



ORGANISATION OF THE ISLAMIC CONFERENCE
STATISTICAL, ECONOMIC AND SOCIAL RESEARCH
AND TRAINING CENTRE FOR ISLAMIC COUNTRIES



OIC OUTLOOK

May 2009

TRANSPORTATION SECTOR IN OIC MEMBER COUNTRIES

Attar Sokak No: 4, 06700 GOP, Ankara, TURKEY
Tel: +90-312-468 6172 (4 lines) **Fax:** +90-312-467 3458
E-mail: oicankara@sesric.org **Web:** www.sesric.org

OIC OUTLOOK

TRANSPORTATION SECTOR IN OIC MEMBER COUNTRIES

INTRODUCTION

An efficient transportation system is a fundamental element in socio-economic development. It facilitates fast transfer and movements of goods, services and resources from producing to consuming areas and improves access to local and international markets.

The issue of transportation has been taken up in the various OIC fora beginning with the Second Islamic Conference of Foreign Ministers (ICFM) in 1979, which called on the member countries to strengthen and coordinate their activities in the field of transportation. One major outcome of this meeting was the realization that the necessary information whereby concrete steps could be taken to enhance cooperation in the field of transportation was largely missing.

Since then, many important activities and developments at the OIC level have taken place in the area of cooperation in transportation. These include, among others, the establishment of the Organization of the Islamic Ship-owners Association (OISA) in 1982 (Jeddah, Saudi Arabia), the First Meeting of the Ministers of Transportation of OIC Countries in 1987 (Istanbul, Turkey) and the resolution for the establishment of a committee for implementing the Port Sudan-Dakar Railway Project adopted at the 11th Islamic Summit held in Dakar, in March 2008.

Transport and communication represents one of the ten priority areas of the Plan of Action to strengthen Economic and Commercial Cooperation among the Member Countries of the OIC. In this context, the Plan mandates an Expert Group Meeting in Transport and Communication to review the requirements for action and make proposals, when necessary, to help implement the provisions of the Plan pertaining to this area.

This report attempts to present and to evaluate the performance of the three modes of the transportation sector; Land, Air and Sea, in the OIC countries. This report presents an overview on the transportation sector in OIC member countries highlights a set of policy recommendations for development of a modern transportation sector in OIC countries and strengthening their cooperation in this important field. Each section attempts to examine, to the extent the available data allows, the basic indicators on different transport modes in the OIC countries.

CAPACITY AND PERFORMANCE OF THE TRANSPORTION SECTOR IN OIC COUNTRIES

The OIC region is geographically vast. The current 57 OIC member countries are dispersed over a large area on four continents, extending from Albania (Europe) in the north to Mozambique (Africa) in the south, and from Guyana (Latin America) in the west to Indonesia (Asia) in the east. As such, the OIC countries as a group account for one sixth of the world area and enjoy a vast strategic trading region. In addition, they account for one fifth of the world population and are well-endowed with potential economic resources in different fields and sectors, such as agriculture and arable land, energy and mining, and human resources.

Utilising these inherent potentials necessitates, inter alia, the existence of an efficient transport sector in the OIC countries. A well functioning transport system is of vital importance for the OIC countries not only at the national level but also for their integration at both the regional and world trading system levels.

Therefore, as far as the OIC countries are concerned, the role and importance of transport is threefold. First, it facilitates mass carriage of goods, which is of special importance to the OIC community in general since the majority of the OIC countries are mainly suppliers of primary commodities. Second, the diverse geographic characteristics of the OIC community, that need to be considered as a natural constraint for enhanced cooperation activities, make it necessary to fully utilise the already established mass transport facilities on the one hand, and develop them further, on the other. Third, an integrated transport system in the OIC countries would be in harmony with the Islamic free trade area and the Islamic common market strategies.

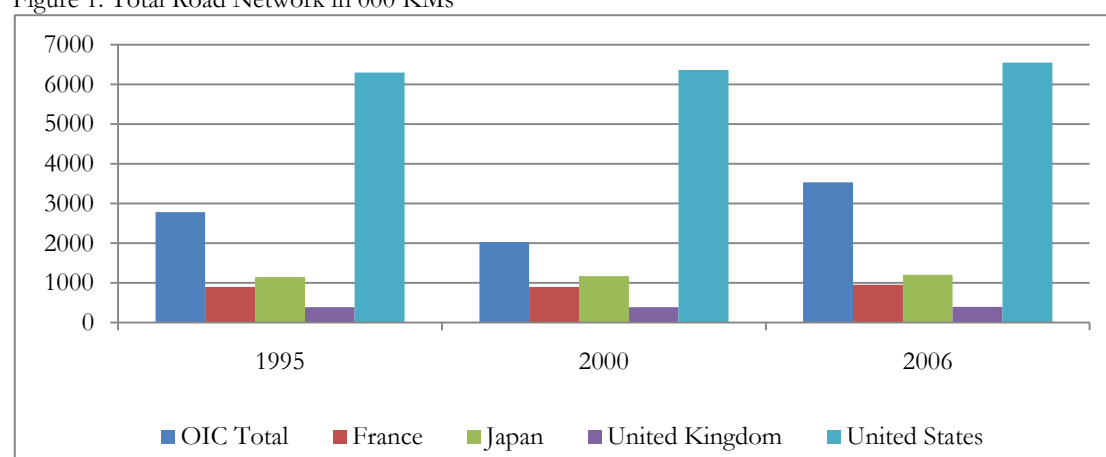
Yet, considering the present situation of the transport sector in OIC countries in terms of both capacity and performance, it seems that this sector is still far from reaching the desired level.

LAND TRANSPORT

ROADS

The largest transport activity in the OIC region and in most of the OIC countries is by roads. The OIC countries as a whole have an extensive road network. There are over 3 million km of highways. However, compared with the total land area, the density of roads is relatively low in many OIC countries and in the OIC countries as a group. As seen in Figure 1, although the total land area of the United States is only one third that of the OIC region, in 1995, it had more than double the road network. And that with a total land area of only 3.7 per cent of the OIC region, the total road network in Japan, France and United Kingdom accounted for 87 per cent of that of the OIC region for the same year. At the individual country level, Table A.1 in the Annex shows that in none of the OIC countries is the density of roads close to that in any of the industrial countries shown in the figure. In 2000, the road network of the United States was more than 3 times that of the OIC countries as a group. However, in 2006, as shown in Figure 1, the total road network in Japan, France and United Kingdom accounted for 72 per cent of that of the OIC and the United States road network was less than 2 times that of the OIC. This shows that there has been a clear development in the transportation sector in the OIC countries though this network is still insufficient compared to the land area of the OIC countries.

Figure 1: Total Road Network in 000 KMs

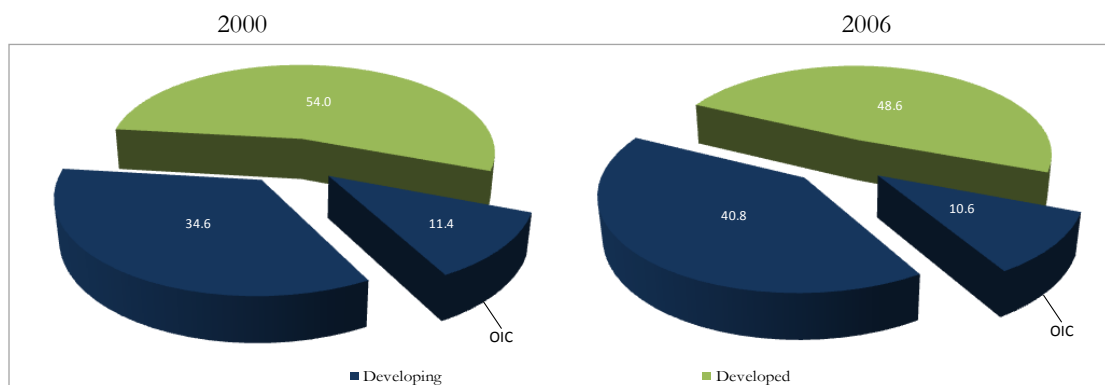


Source: Table A.1 in the Statistical Annex

When we consider the share of OIC member total road network in the world it is seen that OIC member countries have quite a modest share. The share of developing countries in the world total road network was 46 percent in 1995, while developed countries recorded a share of 54 percent. Of this 46 percent 11.4 percent was the share of OIC member countries. In 2006 the share of developing countries increased to 51.4 percent but on the contrary the share of OIC member countries slid back to 10.8 percent. On the other hand, in 1995 the share of OIC

member countries in the total road network of developing countries was 24.8 percent and this share fell back to 20.6 in 2006, although developing countries as a whole gained pace and recorded a share better than that of developed countries in the world total in 2006 as shown in Figure 2.

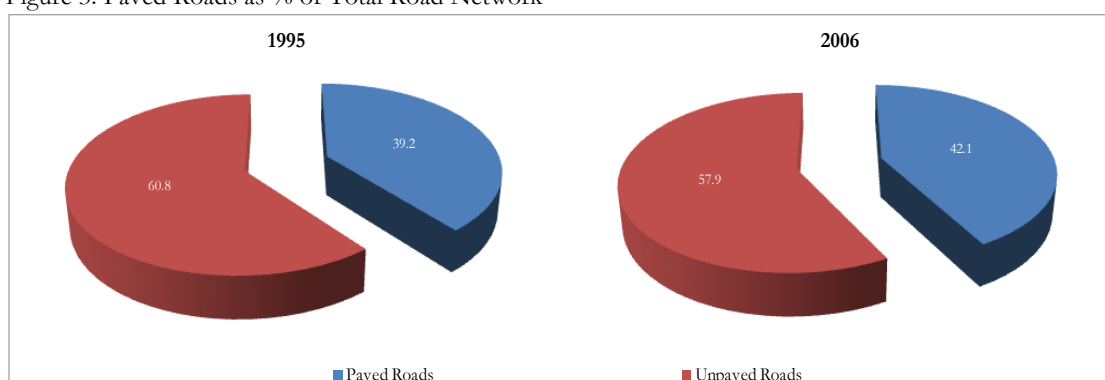
Figure 2: Share in World Total Road Network



Source: Table A.1 in the Statistical Annex

Furthermore, when the adequacy of the roads in the OIC countries is considered, Figure 3 indicates that more than half of these roads are unpaved (over 60 percent in 1995 and around 58 percent in 2006). In contrast, more than half of the road networks in industrial countries such as the United States and Japan are paved. The percentage of the paved roads even reached 100 percent of the total road network in some countries like the United Kingdom and France. At the individual country level, the percentage of unpaved roads is very high in many OIC countries. This percentage reached 90 per cent or more in Bangladesh, Chad, Cote d'Ivoire, Gabon, Guyana, Niger, Sierra Leone, and Yemen in 1995 (calculated using the data in Table A.2 in the annex). However, in some other countries the percentage of paved roads is very high, even higher than that of many industrial countries. For example, this percentage reached 80 per cent or more in Azerbaijan, Iraq, Kuwait, Kyrgyzstan, Lebanon, Qatar Tajikistan and Uzbekistan. It even reached 100 percent in Jordan and the UAE. In 2006 countries like Palestine and Syria developed their road networks to possess 100 percent paved roads (Table A.2 in the Statistical Annex) but the bulk of OIC countries still lagged behind in the aspect of adequacy of roads.

Figure 3: Paved Roads as % of Total Road Network

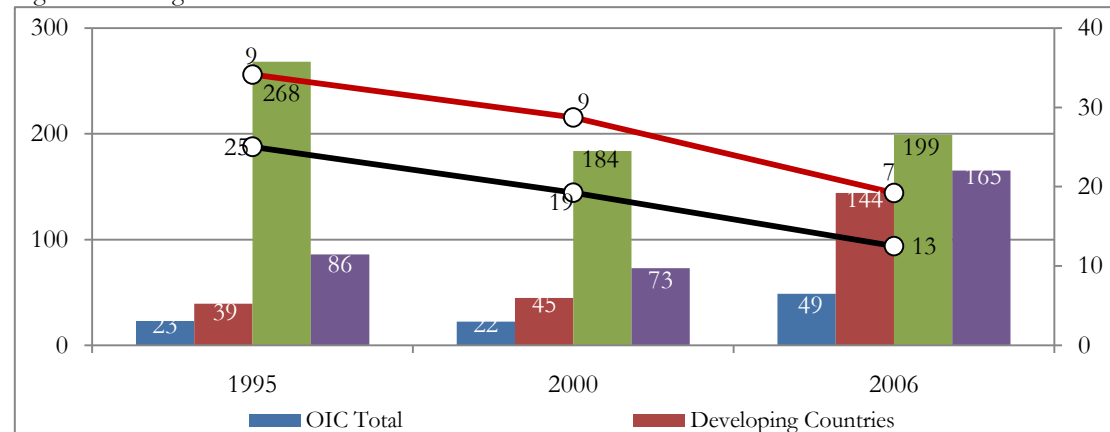


Source: Table A.2 in the Statistical Annex

On average, paved roads in OIC member countries have doubled to reach 49 thousand kilometers in 2006, compared to the average of 24 thousand kilometers in 1995. On the other hand, this figure remained below averages of developing countries, developed countries and the world as shown in Figure 4. In 1995 the share of the OIC member countries in the world total paved roads network was 9 percent and this figure decreased to 7 percent in 2006. The situation is the same in the share of OIC member countries in the developing countries total paved roads

network, as their share decreased to 13 percent in 2006 when compared to the level of 25 percent in 1995 as shown in Figure 4.

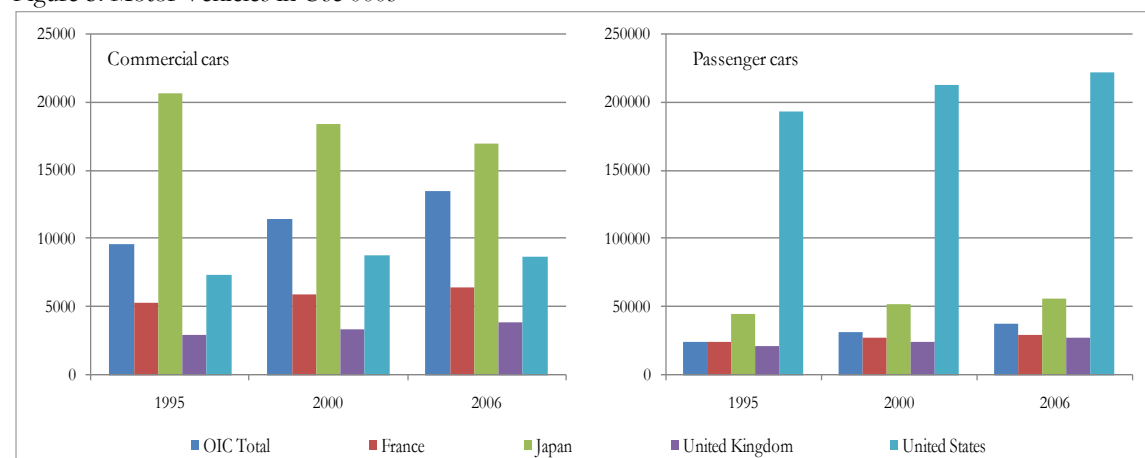
Figure 4: Average Paved Road Network in 000 KMs



Source: Table A.3 in the Statistical Appendix

On the other hand, over the last forty years there has been a ten-fold increase in the number of motorized vehicles in the world to over 800 million units today. The bulk of this increase has been registered in the industrial countries. In this context, considering factors such as the total land area and density of population and road networks, Figure 5 shows that the number of motor vehicles in use in the OIC countries is relatively small when compared with that in some industrial countries.

Figure 5: Motor Vehicles in Use 000s



Source: Tables A.4 and A.5 in the Statistical Annex

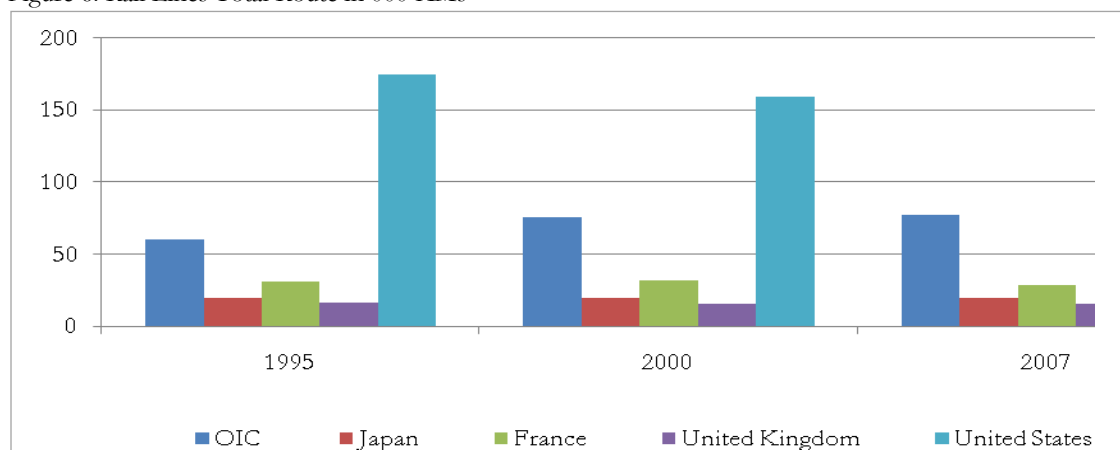
All in all, it is clear that the road transport in the OIC countries is not only suffering from low levels of investment in new road networks, but also from the low level of adequacy. Therefore, in order to improve the efficiency of this important mode of transport in these countries, there is an urgent need for increasing the capacity of road networks by constructing new ones and improving the quality of more than half of the already existing roads.

RAILWAYS

Like in road transport, compared with the total land area, the density of railways is relatively low in the OIC region and in many OIC countries. With a total land area of only one third that of the OIC region, in 1995 the United States had a railways network almost 3 times that of the OIC countries as a group. In the same year, with a total land area of only 3.7 per cent of the OIC region, the total railways network in Japan, France and United Kingdom accounted for more than

100 per cent of that of the OIC region (calculated using the data in Table A.6 in the Statistical Annex). The situation was the same in 2000 and 2007, where the United States had a railways network of more than two times that of the OIC countries in both years. At the individual country level, Table A.6 in the Annex shows that railway networks either don't exist or are very insufficient in many OIC countries. However, rail transport seems to play an important role in some OIC countries such as Kazakhstan, Turkey, Pakistan, Indonesia, and Egypt. Figure 6 shows the railway networks of OIC and some industrialized countries.

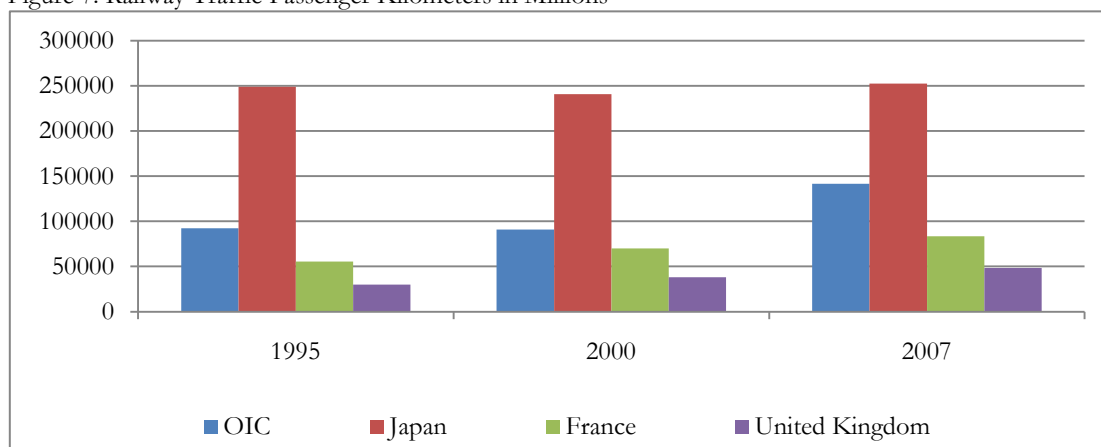
Figure 6: Rail Lines Total Route in 000 KMs



Source: Table A.6 in the Statistical Annex

On the other hand, Figure 7 shows that the overall capacity of the existing railway network in the OIC region is relatively low. For example, with less than one third of the OIC railway network, the Japanese railways have a passenger-kilometers capacity more than double that of the OIC for the all the years considered.

Figure 7: Railway Traffic Passenger Kilometers in Millions



Source: Table A.7 in the Statistical Annex

In terms of net-ton-kilometers, the capacity of the United States railway network in 1995 for the transportation of goods by railways was 26 times more than the OIC and this rate was pulled down to 10 times in 2000 and remained almost the same in 2007 (Table A.8 in the Statistical Annex). At the individual country level as seen in Table A.8 in the Statistical Annex, Kazakhstan, Tajikistan and Uzbekistan have recorded the highest capacities of good transport in OIC countries with net-ton kilometers of over 10000.

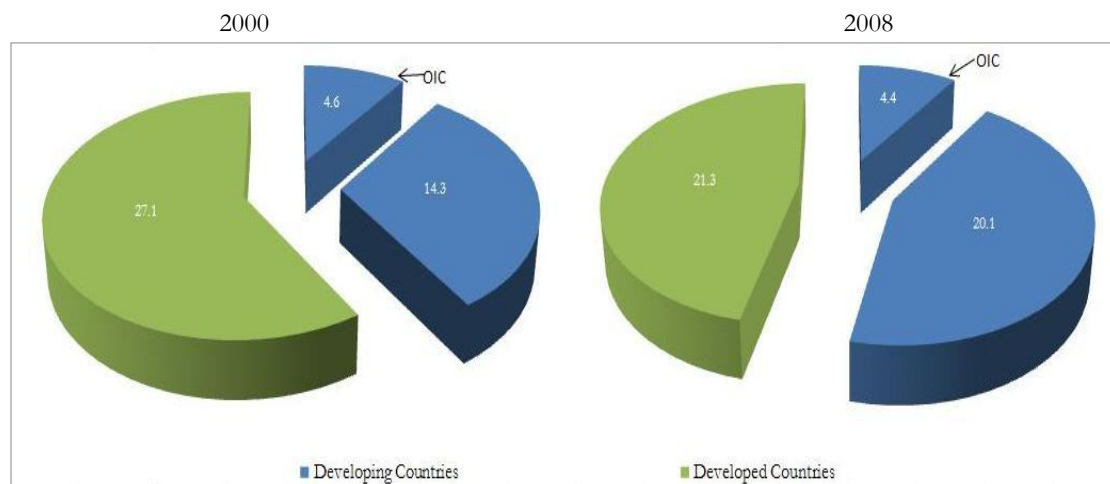
There is a need to connect OIC member countries through rail lines. This will help in enhancing cooperation between OIC member states as rail lines will facilitate intra-OIC trade considering the fact that railways are a less costly means of transportation compared with roads and civil

aviation and are faster than maritime transport. As an example to fulfill this need, a resolution was adopted at the 11th Islamic Summit held in Dakar, Senegal, in March 2008. The resolution is related to the establishment of the Port Sudan-Dakar Railways Line Project which will link East Africa to West Africa. This project will also create grounds for extensive economic integration among all countries included in the line especially the transit states. This project is expected to strengthen the bonds OIC African member states. The First Meeting of the Committee for implementing the project was held at the OIC General Secretariat in Jeddah, on 19-20 July 2008.

MARITIME TRANSPORT

As one of the major modes of bulk transportation, maritime transport is of special importance to the OIC region and the OIC countries since the majority of them are mainly suppliers of primary commodities. In fact, the OIC region is a vast strategic maritime trading region. It enjoys a coastline of about 109 thousand kilometers and a significant seaport access and overlooks some major world maritime straits.

Figure 8: Share of OIC and developing countries fleet in the world market



Source: Tables A.9 and A.10 in the Statistical Annex

In terms of capacity, the OIC merchant fleet amounted to 33.9 million Gross Tons (GT) or 44.6 million Dead Weight Tons (DWT) as of 1st January 2008 (Tables A.10 and A.11 in the Statistical Annex). However, this accounted for only 4.4 percent of the total world fleet capacity and around 18 percent of that of the developing countries, which, accounted for 24.5 percent of the world total fleet. Moreover, the percentage shares of the capacity of the OIC merchant fleet in the world total fleet and in that of the developing countries in the year 2000 were slightly higher with the OIC merchant fleet having a share of 4.6 percent in the world total fleet and 19 percent in the developing countries fleet. On the other hand, the share of developing countries in the world total fleet was much lower with 18.9 percent in 2000. The drawback witnessed by OIC member countries was most probably caused by the lack of investment in the shipping industry in OIC member countries. As seen in Figure 8, the OIC member countries have shown a slight downward trend for their share in the world total fleet.

At the individual country level, the capacity of merchant fleet has, however, increased substantially in some of OIC member countries. In this regard, according to the UNCTAD¹, 7 OIC member countries are among the 35 countries and territories with the largest controlled fleets, as of 1 January 2008 (Table 1) in contrast to the year 2000 where the number of OIC countries was 6. In 2008, the shares of merchant fleets in the OIC countries listed in the top 35

¹ *Review of Maritime Transport 2008*

were, in descending order, Saudi Arabia (1.21%), Turkey (1.12%), Iran (1.02%), United Arab Emirates (0.71%), Indonesia (0.68%), Malaysia (0.68%) and Kuwait (0.49%) (UNCTAD, *Review of Maritime Transport 2008*, p.28). Except for the UAE that appears in the list in 2008, the other countries are the same countries that were in the list in 2000 (UNCTAD, *Review of Maritime Transport 2000*, p.28). It is seen that, excluding the UAE, Indonesia, Iran and Malaysia have succeeded in increasing their share in the world while the remaining 3 -Saudi Arabia, Turkey and Kuwait- have slid back slightly in their percentage share in the world total fleet. The top two countries, Greece and Japan, have a considerably high share in the world fleets as can be seen in Table 1. The total share of the OIC countries appearing in the top 35 list of largest controlled fleets is less than half of both Greece and Japan.

Table 1: Share of countries included in the Top 35 list of largest controlled fleets

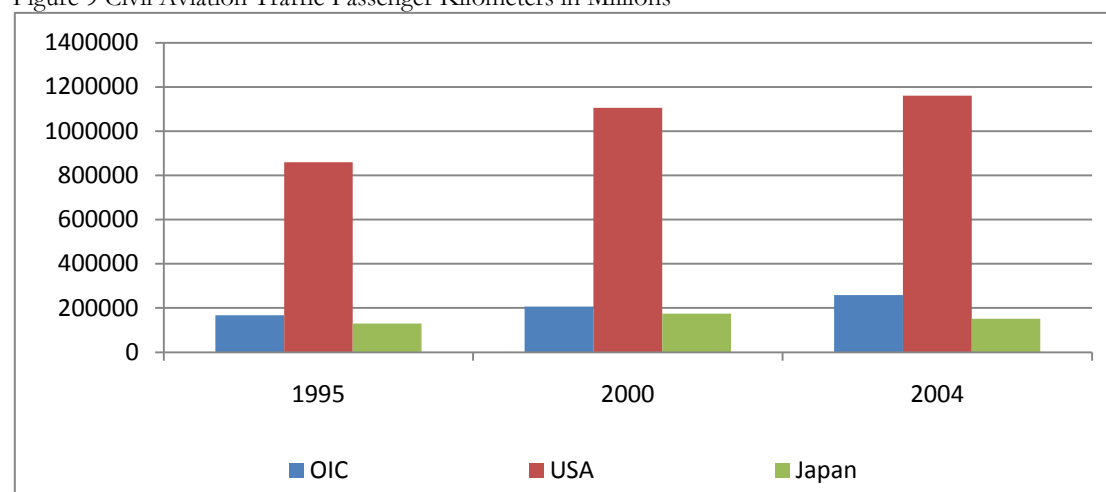
2000		2008	
Country	Share	Country	Share
Saudi Arabia	1.51	Turkey	1.27
Turkey	1.32	Saudi Arabia	1.25
Malaysia	0.88	Malaysia	1.08
Iran	0.83	Iran	0.99
Indonesia	0.61	United Arab Emirates	0.86
Kuwait	0.52	Indonesia	0.70
Greece	18.21	Kuwait	0.51
Japan	12.76	Greece	17.39
		Japan	15.07

Source: UNCTAD, *Review of Maritime Transport*, 2000 and 2008 editions.

CIVIL AVIATION TRANSPORT

There is an extensive airport network in OIC countries with each country having its own international airport. Air passenger transport has also increased substantially with some airports in the OIC countries having gained importance and have become basic hubs of international traffic. However, compared with the number of airports, the air passenger capacity of the existing airport network is still low in the OIC region and in many OIC countries.

Figure 9 Civil Aviation Traffic Passenger Kilometers in Millions



Source: Table A.12 in the Statistical Annex

As can be seen in Figure 9 the capacity of the civil aviation network of the United States in terms of passenger kilometers was 5 times that of the OIC countries in 1995. The situation was the same in the year 2000 but in 2004 the OIC countries were able to reduce this ratio. Figure 9 also shows that the civil aviation traffic in OIC countries is higher than that of Japan. However, it

should be noted that the capacity of Japan is much higher than that of OIC countries considering that the number of airports in Japan is less than the OIC region keeping in mind that we are comparing airports in 57 countries with just 1 country. On the other hand, the capacity of the OIC countries at the individual country level, as observed in Table A.12 in the Statistical Annex, shows that, when compared with the industrialized countries, OIC countries are far behind in civil aviation traffic.

This low capacity of the civil aviation traffic can be explained by the lack of appropriate infrastructure facilities to meet needs of international civil aviation. The development of this sector is essential as, in today's global world, the fastest, easiest and safest means of transportation is considered to be civil aviation. Facilities such as proper terminals and paved runways that will support the needs of traffic flow are essential, and investment opportunities in this sector should be developed and encouraged.

To enhance economic cooperation and increase business activities among OIC member states direct flights from and to important centres of OIC member states should be increased. A properly oriented civil aviation network that will link at least the capital cities of the OIC member countries is a necessity for cooperation. Developing this network of civil aviation and direct flights among OIC member states will have a positive impact on passenger flow to and from OIC member states. This can be helpful in increasing the flow of capital, establishment of new investment opportunities and enhancing intra-OIC tourism and trade.

Therefore, infrastructure modernization in airports is very essential and state involvement is needed since many of the airports in OIC countries have traffic levels that are too low to meet the actual demand.

CONCLUSION

The transport sector still lags behind in OIC member countries and measures should be taken to ensure the development of the OIC countries in this field. Measures should be taken in order to fully utilize the current available means and capacities of transport in OIC member countries. Share of information among the OIC countries about the transport capacities they have and technologies used in different fields of transport would be helpful in assisting the development of the sector within the OIC group. The lack of investment in the field of tourism should be reversed by encouraging investors through introduction of investment facilities by generating policies with the participation of the private sector in order to help secure a sustainable development environment in the sector.

As seen, the transportation sector has vital importance on the socio-economic development process. However, the development of the transportation sector needs to be considered as a whole. The transportation sector as already mentioned has different modes that serve for different purposes. Developing one arm only or developing a number of arms and leaving one out will not have the expected impact. Measures needed to be taken must be considered in a manner that will enable the development of all modes of transportation as one sector. Roads and railways are more involved in domestic transportation while maritime and civil aviation have vital importance in international transport. International transport is very important for the development of international trade. On the other hand to enhance and facilitate the use of maritime and civil aviation transport for increasing international trade, products that are subject to that trade are to be transferred to the docks and airports from which they will be sent abroad. This transport of goods to docks/seaports and airports depends on the capacity of domestic transport which is composed mainly of road and railway networks.

Another point is the transportation network in landlocked countries. Landlocked countries suffer greatly in terms of transfer of goods from neighbouring ports to their markets. The lack of access

to the sea and the current isolation of the landlocked countries from the international markets has become a handicap in their process of socio-economic development. The remoteness of these countries from sea access has crippled their ability to actively participate in the global trade market. Dependency on transit through other countries and long distances from ports to markets inevitably generates very high costs for these countries. Another problem is that most neighbouring countries of landlocked countries are developing countries that often suffer from similar economical resource scarcity. The distance of landlocked countries from seaports is over 2000 km (except for developed landlocked countries of Europe where distance is short and sea borne trade is not very high). There are a total of 31 landlocked countries worldwide 16 of which are classified as poor countries. Out of these 31 countries 12 are OIC member states 6 of which are classified as least developed countries. The development of a proper transportation network, for example through joint projects that will facilitate the transit of goods for these countries has become a major constraint. The main mode of transport of goods in landlocked countries is by trucks. This however, is a very costly means of transportation considering the recent fluctuation of oil prices. Transfer of goods to landlocked countries takes a very long time majorly due to the inadequacy of the current transportation network in these countries.

The spatial distribution of population, the intensity of economic activities and the level of economic development are uneven in the OIC countries. It is clear that these differences are so great that there is a need to differentiate ways in which transport problems are intended to be solved.

In the light of this brief overview of the transportation sector in OIC countries, the following points should be considered for the development of the sector in OIC member countries:

1. The infrastructure problems: require sustainable longer-term investment and involvement of the private sector in transport project investments through OIC joint venture transport projects.
2. Measures to improve maintenance of existing roads, railways, seaports and airports (Budgetary problems) as well as to improve the quality of these transport modes services.
3. Transport sector reform has to be set in the context of general reform of public institutions (Deregulation and privatization of public transport services and road industry).
4. Managing charges and taxes for the use of transport infrastructures to improve efficiency of transport sector.
5. The challenge of developing transport policies for sustainable development is to orient the sector towards a compromise that maximizes the economic and social benefits of transport and minimizes associated environmental, social and economic costs. Measures are required to achieve this balance through integrating transport policies with policies in other sectors.
6. Developing an OIC regional transport approach requires close cooperation and coordination between the member countries as well as the different organization and agencies involved. It also requires concluding of framework agreement on the priorities both in the infrastructure and policy areas.
7. High level policy coordination among Ministers of Transport in member countries can help promote dialogue on the challenges and problems facing the sector in the OIC region.
8. Introduce new regulations that will attract investors to the transport sector in OIC member countries as the level of capital investments in the sector is not sufficient to meet the requirements.
9. Linkages even between neighbouring countries are insufficient among the OIC member countries. This requires the development of proper modern facilities that link OIC member countries through direct rail road and air transport extending beyond the commercial centres.
10. Exchange of information among OIC member countries about their domestic and international transport facilities to help improve the networks throughout the OIC.
11. Develop civil aviation network and expand direct flights between important centres of OIC member states.
12. Design and implement projects similar to the Port Sudan-Dakar railway line project to create grounds of cooperation among OIC member states in the field of transportation.

REFERENCES

United Nations Statistics Division, Online Database

World Bank, World Development Indicators Online Database

UNCTAD, *Review of Maritime Transport*, Various Issues

SESRIC, BASEIND Statistics Database

SESRIC, *Transport in the OIC Countries and Modalities for Strengthening Co-Operation*, 2003

ANNEX

Table A.1 Total Road Network in 000 KM.

COUNTRY	1995	2000	2006*
Afghanistan	21	21	42
Albania	18	18	18
Algeria	102	104	108
Azerbaijan	27	27	59
Bahrain	3	3	3
Bangladesh	204	207	239
Benin	7	0	19
Brunei	2	1	4
Burkina Faso	13	0	92
Cameroon	34	50	51
Chad	33	33	40
Comoros	0	1	1
Cote d'Ivoire	50	50	80
Djibouti	3	3	3
Egypt	58	64	92
Gabon	8	8	9
Gambia	3	3	4
Guinea	30	31	44
Guinea-Bissau	4	0	3
Guyana	8	8	8
Indonesia	327	356	391
Iran	157	0	173
Iraq	47	46	46
Jordan	7	7	8
Kazakhstan	151	0	92
Kuwait	4	4	6
Kyrgyzstan	19	19	19
Lebanon	6	0	7
Libya	82	83	83
Malaysia	61	66	93
Maldives	0	0	0
Mali	15	15	19
Mauritania	8	8	11
Morocco	61	58	58
Mozambique	30	30	30
Niger	10	0	19
Nigeria	193	0	193
Oman	30	33	35
Pakistan	214	239	260
Palestine	0	0	5
Qatar	1	1	8
Saudi Arabia	142	152	221
Senegal	15	15	14
Sierra Leone	11	11	11
Somalia	22	22	22
Sudan	12	12	12
Suriname	4	4	4
Syria	37	0	39
Tajikistan	0	28	28
Togo	8	8	8
Tunisia	23	19	19
Turkey	381	0	427
Turkmenistan	0	24	24
Uganda	0	0	71
UAE	5	1	4
Uzbekistan	80	82	82
Yemen	65	65	71
OIC Total	2853	2041	3533
France	893	894	952
Japan	1142	1166	1197
United Kingdom	386	390	398
United States	6296	6359	6544
Developing Countries	11513	12432	17131
Developed Countries	13508	12954	16192
World	25021	25385	33322

Source: World Development Indicators Online Database *Or latest data available

Table A.2 Paved Roads as a % of Total Road Network

COUNTRY	1995	2000	2006*
Afghanistan	13.3	13.3	29.3
Albania	39	39	39
Algeria	68.9	68.9	70.2
Azerbaijan	93.9		49.4
Bahrain		77.6	79.1
Bangladesh	7.9	9.5	9.5
Benin	20.0		9.5
Brunei	34.6	34.7	77.2
Burkina Faso	16.0		4.2
Cameroon	12.5	8.1	8.4
Chad	0.8	0.8	0.8
Comoros	76.5	76.5	76.5
Cote d'Ivoire	9.6	9.7	8.1
Djibouti	12.6	45	45
Egypt	78	78.1	81
Gabon	8.2	9.9	10.2
Gambia	35.3	35.4	19.3
Guinea	16.4	16.5	9.8
Guinea-Bissau	10.2		27.9
Guyana	7.3	7.4	7.4
Indonesia	52.4	57.1	55.4
Iran	49.9		72.8
Iraq	86	84.3	84.3
Jordan	100	100	100
Kazakhstan	76.3		91.4
Kuwait	80.5	80.6	85.0
Kyrgyzstan	91	91.1	91.1
Lebanon	95		95
Libya	57.1	57.2	57.2
Malaysia	74.4	75.3	79.8
Maldives			
Mali	12	12.1	18
Mauritania	11.2	11.3	26.8
Morocco	50.2	56.4	61.9
Mozambique	18.6	18.7	18.7
Niger	7.9		20.5
Nigeria	18.8		15
Oman	20.4	30	27.7
Pakistan	45	56	65.4
Palestine			100
Qatar	90	90	90
Saudi Arabia	30.1	29.9	21.5
Senegal	28.5	29.3	29.3
Sierra Leone	8	7.9	8
Somalia	11.8	11.8	11.8
Sudan	36.2	36.3	36.3
Suriname	26	26	26.3
Syria	25		100
Tajikistan	82.7		82.7
Togo	31.6	31.6	31.6
Tunisia	78.8	68.4	65.8
Turkey	23		23
Turkmenistan		81.2	81.2
Uganda			
UAE	100	100	100
Uzbekistan	87.2	87.3	87.3
Yemen	7.9	15.5	8.7
OIC Total	39.2	44.0	42.1
France	100	100	100
Japan	73.6	76.6	79.3
United Kingdom	100	100	100
United States	60.7		65.3

Source: World Development Indicators Online Database

*Or latest data available

Table A.3 Paved Roads Network in 000 KMs

COUNTRY	1995	2000	2006
Afghanistan	3	3	12
Albania	7	7	7
Algeria	71	72	76
Azerbaijan	25		29
Bahrain		3	3
Bangladesh	16	20	23
Benin	1		2
Brunei	1	0.4	3
Burkina Faso	2		4
Cameroon	4	4	4
Chad	0.3	0.3	0.3
Comoros	1		1
Cote d'Ivoire	5	5	6
Djibouti	0.4	1	1
Egypt	45	50	75
Gabon	1	1	1
Gambia	1	1	1
Guinea	5	5	4
Guinea-Bissau	0.4		1
Guyana	1	1	1
Indonesia	171	203	217
Iran	78		126
Iraq	40	38	38
Jordan	7		8
Kazakhstan	115		84
Kuwait	4	4	5
Kyrgyzstan	17	17	17
Lebanon	6		6
Libya	47	48	48
Malaysia	46	50	74
Maldives			
Mali	2	2	3
Mauritania	1	1	3
Morocco	30	33	36
Mozambique	6	6	6
Niger	1		4
Nigeria	36		29
Oman	6	10	10
Pakistan	96	134	170
Palestine			5
Qatar	1	1	1
Saudi Arabia	43	45	48
Senegal	4	4	4
Sierra Leone	1	1	1
Somalia	3	3	3
Sudan	4	4	4
Suriname	1	1	1
Syria	9		39
Tajikistan			
Togo	2	2	2
Tunisia	18	13	13
Turkey	88		131
Turkmenistan		19	19
Uganda			16
UAE	5	1	1
Uzbekistan	70	71	71
Yemen	5	10	6
OIC Average	23	22	27
Developing Countries Average	39	44	52
Developed Countries Average	288	188	316
World Average	91	73	105

Source: World Development Indicators Online Database

Table A.4 Motor Vehicles in Use, Commercial Cars in 000s

COUNTRY	1995	2000	2004*
Afghanistan	0.6	7	4.5
Albania	29.1	43	88.8
Algeria	1562	1692	1739
Azerbaijan	125.5	133.4	108
Bahrain	30.5	36.8	38.4
Bangladesh	111.7		
Benin	5.7	96.6	19.2
Brunei	16	19	22
Burkina Faso	19.5	22.6	22.6
Cameroon	39.6	47.4	57.4
Chad	12.4		
Comoros			
Cote d'Ivoire	50.3	54.9	54.9
Djibouti			
Egypt	466	600	715
Gabon	10		
Gambia	3.5		
Guinea	13		
Guinea-Bissau			
Guyana		15.5	15.5
Indonesia	2025	2373	2846
Iran	589.2	384.9	431.2
Iraq	320	336	345
Jordan	76.7	103	176
Kazakhstan	390.9	256.6	307
Kuwait	153.5	134	172
Kyrgyzstan	197.5	189.8	196
Lebanon	84.7	100.2	102.4
Libya	353	177.4	195.5
Malaysia	74.9	36.8	53
Maldives	1	1	1
Mali	7.2	31.7	31.7
Mauritania	5.6	18.2	18.2
Morocco	343.2	415.7	444
Mozambique	10		40
Niger	1.3	1.2	3.8
Nigeria	8.6		
Oman	89.3	124.6	109.1
Pakistan	306	435	657
Palestine			
Qatar	69.5	92.9	109.7
Saudi Arabia			
Senegal	48	71	46
Sierra Leone	11.9	15.8	7.8
Somalia	12		
Sudan	35.9	60.5	62.5
Suriname	17.3	23.5	29.9
Syria	224	346	394
Tajikistan	9.8	16.8	
Togo	34.6	24.5	24.5
Tunisia	189	266	282
Turkey	1010.2	1583.7	2379
Turkmenistan			
Uganda	44.1	74.3	96
UAE	84.2	453.1	477.9
Uzbekistan			
Yemen	291.7	560.3	587.9
OIC Total	9615	11476	13511
France	5374	5933	6424
Japan	20676	18464	17014
United Kingdom	2987	3333	3849
United States	7405	8769	8689

Source: United Nations Statistical Yearbook 50th Edition

*Or latest data available

Table A.5 Motor Vehicles in Use, Passenger Cars in 000s

COUNTRY	1995	2000	2004*
Afghanistan	1.6	6.2	8.6
Albania	58.6	114.5	174.7
Algeria	1562	1692	1739
Azerbaijan	278.3	332.1	404
Bahrain	135.4	175.7	187
Bangladesh	51.1		
Benin	7.3	103.4	135.7
Brunei	142	183	226
Burkina Faso	35.5	26.5	26.5
Cameroon	94.7	115.9	173.1
Chad	8.7		
Comoros			
Cote d'Ivoire	111.9	113.9	113.9
Djibouti			
Egypt	1313	1700	1960
Gabon	23		
Gambia	6.4		
Guinea	23.2		
Guinea-Bissau			
Guyana		61.3	61.3
Indonesia	2107	3039	3885
Iran	819.6	1139.5	1545.2
Iraq	719	740	753
Jordan	188	255.8	396
Kazakhstan	1034.1	1000.3	1204.0
Kuwait	662.9	690	849
Kyrgyzstan	197.5	189.8	196
Lebanon	1197.5	1370.8	1370.9
Libya	763.2	549.6	552.7
Malaysia	256.4	350.4	482
Maldives	1	2	2
Mali	6.3	18.9	18.9
Mauritania	5.1	12.2	12.2
Morocco	992	1211.1	1295.5
Mozambique	30		112
Niger	2.4	3.7	9.3
Nigeria	46.1		
Oman	202.3	344	324
Pakistan	773	1066	1373
Palestine			
Qatar	143.4	199.6	230.1
Saudi Arabia	6111.1	8049.1	9946.6
Senegal	106	169	147
Sierra Leone	32.4	20.1	11.4
Somalia	12		
Sudan	30.8	46	47.3
Suriname	49	61	76
Syria	167	182	281
Tajikistan	166.4	117.1	
Togo	74.7	51.4	51.4
Tunisia	356	517	553
Turkey	3058.5	4422.2	5400
Turkmenistan			
Uganda	28.9	49	60
UAE	321.6	745.3	794.1
Uzbekistan			
Yemen	224.1	323.1	346.6
OIC Total	24738	31560	37535
France	25100	28060	29700
Japan	44680	52738	55995
United Kingdom	21950	25067	27807
United States	193963	212706	222701

Source: United Nations Statistical Yearbook 50th Edition

*Or latest data available

Table A.6 Rail Lines Total Route KMs

COUNTRY	1995	2000	2007*
Afghanistan			
Albania	674	440	423
Algeria	4290	3793	3572
Azerbaijan		2116	2122
Bahrain			
Bangladesh	2706.1	2768	2855
Benin			
Brunei			
Burkina Faso			
Cameroon	1006	1006	974
Chad			
Comoros			
Cote d'Ivoire	639	639	639
Djibouti			
Egypt	4810	5024	5195
Gabon	683	814	810
Gambia			
Guinea			
Guinea-Bissau			
Guyana			
Indonesia	5041		
Iran	5332	6688	7265
Iraq			
Jordan	293	292	293
Kazakhstan		13545	14205
Kuwait			
Kyrgyzstan			
Lebanon			
Libya			
Malaysia	1668	1622	1667
Maldives			
Mali		734	733
Mauritania			
Morocco	1907	1907	1907
Mozambique			
Niger			
Nigeria	3557	3557	3528
Oman			
Pakistan	8774.87	7791	7791
Palestine			
Qatar			
Saudi Arabia	1018	958	1412
Senegal	906	906	
Sierra Leone			
Somalia			
Sudan	4595	4599	5478
Suriname			
Syria	1525	1771	2043
Tajikistan			
Togo			
Tunisia	1860	2260	2218
Turkey	8549	8671	8697
Turkmenistan			
Uganda	1250	261	259
UAE			
Uzbekistan		3645	4005
Yemen			
OIC Total	61084	75807	78091
France	31939	32515	29488
Japan	20134	20165	20050
United Kingdom	16666	15991	16208
United States	174619.4	159822	191771

Source: World Development Indicators Online Database

*Or latest data available

Table A.7 Railway Traffic Passenger Kilometers in Millions

COUNTRY	1995	2000	2007*
Afghanistan			
Albania	197	125	51
Algeria	1797	1142	821
Azerbaijan	791	493	1109
Bahrain			
Bangladesh	3333	3941	4164
Benin			
Brunei			
Burkina Faso			
Cameroon	317	327	370
Chad			
Comoros			
Cote d'Ivoire	181	93	10
Djibouti			
Egypt	29110	34960	40837
Gabon	77	88	76
Gambia			
Guinea			
Guinea-Bissau			
Guyana			
Indonesia	15520		25535
Iran	7294	7119	12549
Iraq			
Jordan			
Kazakhstan		10215	13613
Kuwait			
Kyrgyzstan			
Lebanon			
Libya			
Malaysia	1270	1312	2193
Maldives			
Mali	976	204	196
Mauritania			
Morocco	1564	1956	3659
Mozambique			
Niger			
Nigeria	743	363	174
Oman			
Pakistan	18904	18495	25621
Palestine			
Qatar			
Saudi Arabia	164	288	325
Senegal	194	138	88
Sierra Leone			
Somalia			
Sudan	220	205	40
Suriname			
Syria	492	187	744
Tajikistan			
Togo			
Tunisia	996	1257	1407
Turkey	5797	5832	5553
Turkmenistan			
Uganda	30		
UAE			
Uzbekistan	2497	2163	2339
Yemen			
OIC Total	92464	90903	141474
France	55311	69860	83299
Japan	248993	240793	252579
United Kingdom	30000	38200	48511

Source: World Development Indicators Online Database

*Or latest data available

Table A.8 Railway Traffic Net Ton Kilometers in Millions

COUNTRY	1995	2000	2007*
Afghanistan			
Albania	53	28	53
Algeria	1946	1980	1429
Azerbaijan	2409	5770	10374
Bahrain			
Bangladesh	689	777	817
Benin			
Brunei			
Burkina Faso			
Cameroon	812	1048	1055
Chad			
Comoros			
Cote d'Ivoire	312	537	675
Djibouti			
Egypt	4257	3980	3917
Gabon	503	1611	2202
Gambia			
Guinea			
Guinea-Bissau			
Guyana			
Indonesia	4170		4698
Iran	11870	14179	20542
Iraq			
Jordan	706	575	517
Kazakhstan		124983	191189
Kuwait			
Kyrgyzstan			
Lebanon			
Libya			
Malaysia	1416	907	1355
Maldives			
Mali		279	189
Mauritania			
Morocco	4556	4576	5837
Mozambique			
Niger			
Nigeria	97.1	105	77
Oman			
Pakistan	5077	3754	5907
Palestine			
Qatar			
Saudi Arabia	822	822	1630
Senegal	475	371	384
Sierra Leone			
Somalia			
Sudan	1538	1164	766
Suriname			
Syria	1285	1577	2552.4
Tajikistan		13102	14529
Togo			
Tunisia	2302	2282	2197
Turkey	8516	9761	9680
Turkmenistan	236	210	218
Uganda			
UAE			
Uzbekistan	16830	15441	19281
Yemen			
OIC Total	70877	209819	302071
France	48136	55448	40635
Japan	24747	22313	23145
United Kingdom	12537	18090	22110
United States	1911023	2142145	2820061

Source: World Development Indicators Online Database

*Or latest data available after 2000.

Table A.9 Merchant Shipping Fleets All Ships as of January 1st 2000 (Thousand GT)

COUNTRY	Total fleet	Oil tankers	Bulk carriers	General cargo	Container ships	Other types
Afghanistan						
Albania	21			9		2
Algeria	1005	33	172	227		572
Azerbaijan	661	176		94		391
Bahrain	292	54	33	64	96	45
Bangladesh	378	61	6	279		32
Benin	1					1
Brunei	362			2		360
Burkina Faso						
Cameroon	14					13
Chad						
Comoros	1			1		
Cote d'Ivoire	10	1				9
Djibouti	4			2		2
Egypt	1434	210	601	413	14	196
Gabon	16	1		7		8
Gambia	2					2
Guinea	11			1		10
Guinea-Bissau	6			2		5
Guyana	14			6		8
Indonesia	3249	838	380	1315	44	673
Iran	3548	1754	957	649	10	178
Iraq	511	361		77		72
Jordan	42		21	16	5	1
Kazakhstan				2		8
Kuwait	2456	1644	17	242	214	339
Kyrgyzstan						
Lebanon	322	1	152	160	5	4
Libya	444	267		82		94
Malaysia	5247	919	1513	646	653	1515
Maldives	90	4		79		7
Mali						
Mauritania	49					48
Morocco	448	12		111	18	306
Mozambique	36			7		30
Niger						
Nigeria	434	265		91		77
Oman	21			3		18
Pakistan	308	50	30	180	32	17
Palestine						
Qatar	749	263	142	131	186	27
Saudi Arabia	1215	219		525	222	248
Senegal	48			2		46
Sierra Leone	17	3				14
Somalia	6	1		3		2
Sudan	43	1		40		2
Suriname	6	2		3		2
Syria	445		30	407		9
Tajikistan						0
Togo	43		41			2
Tunisia	200	20	17	25		138
Turkey						0
Turkmenistan	44	2	5	17		21
Uganda	3			3		0
UAE	789	248	20	171	214	136
Uzbekistan						
Yemen	25	2		3		21
OIC Total	25071	7412	4136	6093	1716	5713
World	546794	155122	158296	93217	55458	84701
Developed Count.	148361	46564	27653	19710	19386	35047
Developing Count.	103375	25694	31457	22131	10054	14038

Source: UNCTAD, Review of Maritime Transport, 2000

Table A.10 Merchant Shipping Fleets All Ships as of January 1st 2008 (Thousand GT)

COUNTRY	Total fleet	Oil tankers	Bulk carriers	General cargo	Container ships	Other types
Afghanistan						
Albania	69	0	0	68	0	1
Algeria	736	16	121	45	0	554
Azerbaijan	708	227	0	101	0	381
Bahrain	326	81	43	2	96	104
Bangladesh	441	68	52	254	35	31
Benin	1	0	0	0	0	1
Brunei	483	1	0	2	0	480
Burkina Faso						
Cameroon	17	0	0		0	14
Chad						
Comoros	766	158	115	400	4	89
Cote d'Ivoire	9	1	0	0	0	8
Djibouti	4	0	0	0	0	4
Egypt	1162	295	388	266	48	164
Gabon	14	1	0	4	0	9
Gambia	35	4	0	27	0	4
Guinea	20	0	0	1	0	19
Guinea-Bissau	7	0	0	1	0	5
Guyana	42	5	0	23	0	14
Indonesia	5670	1419	575	2059	392	1226
Iran	3140	1652	836	324	157	171
Iraq	159	48	0	39	0	72
Jordan	369	139	16	121	14	79
Kazakhstan	55	29	0	3	0	22
Kuwait	2426	1838	54	98	214	222
Kyrgyzstan						
Lebanon	136	1	34	91	0	10
Libya	98	8	0	44	0	45
Malaysia	6971	2798	314	491	694	2675
Maldives	126	10	0	104	0	12
Mali						
Mauritania	52	0	0	1	0	51
Morocco	490	78	0	30	72	309
Mozambique	38	0	0	6	0	33
Niger						
Nigeria	431	280	10	18	0	124
Oman	24	2	0	2	0	21
Pakistan	351	160	36	130	0	25
Palestine						
Qatar	620	303	15	32	184	86
Saudi Arabia	943	333	0	303	149	157
Senegal	46	0	0	1	0	45
Sierra Leone	476	61	11	309	14	81
Somalia	10	1	0	4	0	5
Sudan	26	1	0	22	0	3
Suriname	5	2	0	3	0	0
Syria	354	1	34	308	8	3
Tajikistan						
Togo	19	0	0	4	0	14
Tunisia	140	16	17	3	0	104
Turkey	4987	724	2122	1437	365	339
Turkmenistan	52	6	0	17	0	29
Uganda						
UAE	809	243	87	82	214	182
Uzbekistan						
Yemen	29	11	0	5	0	13
OIC Total	33892	11021	4880	7285	2660	8040
World	774779	227986	217563	130330	124814	101085
Developed Count.	164780	46465	24972	21398	35594	36441
Developing Count.	189718	55831	60503	30361	22187	20833

Source: UNCTAD, Review of Maritime Transport, 2008

Table A.11 Merchant Shipping Fleets All Ships as of January 1st 2008 (Thousand DWT)

COUNTRY	Total fleet	Oil tankers	Bulk carriers	General cargo	Container ships	Other types
Afghanistan						
Albania	99	0	0	98	0	1
Algeria	744	26	204	55	0	458
Azerbaijan	611	315	0	112	0	183
Bahrain	394	154	60	2	100	78
Bangladesh	617	118	89	346	48	17
Benin	0	0	0	0	0	0
Brunei	423	2	0	3	0	419
Burkina Faso						
Cameroon	10	0	0	3	0	6
Chad						
Comoros						
Cote d'Ivoire	17	2	0	1	0	14
Djibouti	1	0	0	0	0	1
Egypt	1703	508	679	311	58	148
Gabon	8	1	0	4	0	3
Gambia	12	5	0	5	0	3
Guinea	10	0	0	0	0	10
Guinea-Bissau	2	0	0	0	0	2
Guyana	42	7	0	28	0	7
Indonesia	6859	2289	944	2651	516	459
Iran	5222	3048	1420	419	211	123
Iraq	202	78	0	54	0	70
Jordan	508	293	26	148	18	24
Kazakhstan	68	50	0	2	0	17
Kuwait	3974	3337	93	86	227	230
Kyrgyzstan						
Lebanon	154	1	54	92	0	8
Libya	97	13	0	57	0	27
Malaysia	9448	5087	538	587	842	2395
Maldives	164	21	0	138	0	6
Mali						
Mauritania	25	0	0	1	0	24
Morocco	336	113	0	28	72	124
Mozambique	30	0	0	11	0	19
Niger						
Nigeria	626	477	13	26	0	111
Oman	16	3	0	2	0	11
Pakistan	565	288	66	184	0	27
Palestine						
Qatar	894	546	22	48	202	77
Saudi Arabia	1104	558	0	319	156	72
Senegal	19	0	0	2	0	17
Sierra Leone	588	101	17	418	18	34
Somalia	9	2	0	4	0	4
Sudan	29	1	0	26	0	1
Suriname	7	3	0	3	0	0
Syria	517	2	53	452	8	2
Tajikistan						
Togo	40	14	0	24	0	2
Tunisia	13	0	0	4	0	9
Turkey	7300	1265	3631	1815	455	135
Turkmenistan	46	8	0	15	0	22
Uganda						
UAE	1028	408	142	90	227	163
Uzbekistan						
Yemen	26	17	0	2	0	6
OIC Total	44607	19161	8051	8676	3158	5569
World	1117779	407881	391127	105492	144655	68624
Developed Count.	207241	82833	45603	17969	40356	20481
Developing Count.	285129	98638	109161	36992	26084	16253

Source: UNCTAD, Review of Maritime Transport, 2008

Table A.12 Civil Aviation Passenger Kilometers (Millions)

COUNTRY	1995	2000	2004
Afghanistan	276	143	
Albania		101	136
Algeria	2855	3051	3353
Azerbaijan	1650	503	1276
Bahrain ²	2766	3185	5954
Bangladesh	3058	3988	5042
Benin ³	223	216	
Brunei	2403	3001	3852
Burkina Faso ²	256	253	33
Cameroon	615	646	720
Chad ²	231	216	
Comoros	5		
Cote d'Ivoire ²	302	242	
Djibouti			
Egypt	7678	8828	8918
Gabon	847	750	
Gambia			
Guinea	52		
Guinea-Bissau	10		
Guyana	235	299	
Indonesia	24754	16764	28447
Iran	5634	8202	11657
Iraq			
Jordan	4395	4207	5327
Kazakhstan	2429	1208	1898
Kuwait	5124	6134	7285
Kyrgyzstan	573	423	418
Lebanon	1720	1484	2197
Libya	398	409	985
Malaysia	23431	37939	44642
Maldives	71	425	35
Mali ²	223	216	
Mauritania ²	301	275	56
Morocco	4602	7185	5551
Mozambique	290	376	372
Niger ²	223	216	
Nigeria	819	565	683
Oman ¹	3226	4148	7455
Pakistan	10384	12054	13459
Palestine			
Qatar ¹	2766	6042	12172
Saudi Arabia	18501	20229	22557
Senegal ²	244	222	767
Sierra Leone	23	93	85
Somalia			
Sudan	681	748	898
Suriname	618	1151	1616
Syria	948	1422	2212
Tajikistan	2427	286	1000
Togo ²	223	216	
Tunisia	1955	2690	2853
Turkey	9475	16492	20500
Turkmenistan	1562	1466	1916
Uganda	103	215	272
UAE ¹	9958	22691	24703
Uzbekistan	4855	3732	4454
Yemen	486	1588	2473
OIC Total	166884	206935	258229
USA	858629	1105728	1160236

Source: United Nations Statistics Division Online Database

² Including apportionment (1/4) of the traffic of Gulf Air, a multinational airline with headquarters in Bahrain and operated by four Gulf States.

³ Including apportionment (1/10) of the traffic of Air Afrique, a multi-national airline with headquarters in CÔte d'Ivoire and operated by 10 African states until 1991. From 1992 including apportionment (1/11) of the traffic of Air Afrique and operated by 11 African states.



Statistical, Economic and Social Research and Training Centre
for Islamic Countries (SESRIC)

Attar Sokak No. 4, 06700 GOP, Ankara, TURKEY
Tel: (90-312) 468 6172 (4 lines) Fax: (90-312) 468 5726
E-mail: oicankara@sesric.org Web: www.sesric.org