	1 340	1 143
9	Limassol / CY	1 506	1 730	1 681
10	Aqaba / JO	1 506	1 385	1 222
11	Alger / DZ	1 393	1 167	1 005
12	Gemlik / TR	1 226	1 123	-
13	Marsaxlokk / MT	695	-	-
14	Oran / DZ	344	259	259
15	Agadir / DZ	272	250	233

Note:
The list excludes Egyptian and Syrian ports.

BOX 3.1 – Statistics on maritime transport collected within the MED-Trans project.

Statistics on maritime transport collected within the framework of the MED-Trans project are based on a common framework to guarantee comparability with statistics produced by 13 European Union Member States (excluding Austria and Luxembourg which are landlocked) and seven Central and Eastern European Accession countries (excluding the Czech Republic, Hungary and the Slovak Republic). In the EU these statistics are produced according to the requirements of the Council Directive 95/64/EC on statistical returns on the carriage of passengers and goods by sea and on the subsequent Commission Decisions (98/385/EC and 2000/363/EC).

Basic statistics presenting a global view on maritime freight and passenger movements are collected for each MED port, as follows:

- Direction (inwards/outwards)
- Gross weight of goods (in tonnes)
- Number of passengers (except cruise)
- Number of passengers starting/ending a cruise in the port
- Number of passengers on a cruise stage (transit in the port)
- Number of vessels

The statistical unit is the port and not the country. In some cases (e.g. Egypt and Turkey) only major ports are currently reporting such data. Major ports are those handling more than 1 million tonnes of goods or recording more than 200 thousand passenger movements annually.

The gross weight of goods is the tonnage of goods carried, including direct packaging, but excluding the tare weight of containers and ro-ro units.

Both national and international commercial traffic is taken into consideration. All 12 MED countries are usually supplying such data on annual basis.

Tables 3.1 to 3.8 and figures 3.1 to 3.3 are based on this dataset.

Highlights on flows between the European Union and Mediterranean countries

At present the data collected from MED countries are not sufficient to gather a complete picture of maritime flows within the Euro-Mediterranean region. Estimates were calculated on the basis of EU mirror declarations to fill the gaps (see Box 2). In 2000 goods carried between EU and MED ports (excluding Egypt and Malta) represented about 48% of the overall MED maritime outward flows³, but only 22% of the inward flows. In absolute values, about 60 million tonnes of goods crossed the Mediterranean to be unloaded in MED ports and about 180 million tonnes travelled in the other direction. These figures include 86 million tonnes of goods travelling to/from Egyptian ports and 6 million from/to Malta. The EU is the major

maritime partner for the MED region as it is for nearly all individual MED countries. Goods coming from/carried to the EU generally absorb over 27% of total tonnage handled in each country's ports. The only exceptions are Jordan (13%) and Turkey (19%). Jordan's main maritime partners are the Indian sub-continent (28%) and the Far East (23%); while the main relations for Turkish ports are those with Central and Eastern European countries and the Balkans (44%). The weight of the MED countries in the EU maritime traffic is much smaller and represents in average no more than 8% of the overall tonnage handled. Nevertheless, 72% of cargo unloaded in the Netherlands comes from MED ports, as well as 27% of the goods unloaded in Spain, 17% of the goods unloaded in Italy and 16% of those unloaded in France. The share of MED-directed traffic in EU outward flows is however always under 12%.

³ According to our data quality assessment, these percentages are slightly underestimated. The overall percentage share would be even higher in particular for MED outward flows should Egypt and Malta be considered. Tunisian outward flows to the EU may reach up to 70% of the total.

Table 3.13: Maritime flow of goods between MED countries and the EU, 2000

Country	Thousands of tonnes to/from EU ports			as % of total tonnage		
	From	To	Total	From	To	Total
Cyprus (*)	2 618	1 389	4 007	47.8	76.9	55.0
Algeria	7 900	50 878	58 778	42.6	62.2	58.6
Egypt (*)	6 878	78 917	85 795	:	:	:
Israel (*)	6 460	5 217	11 677	22.1	37.6	27.1
Jordan	1 395	201	1 596	26.0	2.9	12.9
Lebanon	1 984	113	2 097	38.2	32.0	37.8
Morocco (*)	7 514	7 584	15 097	26.1	32.8	29.1
Malta (*)	3 740	2 624	6 364	:	:	:
Syria (*)	2 532	14 983	17 516	29.7	73.3	60.5
Tunisia (1)	6 473	3 021	9 494	43.4	26.9	36.4
Turkey	12 640	14 965	27 605	12.2	33.0	18.5
Total MED	60 135	179 891	240 026			

Notes:

(*) Estimated (see Box 2)

(1) No relation provided for the port of La Skhira. The share of outward flows for Tunisia could reach 70%

Table 3.14: Maritime flow of goods between EU countries and the MED, 2000

Country	Thousands of tonnes to/from MED ports			as % of total tonnage		
	To	From	Total	To	From	Total
Belgium	5 596	8 271	13 867	8.2	7.5	7.7
Germany	4 675	2 929	7 604	10.7	5.5	7.9
Denmark	304	140	444	0.3	0.1	0.2
Spain	5 582	20 050	25 632	10.6	26.6	20.1
Greece	7 121	13 858	20 979	11.2	8.1	8.9
France	10 978	38 236	49 214	11.9	15.7	14.6
Finland	1 302	76	1 378	9.6	0.2	3.0
Italy	16 456	54 927	71 384	12.5	17.4	16.0
Ireland	209	191	401	0.2	0.1	0.1
Netherlands	2 954	29 531	32 485	7.5	71.8	40.3
Portugal	509	4 559	5 068	4.0	10.4	9.0
Sweden	969	838	1 807	1.3	1.0	1.1
United Kingdom	3 479	6 285	9 764	1.4	2.0	1.7
Total EU	60 135	179 891	240 026	5.9	9.2	8.0

Table 3.15: Maritime flows between some MED countries and areas of the world

Relation Country	ALGERIA			JORDAN			LEBANON ⁽¹⁾			TUNISIA ⁽²⁾			TURKEY		
	1998	2000	2001	1998	2000	2001	1998	2000	2001	1998	2000	2001	1998	2000	2001
National traffic	3 447	3 573	3 359	-	-	-	1	4	3	:	1 683	1 849	34 128	34 897	23 849
European Union	50 127	58 778	56 739	1 876	1 596	1 451	2 300	2 097	2 285	:	9 494	9 790	17 297	27 611	26 671
Europe - except EU	7 241	8 071	8 464	1 407	907	1 143	1 557	1 008	1 343	:	4 535	4 447	22 158	31 124	24 942
Africa	850	982	1 177	1 051	994	1 156	418	505	561	:	1 711	2 046	22 753	22 964	25 767
America	27 577	27 200	26 649	1 349	1 564	1 680	543	586	610	:	2 162	2 691	6 809	11 828	9 686
Near and Middle East	597	242	301	1 029	687	780	658	572	604	:	1 082	991	7 487	9 419	10 918
Asian Republics of the Ex-USSR	-	2	-	-	-	-	7	-	0	:	-	-	958	1 425	1 480
Indian Sub-Continent	32	115	105	2 552	3 432	3 495	0	0	0	:	334	287	673	888	612
Far East	848	842	2 092	2 577	2 797	2 810	43	27	28	:	321	302	981	1 761	1 894
Australasia, S. Sea Is. & Antarctica	354	245	422	645	134	75	37	50	0	:	40	52	1 414	2 178	1 995
Not classified	359	251	266	158	247	454	653	698	738	:	4 749	4 868	6 502	4 935	4 504
Total	91 432	100 301	99 575	12 644	12 358	13 043	6 216	5 547	6 173	:	26 110	27 323	121 160	149 029	132 316

Notes:

(1) The category "Not classified" includes all tonnage handled at the port of Tripoli.

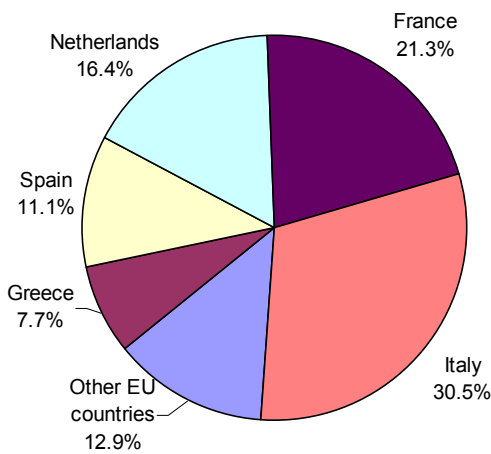
(2) The category "Not classified" includes all tonnage handled at the port of La Skhira.

Whereas for Algeria, Tunisia and Lebanon the share of maritime routes with the EU has been more or less stable during the last few years, a slight decline can be appreciated in Jordan and a clear increase can be observed in Turkey. When the Central and Eastern European countries (most of which are due to join the EU in the next few years) are included into the picture, shares rise from an additional 0.9% in Algeria to an additional 4.6% in Tunisia.

With its central position in the Mediterranean basin, Italy is the leading partner for MED ports. It attracts 31% of the total tonnage unloaded in the EU and 27% of the tonnage directed from the EU ports to the MED region, for a total volume of 71

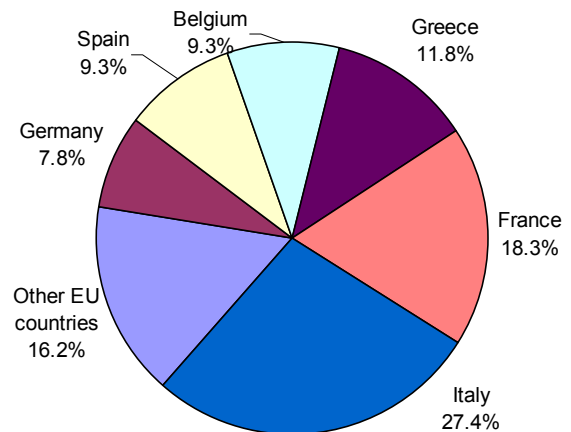
thousand tonnes. Italy figures as the first or second maritime relation in each individual MED country, except Jordan and Morocco (where it is the third), and it features seven times in the list of EU-MED maritime corridors with over 2 million tonnes of goods carried in 2000. France and Spain also appear as major maritime destinations, followed by Greece. Belgium ports handled 9% of the goods directed to the MED region, but are not among the main partners for flows in the opposite direction. Conversely, the Netherlands absorb 16% of the goods coming from the MED countries and unloaded in the EU, but do not cover a major role in the other direction.

Figure 3.5a: Main EU countries loading goods to MED ports



About 25 million tonnes were conveyed by sea between Egypt and Italy in 2000; 23 million between Egypt and the Netherlands, and 18 million between Algeria and France. These three most important corridors accounted for 27% of the total flows. There were in total 25 maritime routes between an EU and a MED country carrying at

Figure 3.5b: Main EU countries unloading goods from MED ports



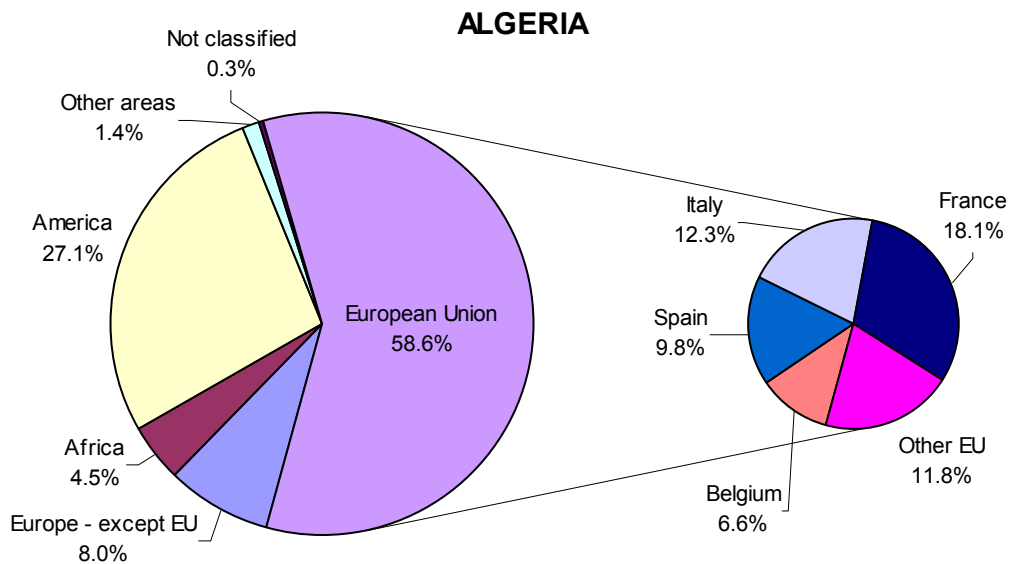
least 2.4 million goods during the year. Seven of these corridors ended on the EU side in Italy, five in France and 4 in Spain. On the MED side, Egypt and Algeria attracted the major routes in seven cases each, while Turkey appears only three times.

Table 3.16: Euro-Mediterranean maritime corridors with at least 2 million tonnes of goods, 2000

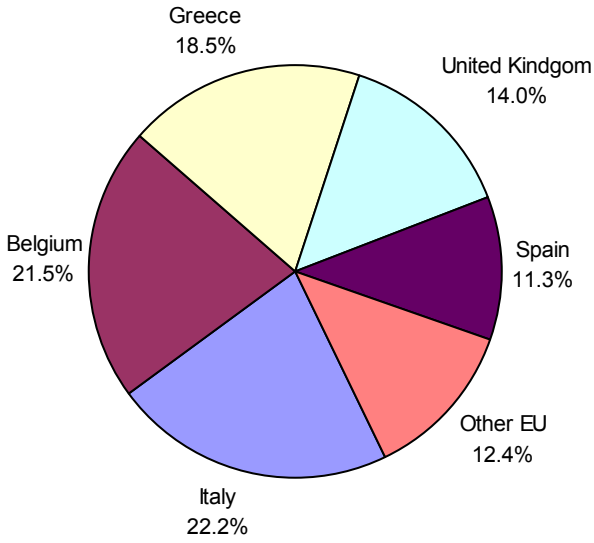
Rank	MED country	EU country	Thousand tonnes
1	Egypt	Italy	25 086 (*)
2	Egypt	Netherlands	22 616 (*)
3	Algeria	France	18 155
4	Egypt	France	15 200 (*)
5	Algeria	Italy	12 374
6	Algeria	Spain	9 827
7	Syria	Italy	9 701 (*)
8	Turkey	Italy	9 662
9	Egypt	Greece	9 221 (*)
10	Turkey	Greece	7 286
11	Algeria	Belgium	6 609
12	Syria	France	5 294 (*)
13	Morocco	France	5 208 (*)
14	Algeria	Netherlands	4 773
15	Egypt	Spain	4 637 (*)
16	Morocco	Spain	4 500 (*)
17	Tunisia	Italy	4 164
18	Malta	Italy	3 778 (*)
19	Turkey	Spain	3 441
20	Algeria	Germany	3 285
21	Egypt	Portugal	3 276 (*)
22	Israel	Italy	3 202 (*)
23	Algeria	United Kindgom	2 514
24	Tunisia	France	2 451
25	Egypt	United Kindgom	2 406 (*)

(*) Estimated (see Box 2)

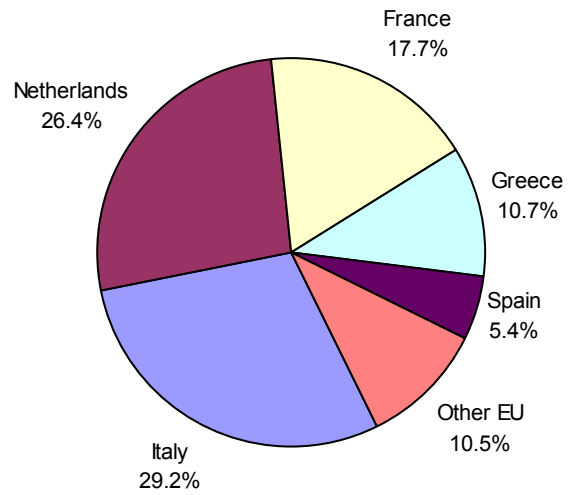
Figure 3.6: Maritime flows between individual MED countries and the EU (single pie-charts) or world regions and EU (double pie-charts)



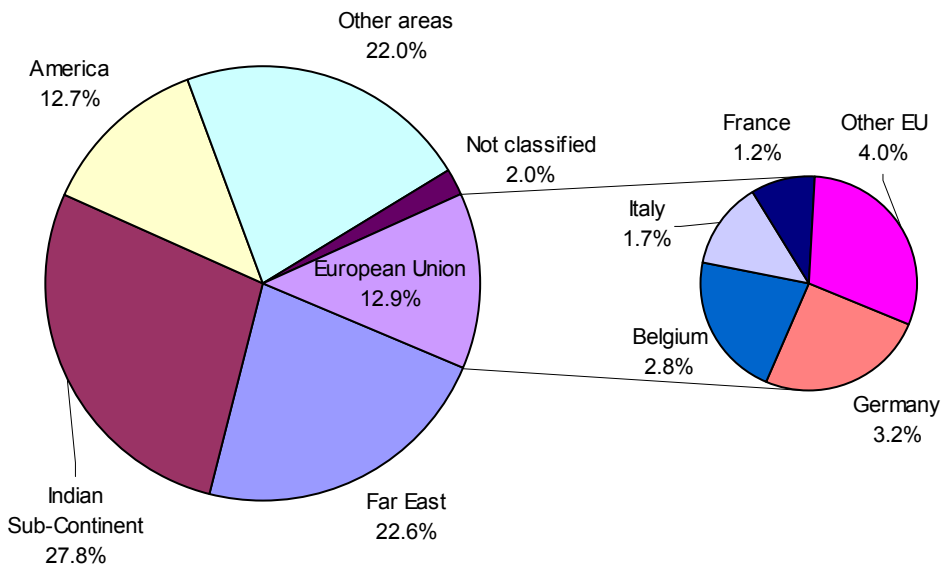
CYPRUS



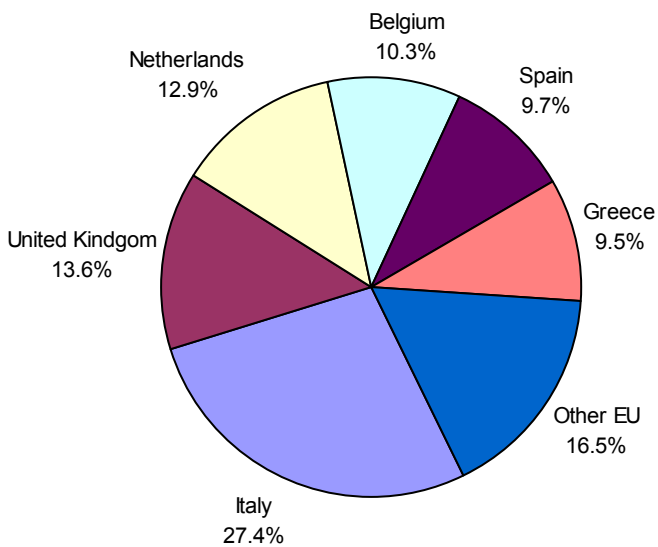
EGYPT



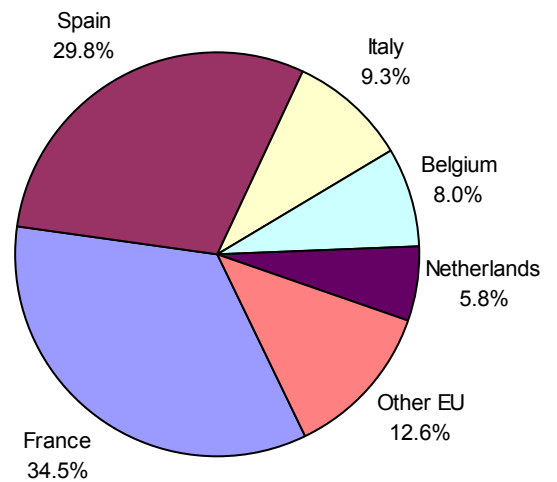
JORDAN



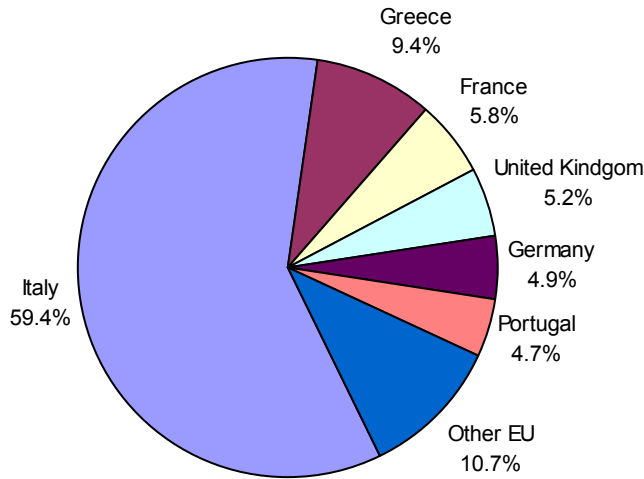
ISRAEL



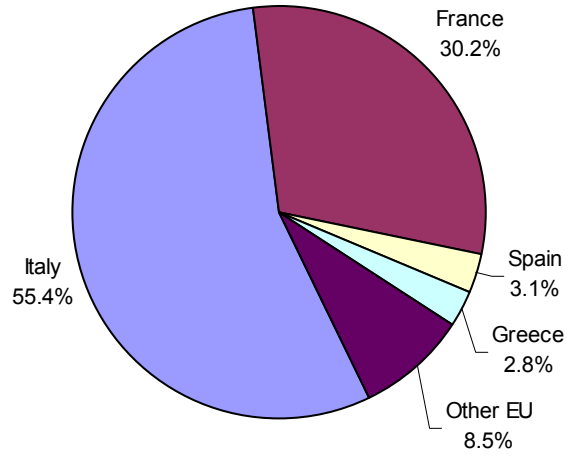
MOROCCO



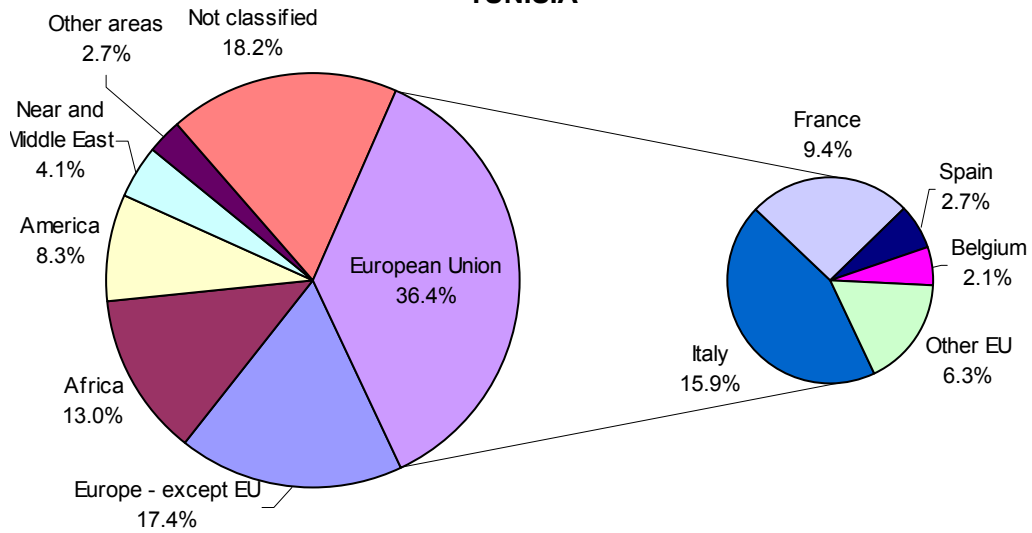
MALTA



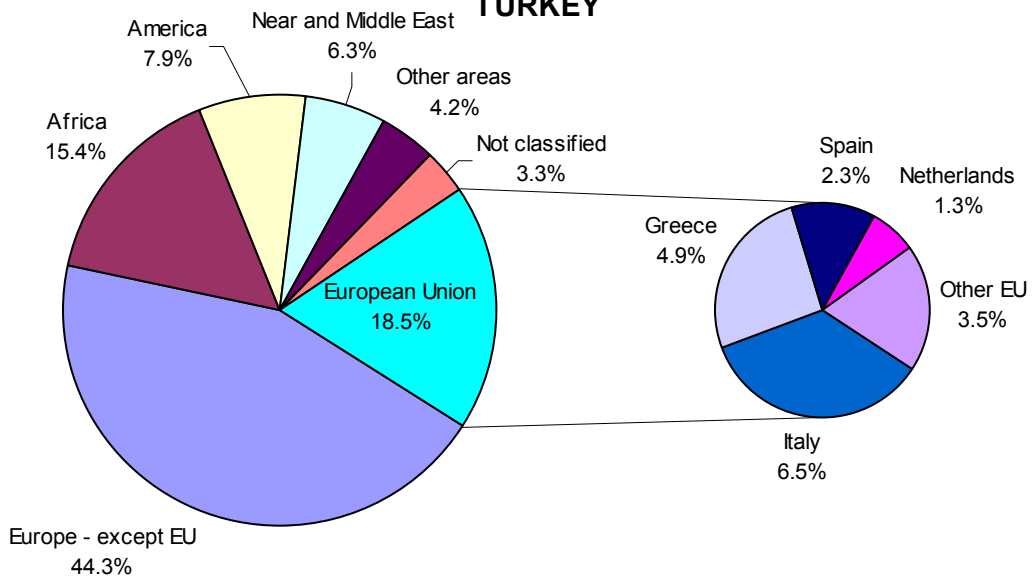
SYRIA

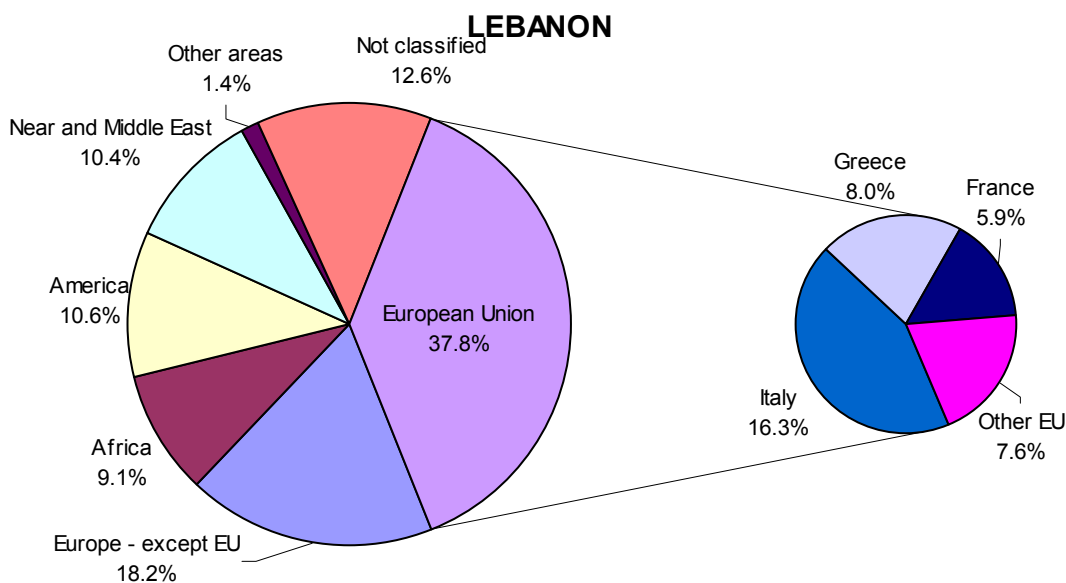


TUNISIA



TURKEY





BOX 3.2 – Statistics on country-to-country maritime flows collected within the MED-Trans project and the estimation of EU-MED flows.

In addition to the tables described in Box 3.1, the regional database set up within the MED-Trans project also contains much more detailed statistics on goods and passengers carried by sea. The main aim is to collect for the major MED ports data equivalent to those collected by Eurostat for EU Member States. These include breakdowns on the relation of maritime flows (port or country of loading/unloading), type of cargo, type of commodity, nationality of vessel, as follows:

- MEDA1 – Seaborne transport of goods in the main MED ports by port, type of cargo and relation
- MEDA2 – Non-unit load seaborne transport of goods in the main MED ports by port, type of cargo and relation
- MEDB1 – Seaborne transport of goods in the main MED ports by port, type of cargo, type of goods and relation
- MEDC1 – Unit-load seaborne transport of goods in the main MED ports by port, type of cargo, relation and loaded status
- MEDD1 – Passenger transport in the main MED ports by port, relation and nationality of registration of vessels;
- MEDE1 – Seaborne transport of goods in the main MED ports by port, type of cargo, relation and nationality of registration of vessels;
- MEDF1 – Vessel traffic in the main MED ports, by port, type and size of vessels DWT loading/unloading cargo
- MEDF2 - Vessel traffic in the main MED ports, by port, type and size of vessels GT loading/unloading cargo

Several MED countries are reporting these detailed tables partially since 1997, but in most cases the statistics do not cover all of the required breakdowns or do not always match the required classification. The data presented here is obtained with a certain degree of approximation on the basis of national classifications or by crossing sources. Comparability is therefore ensured but not total. Data harmonisation is one of the main objectives of the MEDSTAT/MED-Trans project. The data in tables 3.9 to 3.12 and 3.15 and figures 3.3 and 3.4 are extracted from the above mentioned datasets.

In order to gain a complete picture of the Euro-Mediterranean flows, estimates were calculated for the MED countries having not provided route data in 2000 (Egypt, Israel, Malta, Morocco, and Syria) and for those where the quality of data did not allow a sufficient detail (Cyprus) by using the mirror declarations of their EU partner countries as reported to Eurostat. Caution should be made while analysing the results since the EU statistics concern only traffic reported by the major ports (i.e. those with an annual turnover greater than or equal to 1 million tonnes). Figures presented in tables 3.13, 3.14 and 3.16 and figures 3.5a and 3.5b are based on such estimations.

Interesting patterns come into view by analysing the differences between the tonnage of goods imported and exported within the Euro-Mediterranean region by sea and the flows of goods actually loaded/unloaded in EU and MED ports. In 2000 the EU imported by sea about 91 million tonnes from MED countries. The same year the estimated volume of goods carried from MED ports to EU ports was twice as much (180 million tonnes). The differences are not as wide in the opposite direction, with about 54 million exported from the EU by sea to the MED countries against 60 million tonnes unloaded in MED ports and coming from the EU. Undoubtedly, the Mediterranean is a big transit platform for exchanges which go much beyond the actual trade between the EU-MED partners. Possibly a large share of the goods which are unloaded in EU ports from the southern Mediterranean shore, are not directed to the country they touch, but are shipped by land or by sea once more, to other EU

and to CEC countries. Trade statistics provide information about the origin and final destination of this flow, but not about any other step along the transport route, and when the goods reach their final destination by land, they will most probably be registered in the trade statistics as imported by land, even if part of the journey was made by sea. As a consequence of the single European market, any EU country's export-import from/to the Atlantic, Far East, North Africa or Middle East can be made or routed through any other of the 15 EU Member State's ports. The existence of a certain number of *hub* ports on the Northern shores of the Mediterranean play a key role in making differences between countries. On the other hand north-south flows are mostly all absorbed by the MED country where the goods are unloaded, as shows the much smaller difference in maritime trade and maritime transport figures in this direction.

BOX 3.3 – Other international sources of data on maritime transport

The **International Maritime Organisation** (IMO) is a United Nation's specialised agency responsible for improving maritime safety and preventing pollution from ships. It is also involved in legal matters, including liability and compensation issues and the facilitation of international maritime traffic. It was established in 1948 and currently has 162 Member States. (<http://www.imo.org>)

The **European Sea Ports Organisation** (ESPO) was founded in 1993 and represents the port authorities, port associations and port administrations of the seaports of the European Union. Its mission is to influence public policy in the EU to achieve a safe, efficient and environmentally sustainable European port sector, operating as a key element of a transport industry where free and undistorted market conditions prevail, as far as practicable. (www.espo.be)

The **International Association of Ports and Harbours** (IAPH) is often referred to as the "United Ports of the World", in which active players in the global port community, namely Port CEOs, Port Directors and Port Managers are represented to promote and advance their common cause and interests. The IAPH is active in promoting the development of the international port and maritime industry and ensuring that the industry's interests and views are represented before international organizations involved in the regulation of international trade and transportation. It is within its mission to collect, analyze, exchange and distribute information on developing trends in international trade, transportation, ports and the regulations of these industries. (www.iaphworldports.org)

The Association of Mediterranean Cruise Ports (**MEDCRUISE**) is a non profit-making organization constituted in June 1996 to promote the interests of Mediterranean ports and foster good relations and collaboration among all cruise ports of the world. Through its website it allows members to exchange statistics on cruise passenger traffic, on new tourism developments in geographical areas, and on characteristics of cruise ports. (www.medcruise.com)

Land Transport

Land-based modes only account for a small fraction of cross-border transport flows in most of the MED countries. Put aside Turkey, both road and rail are mostly a domestic issue. In addition to the low volume of trade between MED countries and the fact that they are physically separated from their main trading partners by the sea, several historical and political reasons affect the low level of inter-regional land transport integration. However, within the Euro-Mediterranean context, the availability of an efficient land transport system is essential in a

Road, rail and pipeline infrastructure

Over 741 thousand kilometres of road unfold across the MED region. With 429 thousand kilometres of roads, Turkey accounts alone for over 57% of the total network. Algeria follows with 105 thousand kilometres, representing about 14%. In the other countries the length of the network varies from 57.2 thousand kilometres in Morocco to 2.5 thousand in Malta, by far the smallest of the MED countries. Roads available in the West Bank and Gaza Strip are just slightly longer (2 055 km according to 1998 data) than the Maltese network, although the area is about 19 times wider and the population nearly 10 times greater.

Between 1997 and 2001 road infrastructure increased at an average annual growth rate of 2.97% in the MED region as a whole with about 61 thousand kilometres of new roads built over four years. Turkey built around 47 thousand kilometres of roads, of which 323 were motorways. Egypt extended its road network by 2.5 thousand kilometres per year, and Algeria and Syria by 1 thousand. The smallest average per annum extension was experienced in Morocco, where the length of roads has actually decreased in time. During the same period at least 161 thousand kilometres of new roads were built in the EU.

As compared to the 52 748 kilometre motorway system (2001 data) available in the EU,

multi-modal perspective, to connect passengers and goods flowing through ports and airports to their actual inland origin and destination. Unfortunately, the carriage of both passengers and goods by road, for which surveys must be set up, are the weakest area of transport statistics in the MED countries. This chapter presents an overview of land transport infrastructure and equipment in the MED countries and briefly addresses the carriage of passengers and goods by rail.

motorways constitute only a minor part of the road infrastructure in MED countries. All EU countries can rely on some stretch of these typically high-speed roads which represent approximately 1.57% of the whole network; Germany can boast a particularly high concentration of motorways which constitute close to 5% of the national road infrastructure. On the other hand, actual motorways (designed with separate carriageways for the two directions of traffic separated from each other, which do not serve any bordering properties, do not cross at level with any other road, railway, track, or footpath and specially sign-posted and reserved for specific categories of road motor vehicles)¹ do not necessarily exist in all MED countries. Malta does not have any; in Israel they represent no more than 0.34% of the whole network, in Turkey 0.43% and in Algeria 0.64%. Caution should be taken while analysing the figures because the definitions adopted tend to be different from one country to another.²

¹ This is the common definition for "Motorway" as agreed in the UN-ECE/ECMT/Eurostat Glossary on Transport Statistics.

² The Jordanian figure in Table 4.2 refers to "highways" including international roads and those linking governorates, with 4 to 6 lanes and is not harmonised with the motorway definition.

Table 4.1: Land transport infrastructure in the MED, EU and CEC regions

		1997	1998	1999	2000	2001
Road (km)	MED	679 601	682 806	697 195	731 955	740 709
	EU	3 229 912	3 243 299	3 249 706	3 952 937	:
	CEC	:	1 104 357	1 199 278	:	:
Rail (lines - km)	MED	25 852	25 992	25 781	25 487	25 057
	EU	154 261	153 640	152 723	156 353	148 598
	CEC	66 324	65 826	65 409	65 159	63 627
Oil pipelines (km)	MED	22 713	22 713	22 713	22 713	20 398
	EU	21 872	21 799	21 579	21 600	:
	CEC	10 234	10 234	10 129	10 129	10 136

Notes: Differences in definitions between countries for road limit the comparability of data.

Table 4.2: Road infrastructure (length of roads in km)

Country	Type of road	1997	1998	1999	2000	2001
Algeria (DZ)	Motorways	645	645	645	645	645
	Other Roads	100 348	101 863	102 641	103 545	104 084
	Total	100 993	102 508	103 286	104 190	104 729
Cyprus (CY)	Motorways	195	204	216	240	257
	Other Roads	10 459	10 616	10 793	10 901	11 151
	Total	10 654	10 820	11 009	11 141	11 408
Egypt (EG)	Motorways	:	:	:	:	:
	Other Roads	:	:	:	:	:
	Total	42 200	43 000	49 810	49 810	45 345
Israel (IL)	Motorways	56	56	:	56	:
	Other Roads	15 527	15 921	:	16 225	:
	Total	15 583	15 977	16 195	16 281	16 521
Jordan (JO)	Motorways	2 894	2 906	2 911	2 911	:
	Other Roads	4 128	4 227	4 289	4 334	:
	Total	7 022	7 133	7 200	7 245	7 259
Lebanon (LB)	Motorways	:	:	:	:	:
	Other Roads	:	:	:	:	:
	Total	6 359	:	:	6 598	:
Malta (MT)	Motorways	-	-	-	-	-
	Other Roads	1 972	2 170	2 183	2 262	2 254
	Total	1 972	2 170	2 183	2 262	2 254
Morocco (MA)	Motorways	372	372	372	:	:
	Other Roads	57 148	57 146	57 146	:	:
	Total	57 520	57 520	57 520	57 226	57 226
Palestinian Authority (PS)	Motorways	:	:	:	:	:
	Other Roads	:	:	:	:	:
	Total	2 055	2 495	:	:	:
Syria (SY)	Motorways	:	897	927	927	927
	Other Roads	:	40 895	42 454	43 648	44 933
	Total	41 451	41 792	43 381	44 575	45 860
Tunisia (TN)	Motorways	142	142	142	142	195
	Other Roads	18 855	18 855	18 855	18 855	18 856
	Total	18 997	18 997	18 997	18 997	19 050
Turkey (TR)	Motorways	1 528	1 726	1 749	1 773	1 851
	Other Roads	380 289	379 442	384 211	416 607	427 372
	Total	381 817	381 168	385 960	418 380	429 223

Notes:

Length is provided at end of year, except for Egypt where it is at mid-year.

Differences in definitions between countries limit the comparability of this data (especially for motorways).

Railways are in use in only eight of the twelve Mediterranean countries: Algeria, Morocco, Tunisia, Egypt, Jordan, Syria, Israel and Turkey. Turkey can once more claim the most extended infrastructure with a railway network 8.7 thousand kilometres long, the great majority of which is single track. Rail lines in Turkey are nearly two times longer than those operated in Egypt and more than 16 times longer than the network operated in Jordan. In Israel and Egypt over 32% of the rail lines are double-track or more.

Electrified lines account for close to 53% of the network in Morocco and 20% in Turkey, but in Jordan and Israel none of the lines are electrified. On the other hand, 50% of the railway lines are

electrified in the EU. Greece with no electrification and Ireland with only 2% are rare exceptions, as in most EU countries the share of electrified lines is well over 30% in general and over 75% in the Benelux area.

The overall railway infrastructure is shrinking in the MED region, just as it is in the EU and CEC. In most countries road capacity has expanded to the detriment of rail. The most noticeable reduction between 1997 and 2001 was recorded in Algeria (-4.2%), and Tunisia (-4.1%). In some countries new lines were also made available, but at very slow pace, such as in Syria (0.28%) and Turkey (0.19%). Only Israel's rail lines faced a considerable extension of about 2.6% per year.

Table 4.3: Railway infrastructure

Country	Length of lines in km						
	1997	1998	1999	2000	2001		
						% of electrified	% of double track or more
Algeria (DZ)	4 219	4 272	4 256	3 973	3 548	:	9.9
Egypt (EG) ⁽¹⁾	4 961	4 972	5 024	5 012	5 047	:	32.1
Israel (IL)	609	666	663	669	676	0.0	38.9
Jordan (JO)	524	524	524	524	524	0.0	-
Morocco (MA)	1 907	1 907	1 907	1 907	1 907	52.6	19.4
Syria (SY)	2 767	2 786	2 790	2 796	2 798	:	:
Tunisia (TN)	2 258	2 258	1 935	1 935	1 909	:	9.0
Turkey (TR)	8 607	8 607	8 682	8 671	8 671	20.2	4.8

Notes:

(1) Mid-year figures.

Pipelines are operated in several MED countries for a total length of over 33 thousand kilometres. The 13 thousand kilometre network in function in Algeria is the most extended within the MED region. The Algerian pipeline infrastructure is more than 3 times longer than the Algerian railway lines. Tunisian pipelines also stretch further than

their railways. Although most of the pipelines operated in the MED region carry oil, close to 11 thousand kilometres carry natural gas. Overall the length of MED oil pipelines is slightly higher than the length of EU oil pipelines and more than twice the length of those in the CEC.

Table 4.4: Oil and gas pipelines, 2000

Country	Length in km	
	Oil pipelines	Gas pipelines
Algeria (DZ)	7 172	5 796
Egypt (EG)	8 934	1 931
Israel (IL)	254	-
Jordan (JO) ⁽¹⁾	209	:
Morocco (MA)	540	-
Syria (SY) ⁽¹⁾	1 819	:
Tunisia (TN)	1 487	1 890
Turkey (TR)	2 298	1 259
MED	22 713	10 876
EU ⁽²⁾	21 600	177 925
CEC	10 129	:

Notes:

(1) Source: The World Factbook, 2001; Jordan's pipelines may not be in use

(2) 1999 data; estimate for gas pipeline (only transmission pipelines)

The density of transport infrastructure largely reflects the distribution of population, as transportation channels tend to be more developed where more people live and economic activities thrive. Large deserts in northern Africa and part of the Middle East affect the patterns of land infrastructure development. According to 2000 data, the density of the road network within the MED region is about 138 km per 1 000 square km. This is a low figure as

compared to the EU where there are an average 1 253 km per 1 000 square km. Moreover there are marked differences from one country to the other. Algeria is the second largest MED country in terms of road length, but it presents the sparsest population and road network of the region with only 44 km per 1 000 square km. On the other end, less than 2 thousand kilometres of roads in Malta correspond to a density of 7 158 km per 1 000 square km. Cyprus is close to the EU average with 1 911 km per 1 000 square km, followed by Israel 735.2 km per 1 000 square km and Lebanon 634.5 km per 1 000 square km.

With only 669 km of lines, the Israeli railway network corresponds to a density of 30.2 km per 1 000 square kilometres. This figure is by far the largest within the MED group but it is clearly lower than the 49.6 EU average. Turkey and Tunisia both report around 11 km of rail lines per 1 000 square kilometres, but Algeria only 1.7. The CEC region is better equipped in railways than both the EU and MED with a 65 thousand kilometre network corresponding to an average density of 60.4 km per 1 000 square kilometres.

Oil pipelines also appear more concentrated in the CEC than in the other two regions. Although they are just above 10 thousand kilometres long, they account for 9.6 km per 1 000 square kilometres, against 6.8 in the EU and an estimated 4.2 in the MED region.

Table 4.5: Density of land transport infrastructure (km per 1000 square km), 2000

Country	Road	Rail	Oil pipelines
Cyprus (CY)	1 911.0	-	-
Algeria (DZ)	43.8	1.7	3.0
Egypt (EG)	49.7	4.4	8.9
Israel (IL)	735.2	30.2	11.5
Jordan (JO)	81.1	5.9	2.3
Lebanon (LB)	634.5	-	-
Morocco (MA)	81.2 ⁽¹⁾	2.7	0.8
Malta (MT)	7 158.2	-	-
Palestinian Authority (PS)	414.5 ⁽²⁾	-	-
Syria (SY)	240.7	15.1	9.8
Tunisia (TN)	116.1	11.8	9.1
Turkey (TR)	532.6	11.0	3.0
MED	138.3	4.7	4.2
EU	1 253.3 ⁽³⁾	49.6	6.8
CEC	1 112.2 ⁽³⁾	60.4	9.4

Notes: (1) 2001 data; (2) 1998 data; (3) 1999 data

Road and rail equipment

At the end of 2001, about 2 million motorcycles and mopeds, 13.9 million passenger cars (including taxis) and 520 thousand buses and motor coaches were circulating in the MED countries; and over 4 million lorries and 173 thousand road tractors involved in the carriage goods. The passenger car stock increased at an estimated 4.3% average annual growth rate since 1997, while motorcycles and mopeds increased by 3.6% per year and buses by 2.6%. Two (or three)-wheeled powered vehicles are particularly fashionable in some southern Mediterranean countries: in Egypt and in Turkey there is about one motorcycle or moped every four cars and in Cyprus one every seven. The total number of motorcycles and mopeds in the MED region does not match up to the approximately 25 million of these vehicles circulating in the EU.

Passenger cars are a means of both private and public transportation as they include taxis. The highest growth rates for passenger cars were experienced in Jordan (13.4%), in Tunisia (7.3%) and Turkey (6.2%). In Cyprus, Israel, Egypt and Morocco the average growth per year was between 4% and 5%. The number of passenger cars increased in the other MED countries as well, but at a slower pace. The Palestinian Authority is the only exception and a considerable drop (-4.7%) was reported between 1997 and 1999.

Motorisation is increasing rapidly in several MED countries, and in particular in Jordan, Tunisia, Cyprus and Turkey. However, the actual car-density is extremely different from one country to another. Syria stands out for the lowest rate of motorisation in the region with only 9 passenger

cars per 1 000 inhabitants (2000 data). On the other hand, Malta (497 in 2000 and 499 in 2001) and Cyprus (355 in 2000 and 369 in 2001) present the highest rates, reaching those featured by EU countries where there are in average 499 passenger cars per 1 000 inhabitants. Lebanon's motorisation is also fairly high (325 in 2000 and 326 in 2001), but most MED countries report motorisation rates that are from 7 to as much as 15 times smaller than the EU standard. All MED countries except the three mentioned above present levels of motorisation which are lower than the EU country with the sparsest car-density (Greece with 304 passenger cars per 1 000 inhabitants). In the CEC, motorisation was in average 242 in 2000 and 251 in 2001. Here the lowest motorisation rate is found in Romania (139 in 2000 and 143 in 2001), which is nevertheless greater than that of the majority of the southern and eastern Mediterranean countries. Since 1997 car-density has been increasing in all three regions in response to the increased demand of mobility. Clearly it is progressing faster in the MED area than in the EU, and even more rapidly in the CEC countries.

With 520 thousand motorcoaches and buses operating in 2001, the MED region's availability of this typically public transport mode is basically equivalent to the current EU supply and twice the amount circulating in the CEC. Motorcoaches and buses have grown at an average annual rate of 2.6% in the MED region, i.e. much faster than in the EU or CEC regions during the same period. This is not surprising as in the EU the use of common public transportation vehicles has been surpassed by the use of the private car.

Table 4.6: Motorcycles and mopeds

Country	Number of vehicles					New registrations				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Cyprus (CY)	45 226	44 337	44 756	43 315	41 985	9 104	5 795	6 192	5 410	4 756
Algeria (DZ)	8 985	9 025	9 119	9 226	9 245	465	552	644	750	820
Egypt (EG)	439 756	460 898	485 209	498 891	519 575	11 892	21 142	:	:	:
Israel (IL)	72 413	75 011	75 643	77 472	79 736	10 390	10 117	8 363	9 222	10 110
Jordan (JO)	767	806	874	910	930	29	39	68	21	22
Lebanon (LB) ⁽¹⁾	61 471	66 298	:	77 641	83 930	:	4 827	:	6 289	5 924
Morocco (MA)	19 963	20 092	20 089	20 388	:	89	129	128	171	:
Malta (MT)	13 881	11 234	11 871	12 402	12 830	628	683	985	774	764
Palestinian Authority (PS)	337	318	265	:	:	:	3	:	:	:
Syria (SY)	87 361	88 121	:	91 399	:	:	:	:	:	:
Tunisia (TN)	4 595	4 940	5 283	5 547	5 940	143	154	154	140	286
Turkey (TR)	905 121	940 935	975 746	1 011 284	1 031 221	51 143	35 946	34 964	35 702	20 178

Notes: (1) Number of vehicles is obtained by cumulating new registrations and therefore does not represent the actual stock.

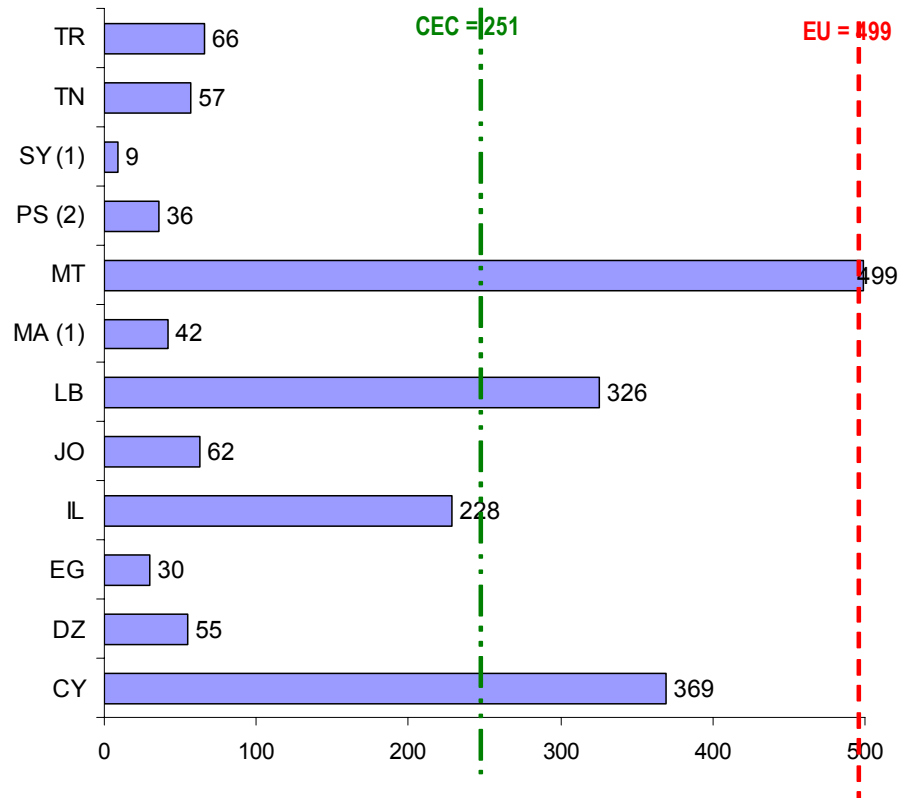
Table 4.7: Passenger cars (including taxis)

Country	Vehicles (in thousands)					New registrations (in thousands)					Rate of motorisation (cars per 1000 inhabitants)				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Cyprus (CY)	235	249	257	268	280	20	25	20	19	25	317	334	342	355	369
Algeria (DZ)	1.615	1.634	1.674	1.722	1.708	130	137	190	230	234	64	55	56	57	55
Egypt (EG)	1.699	1.789	1.869	1.931	1.975	71	90	87	59	53	28	29	30	30	30
Israel (IL)	1.252	1.298	1.341	1.422	1.486	121	112	113	147	133	212	215	216	223	228
Jordan (JO)	196	212	238	288	324	13	16	26	48	30	43	45	49	57	62
Lebanon (LB) ⁽¹⁾	1.299	1.336	:	1.399	1.428	:	36	:	29	29	336	340	:	325	326
Morocco (MA)	1.059	1.109	1.162	1.211	:	42	50	54	50	:	39	40	41	42	:
Malta (MT)	184	175	183	189	195	10	11	13	13	10	491	464	483	497	499
Palestinian Authority (PS)	124	109	107	:	:	:	4	:	:	:	44	38	36	:	:
Syria (SY)	138	139	:	139	:	:	:	:	:	:	9	9	:	9	:
Tunisia (TN)	415	446	483	517	550	17	15	21	19	18	44	48	51	54	57
Turkey (TR)	3.570	3.838	4.072	4.422	4.535	299	271	237	354	117	57	60	63	66	66
MED ⁽²⁾	11.786	12.333	12.862	13.615	13.939	:	:	:	:	:	53	55	56	58	58
EU ⁽³⁾	165.260	168.980	173.100	177.380	188.619	:	13.941	14.633	14.319	14.419	442	451	461	471	499
CEC	22.214	23.157	24.025	25.252	26.131	1.497	1.342	1.352	1.415	1.322	211	221	229	242	251

Notes: (1) Number of vehicles is obtained by cumulating new registrations since 1991 and therefore does not represent the actual stock.

(2) MED totals include the latest available year for each individual country. (3) EU 2001 figure is an estimate.

Figure 4.1: Rate of motorisation, 2001



Notes:
 (1) 2000 data.
 (2) 1999 data.

Figure 4.2: Rate of motorisation in the MED, EU and CEC regions

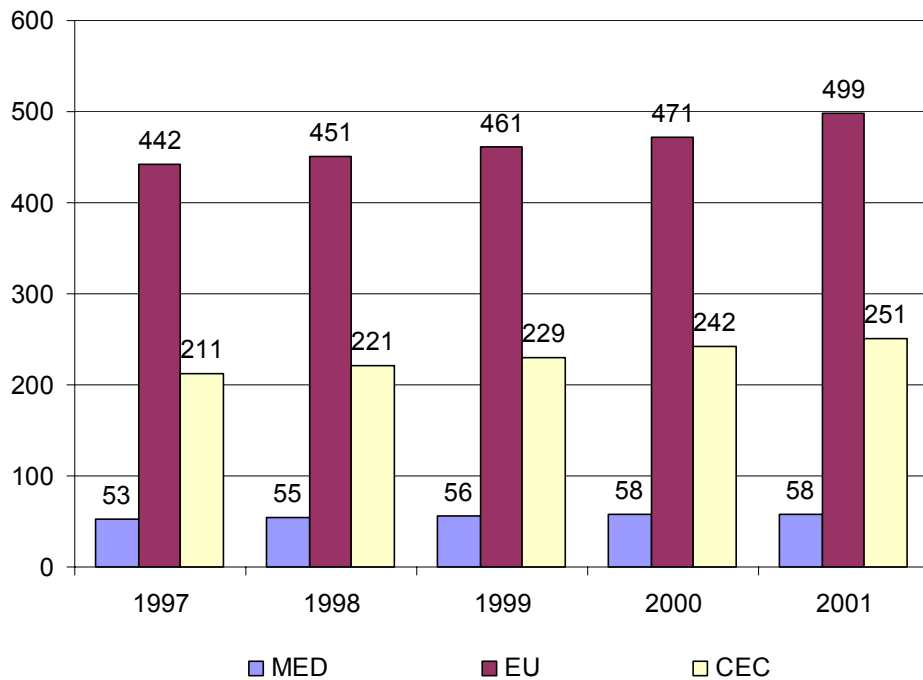


Figure 4.3: Evolution of the rate of motorisation (index number base 1997)

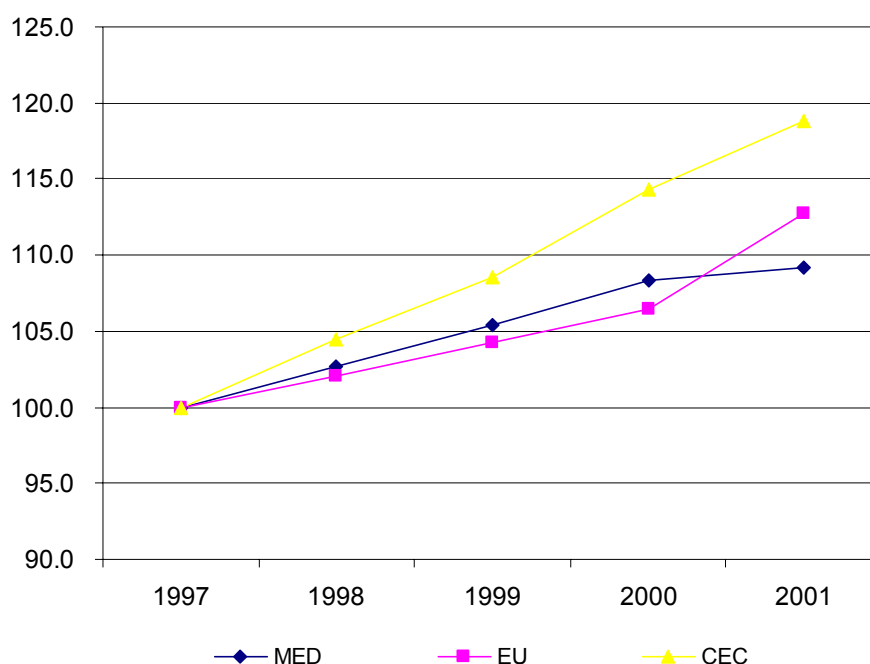


Table 4.8: Buses and motorcoaches

Country	Number of vehicles					New registrations				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Cyprus (CY)	2 800	2 754	2 835	2 949	3 003	120	142	164	202	139
Algeria (DZ)	30 430	32 602	37 932	42 488	44 323	4 999	5 582	9 253	9 097	7 653
Egypt (EG)	43 740	45 144	47 424	53 483	55 491	3 959	1 683	3 846	5 642	3 396
Israel (IL)	14 713	14 986	16 805	18 046	18 780	1 223	990	1 744	2 511	2 066
Jordan (JO)	10 133	10 735	12 057	12 385	13 857	560	602	1 322	324	738
Lebanon (LB) ⁽¹⁾	6 833	9 164	:	12 205	13 471		2 331		1 266	1 266
Morocco (MA)	13 208	13 809	14 407	15 019	:	558	601	601	631	
Malta (MT)	1 077	1 107	1 119	1 126	1 125	51	44	36	31	18
Palestine Authority (PS)	732	853	1 003	:	:	:	81	:	:	:
Syria (SY)	37 453	40 143		42 924						
Tunisia (TN)	9 379	9 896	10 553	11 143	11 638	462	514	605	557	478
Turkey (TR)	298 953	319 856	333 869	354 339	358 687	23 138	22 493	15 747	22 777	6 847
MED ⁽²⁾	469 451	501 049	478 004	566 107	520 375					
EU ⁽³⁾	506 000	510 000	525 000	528 000	:					
CEC	261 219	254 951	253 662	257 480	256 673					

Notes:

(1) Number of vehicles is obtained by cumulating new registrations since 1991 and therefore does not represent the actual stock.

(2) MED totals include the latest available year for each individual country.

(3) The EU figure includes trolleybuses.

When it comes to vehicles for the carriage of goods the MED region disposes of an overall 4 million lorries and 173 thousand road tractors, that is much less than the over 24 million vehicles recorded in the EU. Road tractors are capable of haulage only when a semi-trailer is attached and they represent a small share of the vehicles transporting goods in the MED region. In Cyprus they represent barely 1% of the total, and Israel and West Bank and Gaza Strip not more than 1.5%, but Morocco is a clear exception with 14%. Algeria claims the greatest number of road tractors followed closely by Morocco and Turkey.

The smallest fleets are the West Bank and Gaza Strip and Jordan. The available data on semi-trailers and trailers is largely incomplete. However, it is worth of note that while in most countries there are about 2 semi-trailers and trailers per road tractor, in Israel there are at least 8 and in Jordan 20, and in Malta there is less than one.³

³A popular use of road tractors in Malta is for haulage of trailers and semi-trailers entering the country by roll-on roll-off services. These semi-trailers and trailers are not locally registered because they stay in Malta only for a temporary period.

Table 4.9: Lorries and road tractors

Country	Type of vehicle	Number of vehicles					New registrations				
		1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Cyprus (CY)	Lorries	104 696	108 091	110 114	113 581	116 795	6 193	7 301	6 374	6 770	7 890
	Road tractors	956	1 203	1 011	1 085	1 147	432	121	125	153	133
Algeria (DZ)	Lorries	875 376	884 148	901 304	920 156	910 648	65 145	69 809	94 065	114 253	103 658
	Road tractors	46 906	47 183	47 480	47 840	47 378	5 170	4 376	5 733	6 256	5 961
Egypt (EG)	Lorries	478 608	506 786	544 599	561 341	582 363	20 716	29 168	23 847	24 373	23 265
	Road tractors ⁽⁴⁾	20 933	20 949	21 192	21 612	22 094	577	16	-	-	-
Israel (IL)	Lorries	273 395	282 904	292 107	309 938	326 284	31 392	28 800	28 396	34 082	33 291
	Road tractors	4 304	3 913	3 863	4 042	4 212	288	234	237	452	470
Jordan (JO)	Lorries	96 003	106 000	124 394	130 113	152 831	17 636	9 997	18 394	5 962	17 659
	Road tractors	657	706	794	743	624	47	49	88	68	6
Lebanon (LB)	Lorries ⁽¹⁾	85 242	86 369	:	88 093	88 868	-	1 127	-	775	775
	Road tractors	:	:	:	:	:	:	:	:	:	
Morocco (MA)	Lorries	275 278	287 550	302 358	315 546	:	10 577	12 272	15 053	13 343	-
	Road tractors	43 438	44 210	44 943	45 390	:	678	772	739	453	-
Malta (MT)	Lorries	:	:	:	41 983	42 399	-	-	-	1 770	1 516
	Road tractors	:	:	:	1 181	1 264	-	-	-	121	120
Palestinian Authority (PS)	Lorries	31 027	25 299	23 438	:	:	-	1 676	-	-	-
	Road tractors	4 509	333	339	:	:	-	69	-	-	-
Syria (SY)	Lorries	:	:	:	:	:	:	:	:	:	
	Road tractors	:	:	:	:	:	:	:	:	:	
Tunisia (TN)	Lorries	198 552	212 613	228 000	241 303	254 268	7 035	8 475	10 035	8 938	8 504
	Road tractors	6 282	6 939	7 588	8 307	9 155	501	555	581	656	770
Turkey (TR)	Lorries	883 424	997 167	1 071 902	1 188 742	1 229 668	110 298	115 935	76 921	118 893	44 185
	Road tractors	33 285	36 601	37 471	40 658	41 590	3 715	3 485	1 139	3 264	1 057

Notes:

Differences in definitions between countries limit the comparability of this data.

(1) Number of vehicles is obtained by cumulating new registrations since 1991 and therefore does not represent the actual stock.

(2) Includes agricultural tractors

Table 4.10: Semi-trailers and trailers

Country	Number of vehicles at end of year					Number of new registrations				
	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Cyprus (CY)	1 370	1 785	2 049	2 361	2 653	269	307	284	383	395
Algeria (DZ)	89 245	90 157	91 181	92 222	94 970	5 747	5 092	6 219	6 805	6 584
Egypt (EG)	46 235	48 867	50 528	49 255	50 914	508	2 632			
Israel (IL)	28 599	30 797	32 485	34 761	36 681	4 298	3 893	3 708	4 208	3 620
Jordan (JO)	9 776	10 473	11 532	11 804	12 917	852	697	1 059	179	868
Lebanon (LB)	:	:	:	:	:	:	:	:	:	:
Morocco (MA)	:	:	:	:	:	:	:	:	:	:
Malta (MT)	:	344	407	448	486		28	63	41	38
Palestinian Authority (PS)	:	:	:	:	:	:	:	:	:	:
Syria (SY)	:	:	:	:	:	:	:	:	:	:
Tunisia (TN)	13 146	14 289	15 668	16 926	18 480	1 074	1 024	1 252	1 202	1 530
Turkey (TR)	:	:	:	:	:	7 394	5 809	3 331	5 648	3 297

The MED rail rolling stock, including tractive vehicles (such as locomotives and railcars), passenger vehicles and goods vehicles (vans and wagons), has not seen a progressive expansion in the last few years. Since 1997 the number of operating locomotives and railcars has been reduced in several countries or remained stable, and besides Israel where passenger vehicles have increased, all countries have cut on the number of passenger and freight vehicles. Israel

(together with Jordan) offers a very small rail system as compared to the other MED countries. Egypt surpasses Turkey in the availability of passenger vehicles but not in the number of vans and wagons. The Jordanian rail system can accommodate only 400 passengers in the seats and berths available in its nine available vehicles, while Turkey can accommodate up to 120 thousand.

Goods and passengers transported by rail

The progressive reduction of the rail network and rolling stock in the MED region was accompanied in most cases by a drop in both goods and passengers carried by this mode. Morocco stands out as the country handling the greatest tonnage of goods (over 27 million in 2001), but in terms of tonnes-kilometres Turkey is by far more performing (9.6 billion tonnes-kilometres in 2000 but only 7.3 billion in 2001). With over a billion passengers carried by rail each year, the Egyptian railways transports about 15 times more passengers than Turkey, the second largest country in terms of passenger volumes. International railway transport is extremely limited in MED countries and applies only to Turkey, Syria and to a very small extent to Jordan.

Turkish railways experienced a steady decrease in both freight and passenger transport, passing from 17 million tonnes carried in 1997 to 14 million and from 107 million passengers to only 76 million. As regards freight, the drop in volumes transported by rail is mostly due to a national decrease, given that international figures have remained more or less stable around 1 million tonnes carried and 300 million tonnes-kilometres. Turkey's international rail connections are mostly with Syria, Bulgaria, Romania and Iran. Nevertheless about 8 thousand passengers travelled by rail to and from Greece and about 6 thousand towards Germany, and 13 thousand tonnes of goods were unloaded in Austria.

Jordan saw an even sharper cut in rail transport passing from 2.6 million tonnes and 49 thousand passengers in 1997 to only 1.3 million tonnes and 25 thousand passengers in 2001. Jordan's little international traffic is with Syria.

The slightly negative trends in rail freight transport in Morocco and Tunisia were complemented by positive trends in passenger transport. Israeli railways saw a positive development in the carriage of goods by rail during the 1997-2000 period, but saw a drop in 2001 having carried only 8 million tonnes, i.e. slightly less than the 1997 turnover. On the other hand, Israel experienced a remarkable increase in the number of passengers carried at an average rate of +28.2% per year.

Although the number of passengers carried by rail in Israel in 2001 was just slightly greater than the number travelling by the same mode in Morocco, the network utilisation rate was 3 times larger. It was also much greater than the network utilisation rate in Algeria, for a much lower number of passengers.

Table 4.11: Locomotives and railcars

Country		1997		1998		1999		2000		2001	
		Number	Tractive power (thousand kw)	Number	Tractive power (thousand kw)	Number	Tractive power (thousand kw)	Number	Tractive power (thousand kw)	Number	Tractive power (thousand kw)
Algeria (DZ)	Locomotives	237	435.87	224	404.29	226	415.81	222	411.11	219	396.00
	Railcars	11	6.32	11	6.32	-	-	-	-	-	-
Egypt (EG) ⁽¹⁾	Locomotives	595	:	643	:	673	:	629	:	634	:
	Railcars	107	:	107	:	112	:	:	:	:	:
Israel (IL)	Locomotives	48	55.80	53	84.10	53	84.10	53	84.10	64	88.00
	Railcars	17	15.30	24	24.10	24	24.10	24	24.10	24	24.10
Jordan (JO)	Locomotives	30	35.65	30	35.65	30	35.65	30	35.65	30	35.65
	Railcars	-	-	-	-	-	-	-	-	-	-
Morocco (MA)	Locomotives	213	212.00	212	425.43	212	438.93	211	435.93	220	452.81
	Railcars	14	14.00	14	19.82	14	19.82	14	19.82	14	19.82
Syria (SY)	Locomotives	226	:	226	:	197	:	197	:	:	:
	Railcars	:	:	:	:	:	:	:	:	:	:
Tunisia (TN)	Locomotives	173	147.40	173	147.40	193	171.60	193	171.60	193	171.60
	Railcars	33	:	33	:	32	:	32	:	32	:
Turkey (TR)	Locomotives	713	1 035.00	704	1 026.00	695	1 048.00	702	1 062.00	696	1 039.00
	Railcars	157	126.00	150	119.00	148	119.00	147	119.00	142	116.00

Notes:

(1) Mid-year.

Table 4.12: Passenger railway vehicles

Country	1997		1998		1999		2000		2001	
	Vehicles	Seats and berths	Vehicles	Seats and berths	Vehicles	Seats and berths	Vehicles	Seats and berths	Vehicles	Seats and berths
Algeria (DZ)	510	34 144	498	33 082	493	30 931	481	30 372	477	29 816
Egypt (EG) ⁽¹⁾	3 582	:	3 003	:	3 732	:	3 492	:	3 474	:
Israel (IL)	162	10 960	179	12 000	180	12 000	180	12 000	:	13 000
Jordan (JO)	9	400	9	400	9	400	9	400	9	400
Morocco (MA)	518	39 438	454	33 240	454	33 240	451	33 240	379	27 915
Syria (SY)	563	:	540	:	540	:	540	:	:	:
Tunisia (TN)	262	20 020	262	20 020	269	20 020	298	20 020	272	18 190
Turkey (TR)	1 483	132 377	1 443	125 240	1 435	123 215	1 425	121 824	1 385	119 971

Notes:

(1) Mid-year.

Table 4.13: Vans and wagons

Country		1997		1998		1999		2000		2001	
		Number	Capacity (1000 t)	Number	Capacity (1000 t)	Number	Capacity (1000 t)	Number	Capacity (1000 t)	Number	Capacity (1000 t)
Algeria (DZ)	Vans	:	:	:	:	28	:	26	:	26	:
	Wagons	10 364	572	10 331	572	10 311	571	10 118	558	10 107	557
Egypt (EG) ⁽¹⁾	Vans	:	:	:	:	:	:	132	:	:	:
	Wagons	12 563	:	12 643	:	12 724	:	11 657	:	:	:
Israel (IL)	Vans	-	-	-	-	-	-	-	-	-	-
	Wagons	1 324	72	1 280	:	1 298	74	1 231	78	1 231	78
Jordan (JO)	Vans	-	-	-	-	-	-	-	-	-	-
	Wagons	499	19	499	19	494	19	485	18	495	19
Morocco (MA)	Vans	44	:	40	:	37	:	37	:	37	:
	Wagons	7 158	354	6 997	355	6 868	352	6 894	349	6 583	340
Syria (SY)	Vans	:	:	:	:	:	:	:	:	:	:
	Wagons	4 878	:	5 238	:	5 586	:	5 585	:	:	:
Tunisia (TN)	Vans	5 240	178	5 240	178	5 204	178	5 204	178	5 204	178
	Wagons	17	:	17	:	17	:	17	:	17	:
Turkey (TR)	Vans	17 970	684	17 815	689	18 060	709	17 872	706	17 571	693
	Wagons	389	:	352	:	312	:	310	:	300	:

Notes:

(1) Mid-year.

BOX 4.1 – Statistics on land transport collected within the MED-Trans project.

The information on road transport collected within the MED-Trans project is at present limited to the length of the road network, to the number of road vehicles and to the number of new registrations by type of vehicle. Statistics on railway transport are more comprehensive as they concern the infrastructure and equipment, but also train movements, vehicle movements, and passenger and goods transport. Data on pipelines is basically limited to the infrastructure.

All these statistics are collected on an annual basis. They correspond to a sub-set of the statistics collected in EU and other worldwide countries through the UN-ECE/ECMT/Eurostat Common Questionnaire (Section A: Railways, Section B: Road Transport, and Section E: Pipelines). EU and CEC indicators were calculated on the basis of Eurostat's regular collection of data from EU Member States and Candidate Countries, or from the DG TREN/Eurostat Statistical Pocketbook.

The definitions referred to correspond - as much as possible - to those adopted in the UN-ECE/Eurostat/ECMT Glossary for Transport Statistics and refer to the end of the year, unless otherwise stated. Due to differences in definitions comparisons must be made with caution, in particular as regards road lengths.

The passenger network utilisation rate is obtained by dividing the total volume of passengers (national and international) by the length of railway lines.

Table 4.14: Passenger rail network utilisation rate (passengers/km)

Country	1997	1998	1999	2000	2001
Algeria (DZ)	9 031	7 990	7 525	7 129	8 109
Egypt (EG)	210 963	:	242 635	223 663	234 119
Israel (IL)	9 144	9 583	13 250	18 981	22 274
Jordan (JO)	94	67	82	52	47
Morocco (MA)	6 040	6 235	6 379	6 852	7 116
Syria (SY)	409	324	304	307	451
Tunisia (TN)	13 862	14 256	17 786	18 277	19 287
Turkey (TR)	12 438	12 754	11 395	9 842	8 802

Table 4.15: Passenger transport by rail in the MED countries

Country		Number of passengers (1000)					Number of passenger-kilometres (million)				
		1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Algeria (DZ)	National	38 103	34 132	32 027	28 324	28 769	1 360	1 163	1 069	1 141	981
	International	-	-	-	-	-	-	-	-	-	-
	Total	38 103	34 132	32 027	28 324	28 769	1 360	1 163	1 069	1 141	1 141
Egypt (EG) ⁽¹⁾	National	:	:	:	:	:	:	:	:	:	
	International	:	:	:	:	:	:	:	:	:	
	Total	1 046 589	:	1 219 000	1 121 000	1 181 600	:	:	66 855	49 800	50 600
Israel (IL)	National	5 569	6 382	8 785	12 698	15 057	346	382	529	781	961
	International	-	-	-	-	-	-	-	-	-	
	Total	5 569	6 382	8 785	12 698	15 057	346	382	529	781	961
Jordan (JO)	National	47	33	39	23	21	1.4	1.2	1.4	1.1	3.6
	International	2	2	4	4	4	-	-	0.3	0.7	0.6
	Total	49	35	43	27	25	1.6	1.4	1.7	1.8	4.2
Morocco (MA)	National	11 502	11 878	12 147	13 052	13 565	1 851	1 872	1 874	1 952	2 017
	International	17	12	17	14	5	5	3	6	4	2
	Total	11 519	11 890	12 164	13 066	13 570	1 856	1 875	1 880	1 956	2 019
Syria (SY)	National	:	:	:	:	:	:	:	:	:	
	International	:	:	:	:	:	:	:	:	:	
	Total	1 132	904	848	859	1 261	294	182	187	196	:
Tunisia (TN)	National	31 303	32 194	34 411	35 361	36 819	1 094	1 130	1 197	1 255	1 283
	International	-	-	-	-	-	-	-	-	-	-
	Total	31 303	32 194	34 411	35 361	36 819	1 094	1 130	1 197	1 255	1 283
Turkey (TR)	National	106 822	109 556	98 828	85 259	76 183	5 770	6 099	6 116	5 807	5 504
	International	231	218	103	84	140	70	61	30	25	64
	Total	107 053	109 774	98 931	85 343	76 323	5 840	6 160	6 146	5 832	5 568

Notes:

(1) Mid-year.

Table 4.16: Goods transport by rail in the MED countries

Country		Tonnes transported (1000)					Tonnes-kilometers (million)				
		1997	1998	1999	2000	2001	1997	1998	1999	2000	2001
Algeria (DZ)	National	7 927	8 292	7 842	7 793	7 821	2 023	2 174	2 033	1 980	1 990
	International	-	-	-	-	-	-	-	-	-	-
	Total	7 927	8 292	7 842	7 793	7 821	2 023	2 174	2 033	1 980	1 990
Egypt (EG) ⁽¹⁾	National	:	:	:	:	:	:	:	:	:	
	International	:	:	:	:	:	:	:	:	:	
	Total	:	:	10 700	12 126	12 037	:	:	3 437	4 184	4 198
Israel (IL)	National	8 641	9 155	9 936	10 293	8 082	990	1 049	1 128	1 173	1 076
	International	-	-	-	-	-	-	-	-	-	-
	Total	8 641	9 155	9 936	10 293	8 082	990	1 049	1 128	1 173	1 076
Jordan (JO)	National	2 626	2 561	2 548	1 574	1 269	:	:	:	:	:
	International	5	3	3	5	9	:	:	:	:	:
	Total	2 631	2 564	2 551	1 579	1 278	:	:	:	:	:
Morocco (MA)	National	28 818	28 470	28 127	27 129	27 493	4 835	4 827	4 795	4 650	4 699
	International	-	-	-	-	-	-	-	-	-	-
	Total	28 818	28 470	28 127	27 129	27 493	4 835	4 827	4 795	4 650	4 699
Syria (SY)	National	:	:	:	:	:	:	:	:	:	
	International	:	:	:	:	:	:	:	:	:	
	Total	4 939	4 983	5 445	5 631	5 297	1 472	1 430	1 577	1 568	
Tunisia (TN)	National	:	:	:	:	:	:	:	:	:	
	International	:	:	:	:	:	:	:	:	:	
	Total	12 998	12 820	12 832	12 367	12 294	2 349	2 358	2 372	2 282	2 286
Turkey (TR)	National	16 007	14 160	14 084	16 907	13 190	9 205	7 874	7 844	9 315	7 050
	International	1 094	1 426	1 189	1 327	917	274	387	270	321	330
	Total	17 119	15 607	15 297	18 260	14 117	9 489	8 277	8 130	9 649	7 387

Notes:
 (1) Mid-year.

Accidents

Facing an increasing demand of mobility is the growing concern for safety in transportation, especially as concerns road transport, which claimed altogether about 79 thousand lives in the EU, MED and CEC countries in 2001. Road traffic accidents are the ninth-greatest cause of death worldwide according to the World Health Organization (WHO) and by the year 2020, traffic accidents could move up to third place for death and injuries, ahead of respiratory diseases and

AIDS¹. The burden from traffic accidents is likely to increase, especially in developing countries, where the number of vehicles is growing far faster than the physical, legal, and institutional infrastructure needed to safely accommodate them. This chapter will mainly deal with road accidents, although casualties in rail transport are briefly mentioned.

¹ World Health Organisation, World Health Report, 2002.

Road accidents

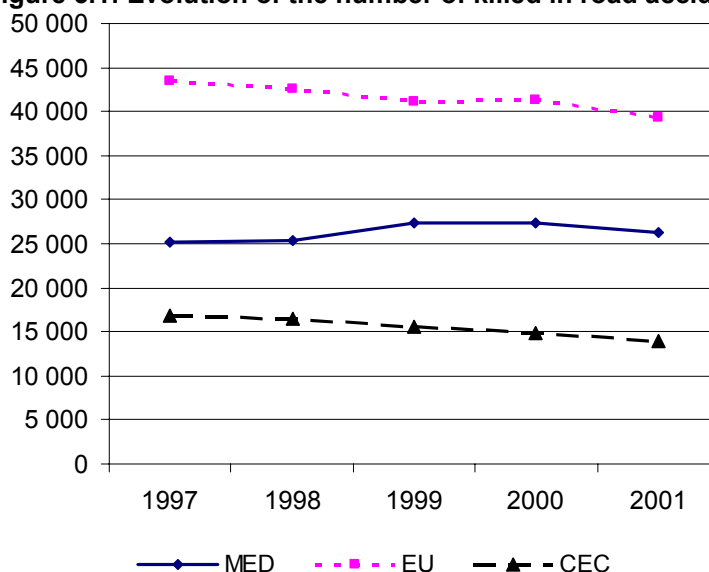
According to the available statistics, over 26 thousand lives were lost in road accidents in the MED region in 2001 and more than 387 thousand persons were recorded as injured², contributing to a rate of about 70 fatalities and 990 injuries occurring per day. Trend data show that the total number of people killed in road crashes in several countries of the southern and eastern Mediterranean basin have continued to increase, whereas on the northern side, both as regards the EU and the CEC, there has been a steady decrease in time, partly thanks to the implementation of specific policy measures for road safety.

Within the MED region road safety is a serious concern as the number of killed and injured has been increasing or stable since 1997, while the trend has been of gradual decrease in both the EU and CEC regions. Nevertheless, a progressive

reduction in the number of fatalities reported can be noticed in Malta, Cyprus and Turkey. The improved situation in Malta is the most difficult to appreciate given the small numbers involved. Moreover, those injured in road accidents grew by close to 13% per year in this country – the strongest increase registered across the whole MED region. Lebanon also experienced a drop in the number of deaths, but the number of injured in road accidents rose year by year. In Israel an improved situation between 1997 and 2000 was blurred by a striking 17.6% increase of fatalities in 2001, but the total number of casualties fortunately continued to decrease. The worst raise in fatalities was registered in Jordan (at an average annual rate of 7.9%), closely followed by Syria (6.6%), Tunisia (5.6%), Morocco (4.3%), and Algeria (1.6%), and it was often accompanied by an even sharper increase in the number of injured. Road deaths grew faster than population in at least 4 of the 12 MED countries (in terms of average annual growth rates).

² 1999 data in place of 2001 for Egypt and the West Bank and Gaza Strip.

Figure 5.1: Evolution of the number of killed in road accidents



Note: MED total includes 1999 values for EG and PS in 2000 and 2001.

Table 5.1: Road accidents casualties in MED countries

Country	Casualties	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
CYPRUS (CY)	Killed	101	103	132	115	133	118	128	115	111	113	111	98
	Injured	4 232	4 164	4 731	4 191	4 374	4 519	4 516	4 490	3 916	3 711	3 585	3 528
	Total	4 333	4 267	4 863	4 306	4 507	4 637	4 644	4 605	4 027	3 824	3 696	3 626
ALGERIA (DZ)	Killed	4 429	4 375	4 944	4 965	5 449	4 888	5 769	4 765	4 945	5 245	5 450	5 087
	Injured	35 845	34 360	35 360	34 030	24 546	25 501	30 739	33 232	36 862	42 405	49 100	53 314
	Total	40 274	38 735	40 304	38 995	29 995	30 389	36 508	37 997	41 807	47 650	54 550	58 401
EGYPT (EG)	Killed	:	:	:	:	:	:	:	5 457	5 371	5 743	:	:
	Injured	:	:	:	:	:	:	:	17 884	:	21 899	:	:
	Total	:	:	:	:	:	:	:	23 341	:	27 642	:	:
ISRAEL (IL)	Killed	427	444	507	505	539	550	517	530	548	476	461	542
	Injured	27 241	31 097	37 331	37 487	35 858	37 974	46 017	46 921	48 741	45 027	39 817	37 047
	Total	27 668	31 541	37 838	37 992	36 397	38 524	46 534	47 451	49 289	45 503	40 278	37 589
JORDAN (JO)	Killed	379	:	388	440	443	469	552	577	612	676	686	783
	Injured	10 464	:	10 676	11 754	12 516	13 184	15 375	16 259	17 177	19 015	18 842	18 832
	Total	10 843	:	11 064	12 194	12 959	13 653	15 927	16 836	17 789	19 691	19 528	19 615
LEBANON (LB)	Killed	:	:	:	:	:	:	:	482	452	447	413	402
	Injured	:	:	:	:	:	:	:	3 339	3 355	4 092	3 994	4 656
	Total	:	:	:	:	:	:	:	3 821	3 807	4 539	4 407	5 058
MOROCCO (MA)	Killed	2 777	:	3 524	3 359	3 605	3 323	2 807	3 081	3 242	3 394	3 627	3 644
	Injured	47 301	:	61 205	61 750	65 058	60 922	57 285	60 577	62 722	70 331	74 265	77 925
	Total	50 078	:	64 729	65 109	68 663	64 245	60 092	63 658	65 964	73 725	77 892	81 569
MALTA (MT)	Killed	4	:	11	14	6	14	19	18	17	12	15	16
	Injured	471	:	687	630	771	652	722	754	836	1 134	1 169	1 215
	Total	475	:	698	644	777	666	741	772	853	1 146	1 184	1 231
PALESTINIAN AUTHORITY (PS)	Killed	:	159	:	177	:	:	191	180	198	186	:	:
	Injured	:	3 032	:	3 344	:	:	8 166	8 212	8 408	8 305	:	:
	Total	:	3 191	:	3 521	:	:	8 357	8 392	8 606	8 491	:	:
SYRIA (SY)	Killed	:	:	1 131	1 617	1 751	2 057	1 871	1 696	1 943	1 921	1 646	2 188
	Injured	:	:	4 926	5 690	5 911	7 364	7 940	7 833	7 175	7 077	8 048	7 907
	Total	:	:	6 057	7 307	7 662	9 421	9 811	9 529	9 118	8 998	9 694	10 095
TUNISIA (TN)	Killed	1 206	:	1 336	1 273	1 291	1 318	1 297	1 301	1 333	1 438	1 499	1 618
	Injured	12 148	:	12 926	12 549	13 119	13 089	13 581	14 565	15 448	16 862	17 540	16 335
	Total	13 354	:	14 262	13 822	14 410	14 407	14 878	15 866	16 781	18 300	19 039	17 953
TURKEY (TR)	Killed	8 528	:	8 389	8 717	8 022	8 105	7 328	6 919	6 662	7 713	7 439	5 921
	Injured	91 774	:	92 649	102 070	102 637	112 218	102 699	104 452	112 825	123 158	134 822	114 668
	Total	100 302	:	101 038	110 787	110 659	120 323	110 027	111 371	119 487	130 871	142 261	120 589

Note: See Box 1

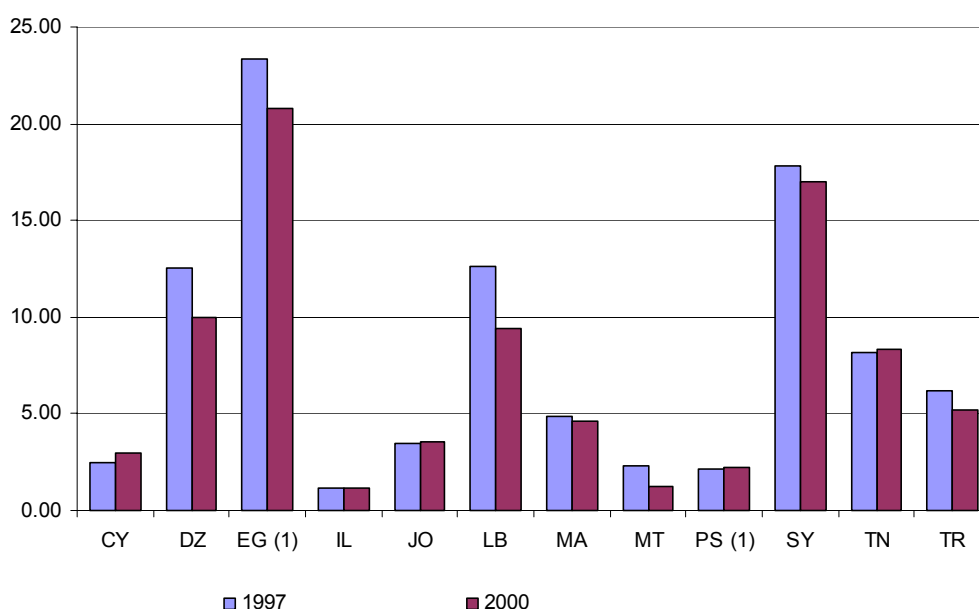
The severity of road accidents in terms of the share of fatalities over the total casualties has very different proportions from one country to another. In Egypt and Syria this share is markedly high at over 20%. Road accidents also tend to be severe in Algeria, Lebanon and Tunisia where 8 or 9 out of 100 victims are actually deaths. The situation is less critical in Cyprus, the Palestinian territories (according to 1999 data), Israel and

Malta where the share of those killed range from 2.7% to 1.3%. In general over the last decade there has been a gradual improvement in the severity of the accidents: in 2001 a smaller share of the victims actually die as a consequence of the accident. The most notable reductions of the share of killed over total casualties can be appreciated in Algeria, Lebanon, and Turkey.

Table 5.2: Share of fatalities over total casualties (in %)

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
CYPRUS (CY)	2.33	2.41	2.71	2.67	2.95	2.54	2.76	2.50	2.76	2.95	3.00	2.70
ALGERIA (DZ)	11.00	11.29	12.27	12.73	18.17	16.08	15.80	12.54	11.83	11.01	9.99	8.71
EGYPT (EG)	:	:	:	:	:	:	:	23.38	:	20.78	:	:
ISRAEL (IL)	1.54	1.41	1.34	1.33	1.48	1.43	1.11	1.12	1.11	1.05	1.14	1.44
JORDAN (JO)	3.50	:	3.51	3.61	3.42	3.44	3.47	3.43	3.44	3.43	3.51	3.99
LEBANON (LB)	:	:	:	:	:	:	:	12.61	11.87	9.85	9.37	7.95
MOROCCO (MA)	5.55	:	5.44	:	5.25	:	4.67	4.84	4.91	4.60	4.66	4.47
MALTA (MT)	0.84	:	1.58	2.17	0.77	2.10	2.56	2.33	1.99	1.05	1.27	1.30
PALESTINIAN AUTHORITY (PS)	:	:	:	:	:	:	2.29	2.14	2.30	2.19	:	:
SYRIA (SY)	:	:	18.67	22.13	22.85	21.83	19.07	17.80	21.31	21.35	16.98	21.67
TUNISIA (TN)	9.03	:	9.37	9.21	8.96	9.15	8.72	8.20	7.94	7.86	8.35	8.50
TURKEY (TR)	8.50	:	8.30	7.87	7.25	6.74	6.66	6.21	5.58	5.89	5.23	4.91

Note: See Box 1. These figures should be analysed with care as definitions for injured are not uniform across countries and under-reporting problems are likely to exist.

Figure 5.2: Fatalities over total casualties (in %), 1997 – 2000


Note: (1) 1999 data

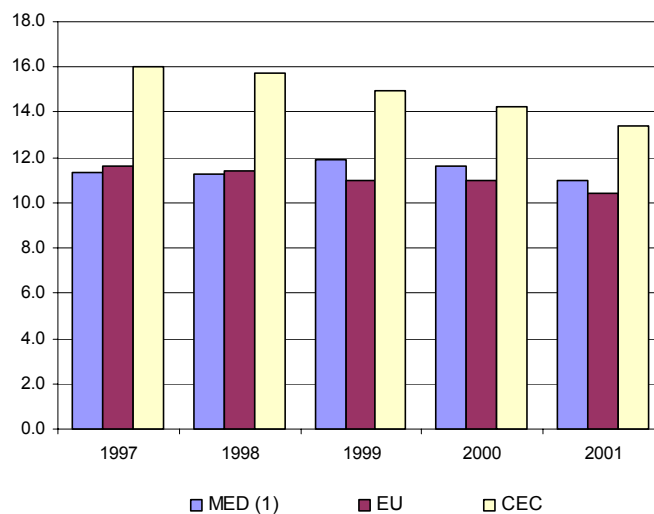
In average within the MED region the number of persons killed per 100 000 inhabitants remained more or less stable, with a slight improvement from 11.3 in 1997 to 11 in 2001. However, individual MED countries did not all progress in terms of safety. In at least four countries the road accident fatality risk has increased by 1, 2 or even 3 units (Jordan, Morocco, Syria and Tunisia). On the other hand, significant reductions can be observed in Cyprus, Algeria, Lebanon and Turkey. In Israel a peak was reached in 1998, followed by decreases in 1999 and 2000, but the rate has increased again in 2001. Algeria (16.4), Tunisia (16.7), Jordan (15.1), Syria (13.1), Cyprus (12.9) and Morocco (12.5) all rated above the MED average, while Malta (4.1), the West Bank and Gaza Strip (6.2 on basis of 1999 data), Israel (8.3), Turkey (8.6), Lebanon (9.2) and Egypt (9.2 on basis of 1999 data) stand below.

The EU average was of 10.4 persons killed per 100 000 inhabitants and in such lower than today's MED average. In the CEC road accident fatality risk is particularly high at 13.4, although it has significantly decreased since 1997, more rapidly than in the EU and in the MED region.

In order to gather a clearer picture, it would be necessary to relate the number of fatalities to traffic density. Unfortunately measures such as the number of passenger-kilometres by road are difficult to obtain, so a rough proxy is made here by taking the number of passenger cars. In 2001 the EU average was of 0.21 persons killed per 1 000 passenger cars, while the MED average is 1.71. In CEC countries the rate was close to the EU average, at 0.53.

Table 5.3: Killed in road accidents per 100 000 inhabitants, 2001

Country	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Cyprus (CY)	15.0	15.0	18.9	16.1	18.4	16.2	17.4	15.5	14.9	15.0	14.7	12.9
Algeria (DZ)	17.7	17.1	18.8	18.5	19.8	17.4	20.2	16.4	16.8	17.5	17.9	16.4
Egypt (EG)	:	:	:	:	:	:	:	9.1	8.8	9.2	:	:
Israel (IL)	8.9	8.8	9.8	9.5	9.9	9.8	9.0	9.0	9.1	7.7	7.2	8.3
Jordan (JO)	10.9	0.0	10.1	11.0	10.7	10.9	12.4	12.5	12.9	13.8	13.6	15.1
Lebanon (LB)	:	:	:	:	:	:	:	12.5	11.5	11.2	9.6	9.2
Morocco (MA)	11.5	:	14.0	13.1	13.8	12.6	10.5	11.3	11.7	12.0	12.6	12.5
Malta (MT)	1.1	:	3.1	3.9	1.6	3.8	5.1	4.8	4.5	3.2	3.9	4.1
Palestinian Authority (PS)	:	7.7	:	:	:	:	7.3	6.5	6.8	6.2	:	:
Syria (SY)	:	:	8.7	12.1	12.7	14.4	12.8	11.3	12.6	12.1	10.1	13.1
Tunisia (TN)	14.8	:	15.7	14.7	14.6	14.7	14.3	14.1	14.3	15.2	15.7	16.7
Turkey (TR)	15.2	:	14.5	14.8	13.4	13.4	11.9	11.1	10.5	12.0	11.0	8.6

Figure 5.3: Evolution of the road accident fatality risk


Note: (1) MED 2000 and 2001 totals include 1999 data for Egypt and the Palestinian Authority

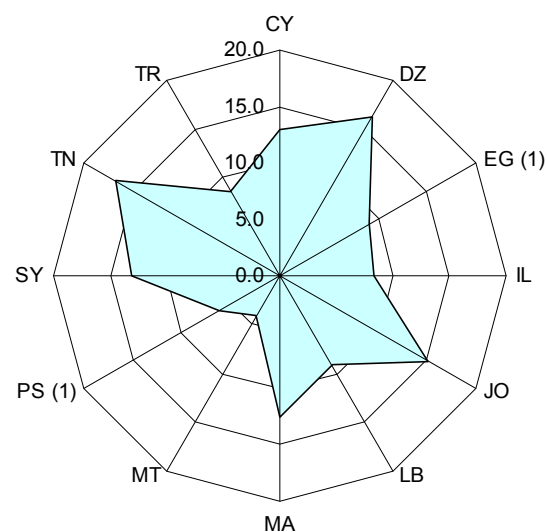
Table 5.4: Number of killed in road accidents per 1 000 passenger cars

Country	1997	2000	2001
CYPRUS (CY)	0.49	0.41	0.35
ALGERIA (DZ)	2.95	3.17	2.98
EGYPT (EG)	3.21	:	:
ISRAEL (IL)	0.42	0.32	0.36
JORDAN (JO)	2.95	2.38	2.42
LEBANON (LB)	0.37	0.30	0.28
MOROCCO (MA)	2.91	2.99	:
MALTA (MT)	0.10	0.08	0.08
PALESTINIAN AUTHORITY (PS)	1.46	:	:
SYRIA (SY)	12.25	11.86	:
TUNISIA (TN)	3.13	2.90	2.94
TURKEY (TR)	1.94	1.68	1.31
MED ⁽¹⁾	2.13	2.00	1.71
EU	0.26	0.23	0.21
CEC	0.76	0.59	0.53

Note:(1) MED totals include latest available data for each country.

As might be expected, males make up the largest proportion of reported victims. For all seven MED countries having provided such data, females appear to have a lower accident risk and represent at the most one quarter of road fatalities (in Israel) and at the least 12.5% (in Malta). Women's casualty involvement appears to increase with motorisation as more than 50% of the reported victims are females in countries like Israel, Cyprus and Malta which have the highest rates of cars per inhabitant. However, female injuries generally appear to be less serious than those concerning males given that larger shares of females are involved in injury accidents than in deadly ones. Of course, it would be interesting to cross these figures with data on gender distribution of road passenger transport, but these are unavailable.

Not surprisingly the age group which is most at risk is from 15 to 40 years. At least 43% (Jordan) and up to 59% (Cyprus) of the people killed in road crashes fall in this group. Children under 14 years of age and the elderly (over 60 years) usually account for a relatively small percent of

Figure 5.4: Killed in road accidents per 100 000 inhabitants, 2001


Note: (1) 1999 data

the reported road casualties, although in Jordan children represent one quarter of the total fatalities and about the same share of the number of injuries. In all countries the elderly present a greater share in fatalities than in injuries, also due their reduced ability to recover from trauma.

When victims of road accidents are analysed by means of transport, passenger car occupants dominate in the casualties of all countries, except for Tunisia where they are surpassed by pedestrians and motorcyclists. Passenger cars account for up to 68% of the total casualties in Israel and 59% in Malta. Vulnerable road users, such as pedestrians and cyclists, are a particularly high-risk group in Morocco where in total they account for 31% of the total casualties, whether deadly, severe or slight. These categories are more exposed than others to serious consequences given that in all countries the share of those reported as killed is much higher than the share of those injured. In Israel pedestrians represent 33% of those involved in deadly accidents, in Morocco 34% and in Tunisia up to 39%.

Table 5.5: Killed and injured in road accidents by sex, 2001

	Killed			Injured		
	Male	Female	Unknown	Male	Female	Unknown
Cyprus (CY)	78.6	21.4	-	64.7	35.3	-
Algeria (DZ)	:	:	-	:	:	-
Egypt (EG)	:	:	-	:	:	-
Israel (IL)	74.5	25.5	-	63.1	36.9	-
Jordan (JO)	76.9	23.1	-	75.8	24.2	-
Lebanon (LB)	:	:	-	:	:	-
Morocco (MA)	79.6	18.0	2.4	75.8	22.4	1.8
Malta (MT)	87.5	12.5	-	60.6	39.4	-
Palestinian Authority (PS)	:	:	-	:	:	-
Syria (SY)	:	:	-	:	:	-
Tunisia (TN)	82.2	17.8	-	78.0	22.0	-
Turkey (TR)	78.1	21.9	-	73.5	26.5	-

Figure 5.5: Killed in road accidents by age group, 2001

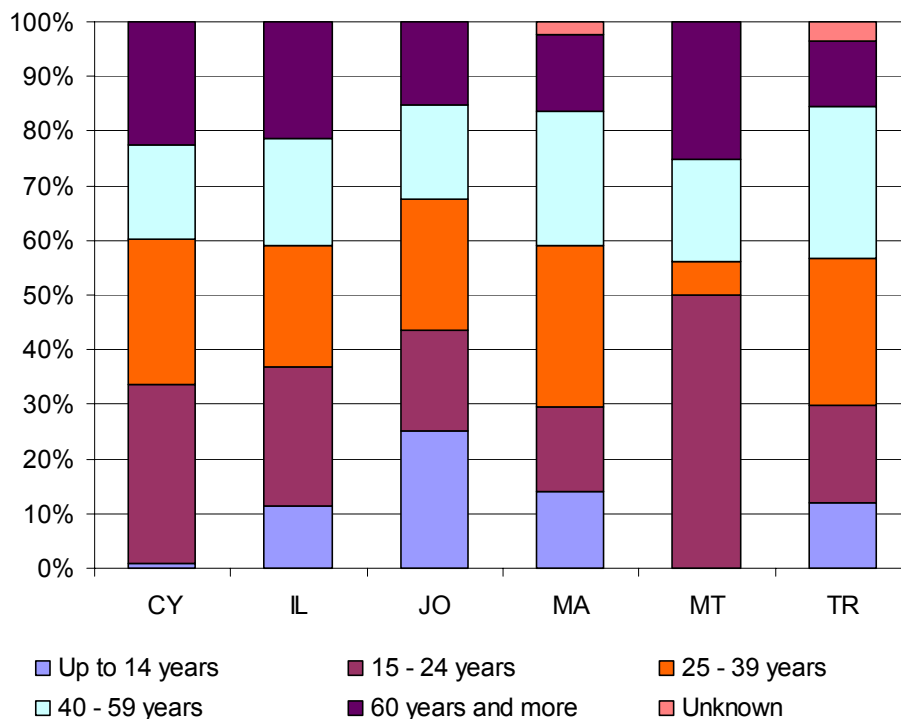


Table 5.6: Killed in road accidents by age group, 2001

Country	Killed						Injured					
	Up to 14 years	15 - 24 years	25 - 39 years	40 - 59 years	60 years and more	Unknown	Up to 14 years	15 - 24 years	25 - 39 years	40 - 59 years	60 years and more	Unknown
Cyprus (CY)	1.0	32.7	26.5	17.3	22.4	-	8.1	32.6	26.7	21.0	11.5	-
Algeria (DZ)	:	:	:	:	:	-	:	:	:	:	:	-
Egypt (EG)	:	:	:	:	:	-	:	:	:	:	:	-
Israel (IL)	11.4	25.3	22.3	19.7	21.2	-	10.0	32.2	30.9	19.5	6.9	0.4
Jordan (JO)	25.0	18.4	24.3	17.2	15.1	-	24.1	26.6	32.0	12.7	4.6	-
Lebanon (LB)	:	:	:	:	:	-	:	:	:	:	:	-
Morocco (MA)	13.9	15.5	29.7	24.3	14.1	2.4	13.8	22.3	33.9	21.1	7.1	1.8
Malta (MT)	0.0	50.0	6.3	18.8	25.0		7.7	31.9	25.3	21.6	8.6	5.0
Palestinian Authority (PS)	:	:	:	:	:	-	:	:	:	:	:	-
Syria (SY)	:	:	:	:	:	-	:	:	:	:	:	-
Tunisia (TN)	:	:	:	:	:	-	:	:	:	:	:	-
Turkey (TR)	12.1	17.7	26.9	27.9	11.8	3.6	13.1	22.7	31.7	22.2	7.6	2.8

Table 5.7: Victims of road accidents by means of transport, 2001

Means of transport	Cyprus (CY)			Israel (IL)			Morocco (MA)			Malta (MT)			Tunisia (TN) (*)			Turkey (TR)		
	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total	Killed	Injured	Total
Motorcycles and moped	24.5	23.3	23.3	6.1	7.1	7.1	11.0	17.9	17.6	:	:	14.0	20.2	26.2	25.7	4.8	8.1	7.9
Passenger Cars	35.7	48.7	48.3	43.6	67.8	67.5	36.6	41.3	41.1	:	:	59.2	22.7	23.7	23.6	41.8	49.1	48.9
Motor coaches and buses	1.0	2.2	2.1	1.3	4.2	4.1	3.3	3.4	3.4	:	:	0.5	4.4	8.3	8.0	12.7	10.9	10.9
Good Vehicles	16.3	16.2	16.2	11.2	12.5	12.4	8.1	6.3	6.4	:	:	8.2	8.9	10.0	9.9	19.0	15.7	15.8
Cycles	1.0	1.0	1.0	5.3	0.8	0.9	7.2	6.0	6.0	:	:	0.0	5.2	4.7	4.7	1.6	1.9	1.9
Pedestrians	21.4	8.7	9.0	32.6	7.7	8.0	33.9	25.1	25.5	:	:	18.1	38.6	27.2	28.1	20.0	14.3	14.5

(*) 1999 data

Rail accidents

Accidents in rail transport do not occur very frequently and when such accidents occur they usually account for a large number of casualties. Statistics therefore fluctuate strongly from one year to the other and limit the comparability with other modes. Nevertheless, in both Turkey and Algeria the number of casualties due to rail accidents was greater than 500 in all five years

under consideration, with a peak in Turkey at 731 killed in 1998. In Algeria the number of lives lost in rail accidents was about 104 times smaller than the number killed in road accidents, whilst in Turkey where 165 deaths occurred on the railway in 2001, this mode represented only 34 times fewer fatalities than the road.

Table 5.8: Number of killed and injured in rail accidents

Country	Casualties	1997	1998	1999	2000	2001
Algeria (DZ)	Killed	101	107	84	74	47
	Injured	403	420	469	455	468
	Total	504	527	553	529	515
Egypt (EG)	Killed	:	:	:	:	:
	Injured	:	:	:	:	:
	Total	:	:	:	:	:
Israel (IL)	Killed	9	5	18	8	11
	Injured	27	11	16	52	20
	Total	36	16	34	60	31
Jordan (JO)	Killed	:	:	:	:	:
	Injured	:	:	:	:	:
	Total	:	:	:	:	:
Morocco (MA)	Killed	131	102	107	117	94
	Injured	283	270	223	432	177
	Total	414	372	330	549	271
Syria (SY)	Killed	:	:	:	:	:
	Injured	:	:	:	:	:
	Total	:	:	:	:	:
Tunisia (TN)	Killed	56	67	63	80	82
	Injured	111	135	258	231	261
	Total	167	202	321	311	343
Turkey (TR)	Killed	245	227	233	185	165
	Injured	397	276	498	430	385
	Total	642	503	731	615	550

Note: There are no standard definitions for killed and injured in rail accidents.

BOX 5.1 – Statistics on road and rail accidents collected within the MED-Trans project.

The regional database set up within the MED-Trans project includes annual information on road accidents, collected through the following data sets:

- Total number of killed and injured in road accidents;
- Number of killed and injured by sex and age group;
- Number of killed and injured by means of transport;
- Total number of casualties by means of transport and age group.

All 12 MED countries are usually supplying the first dataset but only some are compiling the more detailed breakdowns.

The definitions for deaths caused by road accidents refer to the ECMT and UN-ECE standards, i.e. within 30 days of the date of the road accident. Death after this period is classified as an injury. Several MED countries do not adopt the 30-day standard definition. Research in this field has led to the practice of applying conversion factors to make data on the number of killed as comparable as possible among countries. Such factors are based on the conditions and experience of single countries and are variable in time (for example, as first aid services and hospitalisation conditions improve). Nevertheless to improve comparability, the total number of killed and injured in road accidents have been adjusted for Algeria, Egypt, Lebanon, Syria and Turkey where the definition adopted for a person killed in a road accident differs from the “within 30 days” standard. For Algeria, Lebanon Syria and Turkey deaths are recorded only at the scene the accident and the adjustment was made by multiplying the number of killed by a 1.35 factor. For Egypt, where injured are followed for 7 days of hospitalisation, the coefficient applied is 1.07. In Malta deaths are recorded at the scene of the accident or before discharge from the hospital. This definition is very close to the standard one, so no adjustment is made.

On the other hand, the definition adopted for injuries in road accidents is not homogenous across countries in the MED region as much as in the EU. Although statistics on road accidents are usually available in all countries, data reliability problems are likely, namely as concerns under-reporting. Official statistics are usually produced on the basis of police reports.

As regards rail accidents, the MED-Trans database includes only the total number of killed and injured, collected on an annual basis. However the definitions and the reporting system adopted by each country may vary.

Mediterranean National Statistical Institutes

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<p>Israel Central Bureau of Statistics</p> <p>Address: 6 Kanfey Nesharim, Corner Bachi St. P.O. Box 34525 91342 Jerusalem</p> <p>Tel. (972-2) 659 22 02 Fax (972-2) 651 37 60 Internet: www.cbs.gov.il</p>	<p>Syria Central Bureau of Statistics</p> <p>Address: Abdel Malek Ben Marwan Street Abu Rumaneh, Damascus</p> <p>Tel. (972-2) 659 22 02 Fax (972-2) 651 37 60</p>
<p>Jordan Department of Statistics</p> <p>Address: PO Box 2015 Jubahia 11941, Amman</p> <p>Tel. (962-6) 534 21 71 Fax (962-6) 533 35 18 Internet: www.dos.gov.jo</p>	<p>Tunisia Institut National de Statistique</p> <p>Address: 70, rue Ech Cham BP 265 Tunis Cedex</p> <p>Tel. (216-1) 78 41 32 Fax (216-1) 79 25 59 Internet: www.ins.nat.tn</p>
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Other Mediterranean Concerned National Administrations

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<p>Cyprus</p> <p>Civil Aviation Department</p> <p>Address: 16, Griva Digeni Avenue CY-1429 Nicosia</p> <p>Tel.: (357-22) 404 121</p> <p>Fax: (357-22) 766 547</p>	<p>Jordan</p> <p>Ministry of Transport</p> <p>Address: PO Box 35214 35214 Amman</p> <p>Tel.: (962) 6 607111</p> <p>Fax: (962) 6 607233</p>
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<p>Egypt</p> <p>Civil Aviation Authority</p> <p>Address: Cairo International Airport Terminal Building I, Cairo 11776</p> <p>Fax: (20-2) 432 522</p>	<p>Lebanon</p> <p>Directorate General of Civil Aviation</p> <p>Address: Beirut International Airport</p> <p>Tel.: (961 1) 830-850</p>
<p>Israel</p> <p>Ports & Railways Authority</p> <p>Address: 66 Kanfey Nesharim, Corner Bachi St. P.O. Box 20121 61201 Tel Aviv</p> <p>Tel.: (972-3) 565 7001</p> <p>Fax: (972-3) 565 7046</p> <p>Internet: www.israports.org.il</p>	<p>Malta</p> <p>Malta International Airport</p> <p>Address: Luqa LQA 05</p> <p>Tel.: (356) 249 600</p> <p>Fax: (356) 249 563</p> <p>Internet: http://www.maltairport.com</p>
<p>Israel</p> <p>Airports Authority</p> <p>Address: Head Office: PO Box 137 Ben Gurion Airport 70100</p> <p>Fax: (972 3) 9710155</p>	<p>Malta</p> <p>Malta Maritime Authority</p> <p>Address: Maritime House Lascaris Wharf Valletta VLT 01</p> <p>Tel.: 356) 250360/4</p> <p>Fax: (356) 250365</p>

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