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## **CHAPTER 2.**

### **Structure and Ownership of the World Fleet**

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## Chapter 2

# STRUCTURE AND OWNERSHIP OF THE WORLD FLEET

*This chapter reviews the supply-side dynamics of the world maritime industry. The information and data cover comprehensively the structure and ownership of the world fleet. The chapter also reviews deliveries and demolition of vessels, tonnage on order, newbuilding prices and markets for second-hand tonnage.*

### A. STRUCTURE OF THE WORLD FLEET

#### 1. Principal types of vessel

Comparative time-series data on the world fleet for 2002, 2003 and 2004 are provided in figure 4 and table 6. The world merchant fleet stood at 857.0 million deadweight tons (dwt) on 1 January 2004. This represents a 1.5 per cent increase over 2003, at which time the world fleet had already expanded by 2.3 per cent over the tonnage in 2002. The latest increase is lower than the increases in the previous two years. Newbuilding deliveries represented 49.2 million dwt, while 25.6 million dwt were broken up and lost. The result was a net gain of 23.6 million dwt in 2003.

The tonnage of oil tankers in 2003 increased by a healthy 4.1 per cent and that of bulk carriers by 2.5 per cent. These two types of ships represented 72.9 per cent of total tonnage, a slight increase from 71.6 per cent in 2002. The fleet of general cargo ships decreased again in 2003 and at a slightly slower rate than that of the previous year, namely by 2.5 per cent; this category now represents 11.1 per cent of the total world fleet. In terms of deadweight tonnage, the fleet of containerships increased by 7.7 million dwt or 9.3 per cent, and now represents 10.6 per cent of the total world fleet. This relatively high rate of increase reflects the growing proportion of manufactured goods being traded, generally in containers. Deadweight tonnage of liquid gas carriers (mainly LNG and LPG carriers) and ferries/passenger ships has been increasing steadily.

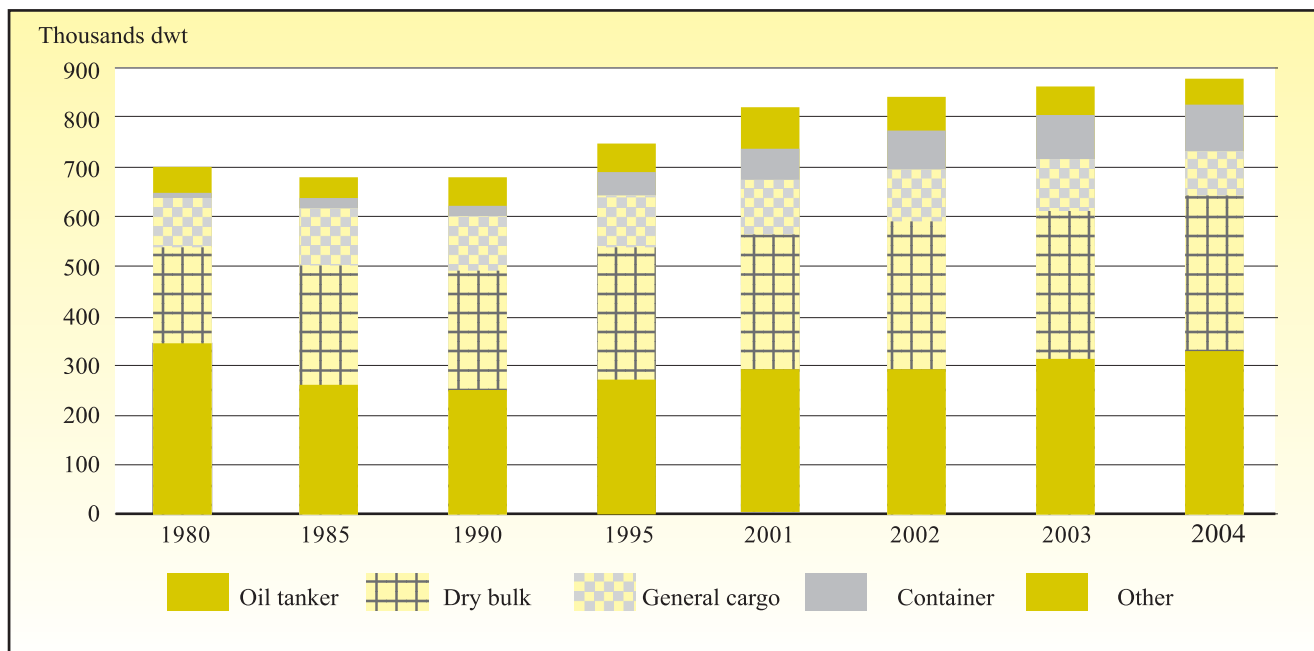
#### 2. World containership fleet

The world fleet of fully cellular containerships continued to expand substantially in 2003 in terms of both number of ships and their TEU capacity; by the beginning of 2004, there were 3,054 ships with a total capacity of 6,437,218 TEUs, an increase of 5.7 per cent in the number of ships and 9.2 per cent in TEU capacity over the previous year (see table 7). Ship sizes also continued to increase, with average carrying capacity per ship growing from 1,944 TEUs in 2002 to 2,108 TEUs in 2004, reflecting the building of larger vessels to achieve economies of scale. As of the end of 2003, the well-defined trend towards large container vessels was continuing unabated. Vessels of over 3,000 TEU capacity made up 70.5 per cent of total deliveries of cellular tonnage for the year and 81.6 per cent of the order book.

#### 3. Age distribution of the world merchant fleet

Table 8 provides data on the average age distribution of the world merchant fleet by types of vessels and by groups of countries and territories. The average age of the total world fleet in 2003 dropped marginally to 12.5 years. By type of vessel, the average age of tankers decreased by almost one year to 10.9 years in 2003. The share of tanker tonnage 15 years and older decreased to 29.9 per cent in 2003 from 33.5 per cent in 2002, reflecting a similar level of scrapping activities, which in 2003 reached 18.4 million dwt (compared with 18.1 million dwt in 2002). The average age of the dry bulk carrier fleet increased

Figure 4  
World fleet by principal types of vessel, selected years



Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

marginally to 12.9 years in 2003. Containerships continued to be the youngest fleet in 2003, with an average age of 9.2 years, slightly above the 9.1 years average age of the previous year. This trend is reflected in the share of tonnage between 0 and 4 years of age — 32.3 per cent, the highest among all categories of vessels.

By country grouping, the fleet age of developed market-economy countries in 2003 was the lowest — at 10.9 years (11.7 years in 2002). These countries have continued the trend of lowering the average age of their fleet that has been apparent over the last few years. Also in this group, the average age of tankers decreased by more than a year to 9.0 years in 2003, as compared with 10.5 years in 2002. This reflects the European Union's ban on old tonnage, which came into effect after the sinking of the *Prestige*. The major open-registry countries had the second lowest average age of all ships (11.9 years in 2003 versus 12.1 years in 2002), even though the tendency to register newbuildings under open-registry flags abated. The average age of all ships registered in developing countries (excluding major open-registry countries) decreased by almost half a year in 2003 to 13.1 years as compared with 13.5 years in 2002. For this group, the average age of general cargo vessels decreased to 18.8 years, while that of containerships marginally increased to 8.8 years. The average age of tonnage registered in the socialist countries of Asia increased to 17.6 years in 2003. The countries of Central

and Eastern Europe continued to have the oldest fleet (20.7 in 2003 versus 20.1 years in 2002), with vessels built more than 15 years ago representing more than four fifths of the total fleet and bulk carriers constituting the oldest class of ships at 22.3 years.

#### 4. Delivery of newbuildings

Newbuilding activities attained the highest level ever recorded in terms of deadweight tons, with deliveries totalling 49.2 million dwt in 2003 (see table 9), a marginal increase over the already record deliveries in 2002 (49.0 million dwt). The total number of vessels delivered increased to 1,707 units from 1,539 units in 2002 (10.9 per cent). This high level of delivery was sustained primarily thanks to record tanker deliveries of 30.7 million dwt, an impressive 31.2 per cent increase over the 2002 level, with the number of newbuildings increasing to 293 units in 2003 from 182 units in 2002. The average size was 105,000 deadweight tons. Conversely, deliveries of bulk carriers were down by 2.0 million dwt, about 14.2 per cent, from the 2002 level. Another feature was the larger size of bulk carriers delivered in 2003. In the previous year, the average deadweight tonnage had been 62,400, whereas in 2003 it was 68,300. Newbuildings for other types of vessels, including general cargo ships and containerships, increased in number, but decreased in deadweight tonnage to 1,235 units and 6.2 million dwt in 2003.

Table 6

**World fleet size by principal types of vessel, 2002–2004 <sup>a</sup>**  
*(beginning-of-year figures, in thousands of dwt)*

Principal types	2002	2003	2004	Percentage change 2003/2004
<b>Oil tankers</b>	285 519 <i>34.6</i>	304 396 <i>36.1</i>	316 759 <i>37.0</i>	4.1
<b>Bulk carriers</b>	294 588 <i>35.7</i>	300 131 <i>35.5</i>	307 661 <i>35.9</i>	2.5
<b>Ore/bulk/oil</b>	14 456 <i>1.8</i>	12 612 <i>1.5</i>	12 110 <i>1.4</i>	-4.0
<b>Ore/bulk</b>	280 132 <i>33.9</i>	287 519 <i>34.1</i>	295 551 <i>34.5</i>	2.8
<b>General cargo ships</b>	99 872 <i>12.1</i>	97 185 <i>11.5</i>	94 768 <i>11.1</i>	-2.5
<b>Containerships</b>	77 095 <i>9.3</i>	82 793 <i>9.8</i>	90 462 <i>10.6</i>	9.3
<b>Other types of ships</b>	68 578 <i>8.3</i>	59 730 <i>7.1</i>	47 324 <i>5.5</i>	-20.8
<b>Liquefied gas carriers</b>	19 074 <i>2.3</i>	19 469 <i>2.3</i>	20 947 <i>2.4</i>	7.6
<b>Chemical tankers</b>	7 974 <i>1.0</i>	8 027 <i>0.9</i>	8 004 <i>0.9</i>	-0.3
<b>Miscellaneous tankers</b>	785 <i>0.1</i>	906 <i>0.1</i>	947 <i>0.1</i>	4.5
<b>Ferries and passengers ships</b>	5 319 <i>0.6</i>	5 495 <i>0.6</i>	5 561 <i>0.6</i>	1.2
<b>Other</b>	35 426 <i>4.3</i>	25 833 <i>3.1</i>	11 865 <i>1.4</i>	-54.1
<b>World total</b>	825 652 <i>100.00</i>	844 235 <i>100.00</i>	856 974 <i>100.00</i>	1.5

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

<sup>a</sup> Percentage shares are shown in italics.

Table 7

Distribution of the world fleet and TEU capacity of fully cellular containerships, by country groups, in 2002, 2003 and 2004 <sup>a</sup>  
(beginning-of-year figures)

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares <sup>a</sup>		
	2002	2003	2004	2002	2003	2004
<b>World total</b>	2 755 <i>100.0</i>	2 890 <i>100.0</i>	3 054 <i>100.0</i>	5 356 650 <i>113.2</i>	5 896 154 <i>100.0</i>	6 437 218 <i>100.0</i>
<b>Developed market-economy countries</b>	759 <i>27.5</i>	798 <i>27.6</i>	824 <i>27.0</i>	1 785 609 <i>37.7</i>	2 019 918 <i>34.3</i>	2 147 550 <i>33.4</i>
<b>Major open-registry countries</b>	1 117 <i>40.5</i>	1 166 <i>40.3</i>	1 224 <i>40.1</i>	2 317 543 <i>49.0</i>	2 591 977 <i>44.0</i>	2 922 805 <i>45.4</i>
<b>Total developed market-economy and major open-registry countries</b>	1 876 <i>68.1</i>	1 964 <i>68.0</i>	2 048 <i>67.1</i>	4 103 152 <i>86.7</i>	4 611 895 <i>78.2</i>	5 070 355 <i>78.8</i>
<b>Countries in Central and Eastern Europe (including former USSR)</b>	30 <i>1.1</i>	29 <i>1.0</i>	35 <i>1.1</i>	24 590 <i>0.5</i>	23 486 <i>0.4</i>	26 813 <i>0.4</i>
<b>Socialist countries of Asia</b>	98 <i>3.6</i>	104 <i>3.6</i>	136 <i>4.5</i>	105 344 <i>2.2</i>	114 112 <i>1.9</i>	153 727 <i>2.4</i>
<b>Developing countries</b>	674 <i>24.5</i>	720 <i>24.9</i>	779 <i>25.5</i>	994 024 <i>21.0</i>	1 035 578 <i>17.6</i>	1 115 019 <i>17.3</i>
<i>of which:</i>						
<b>Africa</b>	10 <i>0.4</i>	9 <i>0.3</i>	9 <i>0.3</i>	10 674 <i>0.2</i>	8 237 <i>0.1</i>	9 131 <i>0.1</i>
<b>America</b>	231 <i>8.4</i>	249 <i>8.6</i>	282 <i>9.2</i>	273 893 <i>5.8</i>	301 618 <i>5.1</i>	361 472 <i>5.6</i>
<b>Asia</b>	432 <i>15.7</i>	462 <i>16.0</i>	488 <i>16.0</i>	708 883 <i>15.0</i>	725 723 <i>12.3</i>	744 416 <i>11.6</i>
<b>Europe</b>	1 <i>0.0</i>	0 <i>0.0</i>	0 <i>0.0</i>	574 <i>0.0</i>	0 <i>0.0</i>	0 <i>0.0</i>
<b>Oceania</b>	0 <i>0.0</i>	0 <i>0.0</i>	0 <i>0.0</i>	0 <i>0.0</i>	0 <i>0.0</i>	0 <i>0.0</i>
<b>Other, unallocated</b>	77 <i>2.8</i>	73 <i>2.5</i>	56 <i>1.8</i>	129 540 <i>2.7</i>	111 083 <i>1.9</i>	71 304 <i>1.1</i>

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

<sup>a</sup> Percentage shares are shown in italics.

Table 8

**Age distribution of the world merchant fleet, by types of vessel, as of 1 January 2004**  
(percentage of total dwt)

Country grouping	Types of vessel	0-4 years	5-9 years	10-14 years	15-19 years	20 years and over	Average age (years) 2003 <sup>a</sup>	Average age (years) 2002 <sup>a</sup>
<b>World total</b>	All ships	22.4	21.6	16.1	12.1	27.7	12.5	12.6
	Tankers	28.2	20.8	21.0	11.0	18.9	10.9	11.6
	Bulk carriers	19.2	23.8	13.9	14.5	28.7	12.9	12.7
	General cargo	7.8	14.4	10.3	13.5	53.9	17.4	17.0
	Containerships	32.3	30.5	15.1	9.5	12.6	9.2	9.1
	All others	15.9	13.7	12.9	7.8	49.8	15.8	16.0
<b>Developed market-economy countries</b>	All ships	27.6	23.8	16.4	12.4	19.7	10.9	11.7
	Tankers	35.6	23.9	18.7	10.8	11.0	9.0	10.5
	Bulk carriers	17.6	25.1	14.1	17.0	26.1	12.8	13.1
	General cargo	17.6	19.8	14.0	13.9	34.7	13.9	13.7
	Containerships	34.2	29.5	15.5	10.6	10.2	8.8	8.7
	All others	17.6	17.3	14.8	9.7	40.7	14.5	14.7
<b>Major open-registry countries</b>	All ships	23.7	23.0	16.7	11.8	24.9	11.9	12.1
	Tankers	27.3	20.5	23.1	10.9	18.2	10.9	11.6
	Bulk carriers	21.7	25.1	13.3	13.4	26.5	12.3	12.0
	General cargo	7.5	20.7	11.8	16.2	43.6	16.0	15.8
	Containerships	34.5	29.1	14.6	9.1	12.7	9.0	9.1
	All others	17.9	14.3	11.5	2.9	53.3	15.8	16.0
<b>Subtotal</b>	All ships	25.1	23.3	16.6	12.0	23.0	11.6	11.9
	Tankers	30.8	21.9	21.3	10.9	15.2	10.1	11.2
	Bulk carriers	20.7	25.1	13.5	14.3	26.4	12.4	12.2
	General cargo	11.5	20.4	12.7	15.3	40.1	15.2	15.0
	Containerships	34.4	29.3	14.9	9.8	11.6	8.9	9.0
	All others	17.7	15.9	13.2	6.5	46.6	15.1	15.3
<b>Countries of Central and Eastern Europe</b>	All ships	1.6	2.9	6.6	18.0	70.8	20.7	20.1
	Tankers	4.9	3.4	1.6	15.8	74.4	20.7	20.4
	Bulk carriers	0.0	0.0	0.2	17.5	82.3	22.3	20.6
	General cargo	1.1	3.2	9.0	17.2	69.5	20.6	20.2
	Containerships	0.0	19.1	12.5	27.0	41.4	17.2	15.9
	All others	1.2	2.2	13.3	21.5	61.8	20.0	19.6
<b>Socialist countries of Asia</b>	All ships	10.4	8.8	12.0	13.1	55.7	17.6	16.7
	Tankers	17.4	7.5	18.1	15.5	41.5	15.4	16.3
	Bulk carriers	6.7	12.5	8.8	11.4	60.5	18.2	17.2
	General cargo	3.1	4.8	4.8	11.1	76.2	20.8	20.6
	Containerships	23.1	9.5	25.8	17.7	23.9	12.9	13.4
	All others	17.4	7.5	18.1	15.5	41.5	15.4	16.3
<b>Developing countries (excluding open-registry countries)</b>	All ships	20.6	20.2	16.3	12.0	30.9	13.1	13.5
	Tankers	27.2	19.5	19.8	11.0	22.5	11.4	12.5
	Bulk carriers	17.6	21.9	17.0	15.7	27.8	13.1	12.8
	General cargo	6.2	10.5	8.1	10.8	64.4	18.8	19.1
	Containerships	28.9	40.0	12.9	5.7	12.4	8.8	8.7
	All others	14.1	8.5	12.3	9.1	55.9	17.0	17.5

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

<sup>a</sup> To calculate the average age, it has been assumed that the ages of vessels are distributed evenly between the lower and upper limits of each age group. For the 20-years-and-over age group, the mid-point has been assumed to be 23.5 years.

Table 9

## Deliveries of newbuildings, selected years

Year	Oil tankers <sup>a</sup>		Combined carriers <sup>a</sup>		Dry bulk carriers <sup>a</sup>		Others <sup>b</sup>		Total	
	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt	No. of vessels	Million dwt
1980	99	7.0	4	0.4	135	4.7	548	6.0	786	18.0
1985	72	3.9	10	0.7	339	14.7	529	5.0	950	25.0
1990	81	8.7	0	0.0	119	9.6	523	4.0	723	23.0
1997	69	7.5	3	0.3	299	18.8	696	10.2	1 067	36.8
1998	120	12.6	0	0.0	217	11.6	704	11.1	1 041	35.3
1999	161	19.1	4	0.4	195	13.0	585	8.4	940	40.5
2000	154	20.8	0	0.0	188	13.1	1 202	10.5	1 544	44.4
2001	112	14.4	0	0.0	310	21.0	1 048	9.8	1 470	45.2
2002	182	23.4	0	0.0	226	14.1	1 131	11.5	1 539	49.0
2003 <sup>c</sup>	293	30.7	2	0.2	177	12.1	1 235	6.2	1 707	49.2

Source: Compiled by the UNCTAD secretariat on the basis of data from Fearnleys, *Review 2003*.

<sup>a</sup> Vessels over 10,000 dwt.

<sup>b</sup> Sea-going, cargo-carrying vessels of over 1,000 gross registered tons (grt).

<sup>c</sup> Provisional.

## 5. Demolition of ships

Trends in the tonnage, types and average age of broken-up vessels are shown in tables 10, 11 and 12. In 2003, total tonnage sold for demolition decreased by 16.1 per cent from the tonnage of the previous year to 25.6 million dwt, equivalent to 3.0 per cent of world total deadweight tons, as compared with 3.6 per cent in 2002. Break-up of tankers accounted for the largest share of total demolition. Sales of tankers for break-up increased by 1.6 per cent to 18.4 million dwt and the combined effect of freight rate volatility and strong steel demand in China pushed demolition prices up over \$300 per ton. ULCC/VLCC demolition sales decreased from 35 units in 2002 to 28 units in 2003. Sales of Suezmaxes stood at 14 units in 2003, while those of Aframax increased substantially from 20 units in 2002 to 35 units in 2003. In the smaller category of crude oil tankers, demolition also increased: 66 ships were sold for scrap in 2002, while 80 units were sold in 2003. The average age of tankers sold for demolition was up by one year to 29.3 years in 2003. The number of dry bulk carriers sold for scrap decreased by 44.1 per cent to 3.3 million dwt in 2003, and the number

of combined carriers decreased by about two thirds to 0.5 million dwt in 2003. There was a decrease in the scrapping of all sizes of bulk carriers. Demolition sales of vessels over 120,000 dwt decreased from 5 units in 2002 to 2 units in 2003. For vessels in the range of 60,000 to 120,000 dwt, sales contracted from 26 units in 2002 to 8 units in 2003. For Handymax tonnage there was a slight decrease in demolition sales from 11 units in 2002 to 9 units in 2003. The average age of all dry bulk carriers broken up was 26.5 years in 2003, slightly lower than the previous year. Other ship types had a different trading life in 2003, with containerships being sold to breakers at an average age of 25.5 years and general cargo ships at an average age of 29.3 years. Ship demolition came into focus owing to environmental concerns. In October the *Hesperus*, sold for demolition in India, was not allowed by the Ministry of the Environment to beach at Alang (Gujarat), following allegations that it contained hazardous chemicals which had not been disposed of before entering the country. This followed a similar event in Turkey regarded as a violation of the Basel Convention, which, *inter alia*, provides against imports of hazardous waste. In November the United Kingdom's

Table 10

## Broken-up tonnage, 1990 and 1999–2003

Broken-up tonnage	1990	1999	2000	2001	2002	2003
Tonnage sold for breaking (million dwt)	16.9	30.7	22.2	27.8	30.5	25.6
Broken-up tonnage as a percentage of the total world fleet	2.4	3.9	2.7	3.4	3.6	3.0

Sources: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, *Review*, various issues, and Lloyd's Register – Fairplay.

Table 11

## Tonnage reported sold for breaking, by types of vessel, 1999–2003

(millions of dwt and percentage shares)

Years	Million dwt						Percentage share					
	Tankers	Combined carriers	Bulk carriers	Others	Total	World fleet	Total	Tankers	Combined carriers	Bulk carriers	Others	Total
1999	16.7	1.1	9.7	3.25	30.7	799.0	3.8	54.2	3.7	31.5	10.6	100.0
2000	13.5	1.0	4.6	3.10	22.2	808.4	2.7	60.9	4.3	20.8	14.0	100.0
2001	15.7	0.8	8.1	3.24	27.8	825.7	3.4	56.5	2.7	29.1	11.7	100.0
2002	18.1	1.6	5.9	4.92	30.5	844.2	3.6	59.3	5.2	19.3	16.1	100.0
2003	18.4	0.5	3.3	3.4	25.6	857.0	3.0	71.9	2.0	12.9	13.3	100.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, *Review*, various issues.

Table 12

Average age of broken-up ships, by type, from 1999 to 2003 <sup>a</sup>

(years)

Year	Tankers	Dry bulk carriers	Containerships	General cargo ships
1999	26.2	25.0	24.8	26.7
2000	26.9	25.9	25.7	27.3
2001	28.0	26.7	26.9	27.4
2002	28.3	26.6	26.0	28.2
2003	29.3	26.5	25.5	29.3

Source: Compiled by the UNCTAD secretariat on the basis of data in Institute of Shipping Economics and Logistics (2004), *Shipping Statistics and Market Review*, Jan./Feb., table I-1.3.2.

<sup>a</sup> Ships of 300 grt and over.



Environmental Agency revoked on environmental grounds a licence to import from the United States 13 former naval reserve vessels for scrapping. At the end of the year, a feasibility study was conducted in the Netherlands for setting up a “green recycling dock” for ship demolition.

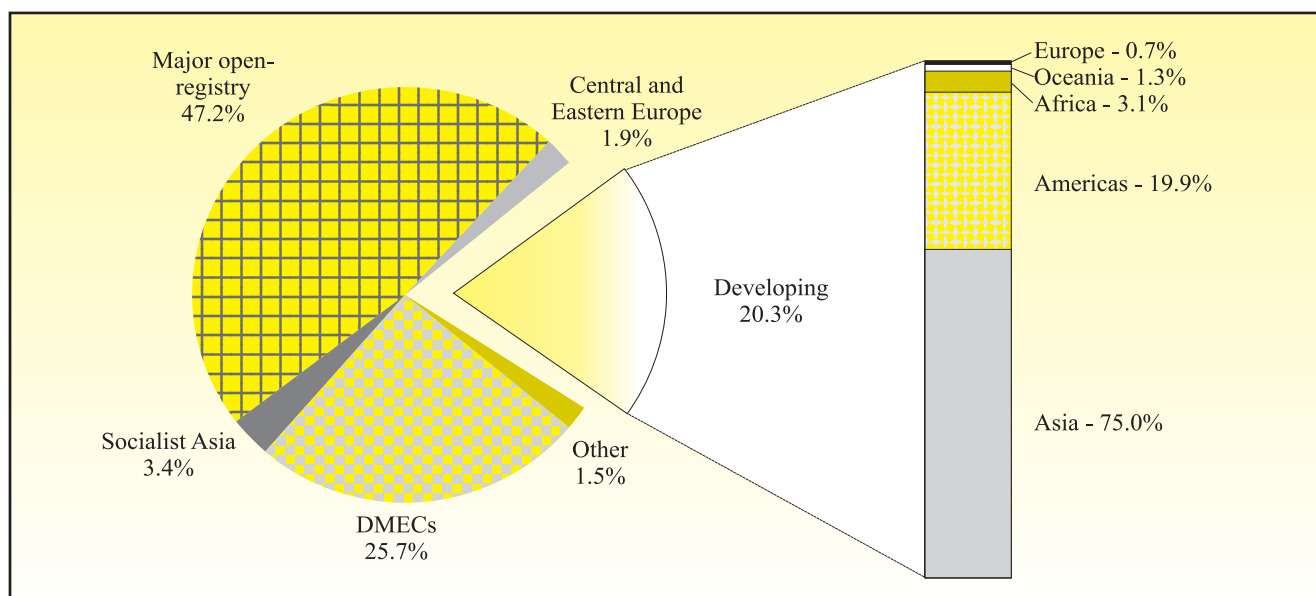
**B. OWNERSHIP OF THE WORLD FLEET**

**1. Distribution of world tonnage by country groups**

The total world fleet continued to expand in 2003, increasing by 1.5 per cent to 857.0 million dwt (see figure 5 and table 13). The rate of growth of the tonnage of developed market-economy countries was more than four times that of the total world fleet, reaching 6.1 per cent (an increase of 13.3 million dwt to 230.4 million dwt). This could reflect the steps taken in some European Union countries to apply tonnage taxes instead of standard tax rules to vessels registered in the country, as well as the guidelines for State aid approved by the European Union in October 2003. The tonnage of major open-registry countries in 2003 increased marginally by

1.0 million dwt to 399.5 million dwt. Approximately two thirds of these beneficially owned fleets are owned by developed market-economy countries and the rest by developing countries. The share of the world fleet registered in developing countries has continued to increase, rising by 10.1 million dwt (5.9 per cent) in 2003 to 181.4 million dwt. This increase resulted from investments made by shipowners in Asian developing countries, whose fleets expanded by 9.1 million dwt (7.2 per cent) to 136.0 million dwt, accounting for 75.0 per cent of the developing countries’ total fleet. The fleets of developing countries of Africa and America increased by the same amount (0.4 million dwt) to 5.7 and 36.0 million dwt respectively. A marginal decrease of 0.1 million dwt was seen in the fleet of developing countries in Europe, while the small fleet of developing countries in Oceania increased by 0.4 million dwt to 2.4 million dwt. The fleets of the socialist countries in Asia and the countries of Central and Eastern Europe evolved in the opposite direction during 2003, the former decreasing by 0.2 million dwt and the latter expanding by 1.6 million dwt.

Figure 5  
**World tonnage by country groups, as of 1 January 2004**  
*(percentage distribution of dwt)*



Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd’s Register – Fairplay.

Table 13

**Distribution of world tonnage (dwt) by groups of countries of registration,  
1980, 1990, 2002, 2003 and 2004 <sup>a</sup>**  
(beginning-of-year figures)

Flag of registration by group of countries	Tonnage and percentage shares <sup>b</sup> in millions of dwt				
	1980 <sup>c</sup>	1990 <sup>d</sup>	2002	2003	2004
<b>World total</b>	682.8 <i>100.0</i>	658.4 <i>100.0</i>	825.7 <i>100.0</i>	844.2 <i>100.0</i>	857.0 <i>100.0</i>
<b>Developed market-economy countries</b>	350.1 <i>51.3</i>	219.0 <i>33.3</i>	207.5 <i>25.1</i>	217.1 <i>25.7</i>	230.4 <i>26.9</i>
<b>Major open-registry countries</b>	212.6 <i>31.1</i>	224.6 <i>34.1</i>	402.4 <i>48.7</i>	398.5 <i>47.2</i>	399.5 <i>46.6</i>
<b>Countries of Central and Eastern Europe (including former USSR)</b>	37.8 <i>5.5</i>	44.3 <i>6.7</i>	15.4 <i>1.9</i>	15.9 <i>1.9</i>	15.7 <i>1.8</i>
<b>Socialist countries of Asia</b>	10.9 <i>1.6</i>	22.1 <i>3.4</i>	26.5 <i>3.2</i>	28.3 <i>3.4</i>	29.9 <i>3.5</i>
<b>Developing countries</b>	68.4 <i>10.0</i>	139.7 <i>21.2</i>	159.0 <i>19.3</i>	171.3 <i>20.3</i>	181.4 <i>21.2</i>
<i>of which:</i>					
<b>Africa</b>	7.2	7.3	5.7	5.3	5.7
<b>Americas</b>	21.8	25.5	34.6	35.6	36.0
<b>Asia</b>	39.1	89.5	117.0	126.9	136.0
<b>Europe</b>	0.2	13.8	1.1	1.3	1.2
<b>Oceania</b>	0.1	3.6	0.6	2.0	2.4
<b>Other, unallocated</b>	3.0 <i>0.4</i>	8.7 <i>1.3</i>	14.8 <i>1.8</i>	13.1 <i>1.6</i>	0.0 <i>0.0</i>

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

<sup>a</sup> Excludes the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, which in 2003 amounted respectively to 4.3, 1.8 and 1.6 million dwt.

<sup>b</sup> Percentage shares are shown in italics.

<sup>c</sup> Mid-year figure.

<sup>d</sup> End-of-year figure.

## 2. Distribution of world tonnages by types of vessel by country groups

Table 14 provides more detailed data on fleet distribution by types of vessel and country groups for 1970, 1980, 1990, 2000, 2002 and 2003. The share of oil tankers in the total world fleet increased by 0.9 per cent in 2003 compared with 2002. This reinforced the trend of the previous year and reflected the high level of tanker deliveries during 2003. There was a 0.3 per cent increase in the share of bulkers in the total world fleet, which reached 35.9 per cent — the highest for the years selected. The share of general cargo vessels in the world fleet continued to decrease, falling to 11.1 per cent, while that of container vessels continued its upward trend to 10.6 per cent. The share of other types of vessels decreased to 5.5 per cent. In the oil tanker sector, the share of developed market-economy countries continued its upward trend to 32.2 per cent in 2003 from 30 per cent in 2000. Conversely, the open-registry countries' share decreased to 45.7 per cent, as compared with 48.6 per cent the previous year. These fluctuations for the two country groups contrast with the traditional tendency for owners in developed market-economy countries to register tanker tonnage under open registry. The share of developing countries also increased again in 2003 — to 19.4 per cent — maintaining the upward trend of the previous year. The share of Asian developing countries increased by 1.9 per cent in 2003 to 15.8 per cent of the world tanker fleet, while that of the developing countries of America increased marginally to 3.0 per cent.

In the dry bulk carrier sector, the tonnage share of developed market-economy countries in the total world fleet increased by 2.1 per cent in 2003 to 19.0 per cent, considerably less than its share in 1980 (52.7 per cent). Major open-registry countries reduced their share to 54.1 per cent in 2003, as compared with 54.6 per cent in 2002 (31.7 per cent in 1980). The developing countries' share increased by 1.0 per cent to 21.8 per cent. The shares of countries in Central and Eastern Europe and socialist countries in Asia changed by 0.1 per cent but in opposite directions, with the share of the former reduced to 1.0 per cent and that of the latter expanded to 4.1 per cent of the world fleet respectively.

In the sector of general cargo ships, the fleet developments for developed market-economy countries and open-registry countries mirrored those in the tanker and dry bulk carrier sectors. Developed market-economy

countries increased their share to 22.7 per cent of the world fleet, while open-registry countries recorded a drop to 33.6 per cent. Developing countries reduced their share by 0.8 per cent to 28.3 per cent, with increases spread among all regions. General cargo ships continued to be the largest of the five principal types of vessel for developing countries.

Developed market-economy countries decreased their share of containership deadweight tonnage in 2003 by 0.3 per cent to 33.6 per cent. The major open-registry countries' share increased by 0.7 per cent, reaching 45.1 per cent, approximately two thirds of which represented containerships beneficially owned by owners in developed market-economy countries. Thus developed market-economy countries own about 60 per cent of the fleet. The share of developing countries decreased slightly to 17.9 per cent, with the share of Asian developing countries decreasing to 12.3 per cent, while developing countries in America increased their share by 5.4 per cent and those in Africa maintained their share at 0.1 per cent.

## 3. Fleet structure of main country groups

Table 15 provides data on the structure of the merchant fleet of the main country groups as of 1 January 2004. Developed market-economy countries' tonnage in tankers increased in 2003 by 5.8 million dwt and reduced marginally its share of the group's total fleet to 44.3 per cent. The share of dry bulk carriers increased to 25.4 per cent owing to the increase of 7.8 million dwt. General cargo ships' and containerships' share of their fleet registered similar upward movements, to 9.3 per cent for the former and to 13.2 per cent for the latter, as compared with 9.1 per cent and 12.9 per cent in 2002. Major open-registry countries increased their total fleets by 1.0 million dwt. The greater proportion of their fleets was in the oil tanker and dry bulk carrier sectors, these two sectors accounting for 77.9 per cent of their fleet at the beginning of 2004. The proportion of oil tankers decreased in 2003 by 3.2 million dwt to 36.2 per cent of the group's total fleet, while the share of dry bulk carriers increased in the same year by 2.8 million dwt to 41.7 per cent as compared with 41.1 per cent the previous year. The share of general cargo ships decreased in 2003 by 1.2 million dwt, accounting for 8.0 per cent of the group's total fleet, down from 8.3 per cent in 2002. These countries' containership fleet expanded in 2003 by 4.0 million dwt to 10.2 per cent of their total fleet (up from 9.2 per cent in 2002).

Table 14

Percentage shares of world tonnage, by types of vessel and country groups, in 1970, 1980, 1990, 2000, 2002 and 2003 <sup>a b</sup>

	Year	Total dwt		Oil tankers	Bulk carriers <sup>c</sup>	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total					
<b>World total</b>	1970	326.1	100.0	39.4	20.2	30.2	0.9	9.3
	1980	682.8	100.0	49.7	27.2	17.0	1.6	4.5
	1990	658.4	100.0	37.4	35.6	15.6	3.9	7.5
	2000	808.4	100.0	35.3	34.8	12.7	8.6	8.6
	2002	844.2	100.0	36.1	35.6	11.5	9.8	7.1
	2003	857.0	100.0	37.0	35.9	11.1	10.6	5.5
<b>Developed market-economy countries</b>	1970	211.9	65.0	63.9	69.2	65.6	99.0	61.3
	1980	350.1	51.3	52.5	52.7	43.4	74.3	50.4
	1990	219.0	33.3	37.3	29.5	23.1	46.5	45.2
	2000	203.4	25.2	30.0	16.9	19.6	34.4	37.6
	2002	217.1	25.7	31.7	16.9	20.4	33.9	37.3
	2003	230.4	26.9	32.2	19.0	22.7	33.6	38.0
<b>Open-registry countries</b>	1970	70.3	21.6	26.4	24.1	7.6	1.0	3.6
	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	1990	224.6	34.1	41.6	33.2	26.2	21.1	24.2
	2000	392.2	48.5	50.8	55.0	36.5	40.6	38.2
	2002	398.5	47.2	48.6	54.6	34.1	44.4	28.3
	2003	399.5	46.6	45.7	54.1	33.6	45.1	33.1
<b>Central and Eastern Europe</b>	1970	20.5	6.2	4.6	2.1	12.0	-	28.8
	1980	37.8	5.5	2.8	4.2	12.3	2.9	19.2
	1990	44.3	6.7	3.2	6.1	15.5	3.2	10.9
	2000	16.3	2.0	1.0	1.4	6.3	0.6	3.7
	2002	15.9	1.9	1.0	1.1	6.7	0.5	4.5
	2003	15.7	1.8	1.0	1.0	6.5	0.5	6.0
<b>Socialist countries of Asia</b>	1970	1.2	0.4	0.1	-	1.1	-	0.3
	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1990	22.1	3.4	1.1	3.6	8.5	4.2	2.2
	2000	26.1	3.2	1.4	4.0	7.6	2.6	1.8
	2002	28.3	3.4	1.5	4.0	8.4	2.6	2.1
	2003	29.9	3.5	1.7	4.1	8.8	2.9	2.0

Table 14 (continued)

	Year	Total dwt		Oil tankers	Bulk carriers <sup>c</sup>	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total	Percentage share by vessel type <sup>d</sup>				
<b>Developing countries</b>	1970	20.5	6.3	4.7	4.3	12.6	-	5.9
	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1990	139.7	21.2	16.3	25.6	26.2	16.0	17.4
	2000	157.0	19.4	16.1	20.7	27.1	18.7	17.3
	2002	171.3	20.3	17.3	20.8	29.1	18.0	22.0
	2003	181.4	21.2	19.4	21.8	28.3	17.9	20.9
<i>of which:</i>								
<b>Africa</b>	1970	1.1	0.3	0.2	-	1.3	-	0.7
	1980	7.1	1.0	1.1	0.1	2.3	..	2.1
	1990	7.3	1.1	1.0	0.5	2.3	0.2	2.9
	2000	6.0	0.7	0.5	0.4	1.7	0.2	1.8
	2002	5.3	0.6	0.4	0.4	1.5	0.1	2.1
	2003	5.7	0.7	0.6	0.4	1.4	0.1	2.2
<b>America</b>	1970	8.7	2.7	2.8	1.4	4.3	-	2.5
	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	1990	25.5	3.9	3.0	3.8	6.2	1.4	4.7
	2000	34.1	4.2	2.7	3.5	9.6	5.1	4.5
	2002	35.6	4.2	2.9	3.25	9.5	4.9	6.0
	2003	36.0	4.2	3.0	3.2	9.6	5.4	5.8
<b>Asia</b>	1970	10.7	3.3	1.7	2.9	6.9	-	2.6
	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	1990	89.5	13.6	10.7	17.6	13.7	13.5	9.1
	2000	115.7	14.3	12.9	16.5	15.5	13.3	10.9
	2002	126.9	15.0	13.9	16.5	17.1	12.8	13.4
	2003	136.0	15.9	15.8	17.4	16.6	12.3	11.9
<b>Europe</b>	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	13.8	2.1	1.4	2.8	3.2	0.6	0.4
	2000	1.0	0.1	0.0	0.3	0.2	0.0	0.0
	2002	1.3	0.2	0.0	0.3	0.2	0.0	0.2
	2003	1.2	0.1	0.0	0.3	0.2	0.0	0.1
<b>Oceania</b>	1970	-	-	-	-	-	-	-
	1980	0.2	-	-	-	0.1	-	-
	1990	3.6	0.5	0.2	0.9	0.8	0.3	0.3
	2000	0.2	0.0	0.0	0.0	0.1	0.0	0.1
	2002	2.0	0.2	0.1	0.3	0.7	0.0	0.3
	2003	2.4	0.3	0.0	0.4	0.6	0.0	0.9

Table 14 (continued)

	Year	Total dwt		Oil tankers	Bulk carriers <sup>c</sup>	General cargo	Container ships	Other ships
		Million dwt	Percentage of world total					
<b>Unallocated</b>	1970	1.7	0.5	0.3	0.3	1.1	-	0.1
	1980	3.0	0.4	0.2	0.6	0.9	1.6	0.1
	1990	8.7	1.3	0.5	2.0	0.5	9.0	0.1
	2000	13.4	1.7	0.7	1.9	2.9	3.1	1.3
	2002	13.1	1.6	0.0	2.6	1.3	0.7	5.8
	2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay. See annex III(b) for details.

<sup>a</sup> Excludes the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

<sup>b</sup> Data up to 1990 were as at 1 July and from 1991 onwards as of 31 December.

<sup>c</sup> Ore and bulk carriers, including combined ore/oil and ore/bulk/oil carriers.

<sup>d</sup> Percentages for 1970 were calculated on the basis of grt.

Table 15

**Structure of the merchant fleets of the main country groups as of 1 January 2004 <sup>a</sup>**  
(millions of dwt and percentage shares)

	World fleet		Developed market-economy countries		Open-registry countries		Developing countries		Central and Eastern Europe		Socialist countries of Asia	
	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%	Million dwt	%
<b>Total fleet</b>	857.0	100.0	230.4	100.0	399.5	100.0	181.4	100.0	15.7	100.0	29.9	100.0
<b>Oil tankers</b>	316.8	37.0	102.2	44.3	144.6	36.2	61.5	33.9	3.1	19.9	5.4	17.9
<b>Bulk carriers</b>	307.7	35.9	58.4	25.4	166.6	41.7	66.9	36.9	3.1	20.0	12.6	42.0
<b>General cargo ships</b>	94.8	11.1	21.5	9.3	31.9	8.0	26.9	14.8	6.2	39.5	8.4	27.9
<b>Containerships</b>	90.5	10.6	30.4	13.2	40.8	10.2	16.2	8.9	0.4	2.7	2.7	8.9
<b>Other ships</b>	47.3	5.5	18.0	7.8	15.7	3.9	9.9	5.5	2.8	17.9	1.0	3.2

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

<sup>a</sup> Ships of 100 grt and over, excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

In developing countries, tonnage distribution was characterized by a comparatively high proportion of oil tankers and dry bulk carriers, which represented 33.9 per cent and 36.9 per cent respectively in 2003. In absolute terms, these countries' 2003 tonnage in oil tankers and dry bulk carriers was 61.5 million dwt and 66.9 million dwt as compared with 102.2 million dwt and 58.4 million dwt for developed market-economy countries. The share of general cargo ships in this group decreased in 2003 to 26.9 million dwt compared with 28.3 million dwt in 2002, while containerships increased in tonnage by 1.3 million dwt and in percentage terms to 8.9 per cent in 2003 from 8.7 per cent the previous year. In the countries of Central and Eastern Europe, general cargo ships were relatively dominant, accounting for 39.5 per cent in 2003, as compared with 41.1 per cent in 2002. On the other hand, containerships have remained unchanged at 0.4 million dwt, or around 2 per cent of the total, since the early 1990s. The socialist countries of Asia continued to have a predominant share of both dry bulk carriers and general cargo ships. The absolute tonnage of these types of vessel increased in 2003 to 12.6 million dwt and 8.4 million dwt respectively. However, their share of the total decreased marginally to 42.0 per cent (42.9 per cent in 2002) for dry bulk carriers and 27.9 per cent (29.0 per cent in 2002) for general cargo ships. The absolute tonnage of containerships increased in 2003 to 2.7 million dwt, or 8.9 per cent (compared with 7.6 per cent in 2002).

### C. REGISTRY OF VESSELS

#### 1. The 35 most important maritime countries and territories

Rankings in terms of deadweight for the 35 most important maritime countries and territories are provided in table 16. In 2003, these 35 countries and territories controlled 97.5 per cent of the world merchant fleet (2.6 per cent more than in the previous year). Croatia and Chile, which had been 34<sup>th</sup> and 35<sup>th</sup> in 2002, were replaced in 2003 by the new entrants, Thailand and Ukraine respectively. There were several movements in the ranks for the other countries: Malaysia moved up by five places and Canada, Sweden and Cyprus by three places, Germany and Belgium by two places, and Singapore, the Russian Federation, India, the Islamic Republic of Iran and Spain by 1 place; other countries moved down by one place (China, United States, Taiwan Province of China, Denmark, Saudi Arabia, Kuwait, Monaco, Australia and Indonesia), two places (Turkey, Philippines and France) and three places (Netherlands and Brazil).

Among these most important maritime countries and territories, registration under a foreign flag continued in 2003. The total tonnage registered under foreign flags in 2003 increased to 489.3 million dwt, representing 64.6 per cent of the 35 countries' total fleet, as compared with 465.8 million dwt or 64.0 per cent in 2002. For developing countries and territories, the trend in favour of registering their tonnage under foreign flags is a recent one. In 2003, the 12 developing countries and territories listed in the table (including Hong Kong (China) but excluding Taiwan Province of China) had 45.2 per cent of their total tonnage registered under foreign flags. In spite of the continuous trend towards flagging out among developing countries, there are significant differences among the countries concerned. The foreign registries of Saudi Arabia and Hong Kong (China) amounted to 92.5 per cent and 65.9 per cent respectively, while the Islamic Republic of Iran and the Philippines made significantly less use of foreign flag facilities, which accounted for only 5.8 and 19.4 per cent respectively of their fleets. For developed market-economy countries, the share of foreign-registered tonnage increased to 71.3 per cent in 2003.

#### 2. Open registries

The share of the world merchant fleet in major open registries increased only by 0.5 per cent in 2003 after contracting by 4.7 per cent the previous year. This could reflect changes in the fiscal rules of developed market-economy countries and registration of vessels in other open registries. The tonnage distribution of the six major open-registry countries by principal types of vessel is shown in table 17, together with the corresponding totals for six minor open-registry countries. The total tonnage registered in 2003 in the six major registries increased by less than 1 per cent to 357.8 million dwt from 356.1 million dwt the previous year, when the tonnage contracted by 4.7 per cent. Panama continued to head the list in 2003 with a minimum expansion of 0.2 million dwt. The bilateral maritime agreement concluded between Panama and the Russian Federation by mid-2003 was expected to lead to a more equitable treatment of foreign vessels flying the Panamanian flag in Russian ports and to the recognition of the Russian register as a classification society. The charges of between \$1,500 and \$3,000 for evaluating ship security plans in accordance with the International Ship and Port Facility Security (ISPS) Code levied by the specialized company appointed by Panama gave rise to some complaints late in the year. Liberia's fleet expanded by 8.3 per cent. This registry decided to train its own inspectors and deploy them in key locations around the world for verifying

Table 16

The 35 most important maritime countries and territories as of 1 January 2004 <sup>a</sup>

Country of domicile <sup>b</sup>	Number of vessels			Deadweight tonnage				
	National flag <sup>c</sup>	Foreign flag	Total	National flag <sup>c</sup>	Foreign flag	Total	Foreign flag as a % of total	Total as a % of world total
<b>Greece</b>	751	2 361	3 112	50 159 627	107 179 349	157 338 976	68.12	20.26
<b>Japan</b>	732	2 216	2 948	13 054 209	97 036 098	110 090 307	88.14	14.17
<b>Norway</b>	840	813	1 653	21 828 640	29 926 150	51 754 790	57.82	6.66
<b>Germany</b>	307	2 161	2 468	6 739 997	42 247 135	48 987 132	86.24	6.31
<b>China</b>	1 627	788	2 415	24 206 132	23 195 756	47 401 888	48.93	6.10
<b>United States</b>	592	948	1 540	10 587 584	35 240 739	45 828 323	76.90	5.90
<b>Hong Kong (China)</b>	254	238	492	15 375 679	15 507 833	30 883 512	50.21	3.98
<b>Republic of Korea</b>	485	380	865	8 584 810	16 651 656	25 236 466	65.98	3.25
<b>Singapore</b>	449	291	740	11 703 683	11 574 617	23 278 300	49.72	3.00
<b>Taiwan Province of China</b>	111	426	537	5 199 044	17 678 913	22 877 957	77.27	2.95
<b>United Kingdom</b>	391	392	783	9 192 550	10 430 365	19 622 915	53.15	2.53
<b>Russian Federation</b>	2 142	391	2 533	8 317 313	8 507 445	16 824 758	50.57	2.17
<b>Denmark</b>	323	338	661	8 606 789	7 685 160	16 291 949	47.17	2.10
<b>Italy</b>	531	121	652	8 785 816	3 674 335	12 460 151	29.49	1.60
<b>India</b>	353	45	398	10 919 675	1 470 437	12 390 112	11.87	1.60
<b>Saudi Arabia</b>	50	76	126	908 754	11 175 137	12 083 891	92.48	1.56
<b>Malaysia</b>	262	73	335	5 985 287	3 782 960	9 768 247	38.73	1.26
<b>Iran, Islamic Republic of</b>	147	9	156	8 232 477	505 645	8 738 122	5.79	1.12
<b>Turkey</b>	405	171	576	6 471 308	2 210 446	8 681 754	25.46	1.12
<b>Switzerland</b>	14	267	281	770 220	7 788 365	8 558 585	91.00	1.10
<b>Netherlands</b>	549	196	745	3 785 658	3 524 525	7 310 183	48.21	0.94
<b>Belgium</b>	43	122	165	1 192 165	5 197 185	6 389 350	81.34	0.82
<b>Canada</b>	219	104	323	2 584 240	3 330 933	5 915 173	56.31	0.76
<b>Sweden</b>	162	157	319	1 460 911	4 374 954	5 835 865	74.97	0.75
<b>Philippines</b>	313	37	350	4 455 395	1 073 077	5 528 472	19.41	0.71
<b>Brazil</b>	140	11	151	3 823 338	1 609 053	5 432 391	29.62	0.70
<b>France</b>	154	103	257	2 607 750	2 358 553	4 966 303	47.49	0.64
<b>Spain</b>	80	255	335	232 358	4 675 988	4 908 346	95.27	0.63
<b>Indonesia</b>	515	101	616	3 362 462	1 282 311	4 644 773	27.61	0.60
<b>Cyprus</b>	41	68	109	1 061 970	2 519 319	3 581 289	70.35	0.46
<b>Kuwait</b>	32	0	32	3 359 448	0	3 359 448	0.00	0.43
<b>Monaco</b>	0	95	95	0	3 032 474	3 032 474	100.00	0.39



Table 16 (continued)

Country of domicile <sup>b</sup>	Number of vessels			Deadweight tonnage				
	National flag <sup>c</sup>	Foreign flag	Total	National flag <sup>c</sup>	Foreign flag	Total	Foreign flag as a % of total	Total as a % of world total
<b>Australia</b>	46	42	88	1 383 636	1 455 419	2 839 055	51.26	0.37
<b>Thailand</b>	221	33	254	1 895 071	298 436	2 193 507	13.61	0.28
<b>Ukraine</b>	298	91	389	1 077 447	1 105 126	2 182 573	50.63	0.28
<b>Total (35 countries)</b>	13 579	13 920	27 499	267 911 443	489 305 894	757 217 337	64.62	97.49
<b>World total</b>	14 840	14 951	29 791	276 166 653	500 564 528	776 731 181	64.45	100.00

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

- <sup>a</sup> Vessels of 1,000 grt and above, excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.
- <sup>b</sup> The country of domicile indicates where the controlling interest (i.e. parent company) of the fleet is located. In several cases, determining this has required certain judgements to be made. Thus, for instance, Greece is shown as the country of domicile for vessels owned by a Greek owner with representative offices in New York, London and Piraeus, although the owner may be domiciled in the United States.
- <sup>c</sup> Includes vessels flying the national flag but registered in territorial dependencies or associated self-governing territories. For the United Kingdom, British flag vessels are included under the national flag, except for Bermuda (listed in table 17 as an open-registry territory).

Table 17

Tonnage distribution of open-registry fleets <sup>a</sup> as of 1 January 2004

Flag	Oil tankers		Bulk carriers		General cargo		Container ships		Others		Total		Total as of 1.1.2003
	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Thousand dwt
<b>Panama</b>	616	46 627	1 299	83 289	1 186	11 217	537	19 249	473	8 329	4 111	168 710	168 508
<b>Liberia</b>	363	37 611	263	16 371	181	3 104	367	12 572	162	4 425	1 336	74 083	68 413
<b>Bahamas</b>	177	22 790	144	8 662	384	5 883	58	1 764	263	3 453	1 026	42 552	44 122
<b>Malta</b>	225	14 296	396	17 283	342	2 889	32	613	25	268	1 020	35 348	36 649
<b>Cyprus</b>	110	6 291	370	19 238	310	3 054	104	2 826	44	296	938	31 706	32 097
<b>Bermuda</b>	4	629	25	3 579	19	228	18	526	18	484	84	5 446	6 293
<b>Subtotal</b>	1 495	128 243	2 497	148 422	2 422	26 375	1 116	37 549	985	17 255	8 515	357 845	356 082
<b>St. Vincent and the Grenadines</b>	29	241	98	3 896	263	2 022	22	163	78	240	490	6 562	6 554
<b>Antigua and Barbuda</b>	7	27	18	382	589	2 546	222	4 260	15	92	851	7 306	6 039
<b>Cayman Is.</b>	40	2 053	23	1 159	44	580	0	0	29	293	136	4 086	3 321
<b>Luxembourg</b>	14	718	0	0	8	62	9	147	18	346	49	1 273	1 990
<b>Vanuatu</b>	0	0	25	1 236	16	288	1	29	87	232	129	1 785	1 381
<b>Gibraltar</b>	19	349	2	30	80	423	14	195	8	70	123	1 068	1 261
<b>Total</b>	1 604	131 630	2 663	155 126	3 422	32 296	1 384	42 343	1 220	18 528	10 293	379 923	376 628
<b>Total six major open registries as of 1 January 2003</b>													
1 538 134 277 4 286 145 514 2 527 27 794 1 007 31 817 1 005 16 680 8 563 356 081													
<b>Total six major open registries as of 1 January 2002</b>													
1 267 132 382 2 684 151 764 2 946 31 892 1 014 30 574 1 646 26 921 9 557 373 533													
<b>Total six major open registries as of 1 January 2001</b>													
395 164													

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

<sup>a</sup> Ships of 1,000 grt and above. This table is not fully comparable with tables 13 and 15, which list ships of 100 grt and above as the base.

security audits mandated by the ISPS Code. The combined tonnage of Panama and Liberia amounts to 67.8 per cent of the total tonnage of the six major open-registry countries. In 2003, Bermuda, the smallest of the six major registries, reduced its fleet by 13.5 per cent to 5.4 million dwt, lower than those tonnages registered under Saint Vincent and the Grenadines and Antigua and Barbuda. The remaining three major open registries — the Bahamas, Malta and Cyprus — recorded a reduction in tonnages of 3.6, 3.5 and 1.2 per cent respectively.

Four of the minor open registries are located in developing countries of America (three) and Oceania (one), while the two others are located in developed market-economy countries of Europe. A number of other developing countries (i.e. Belize, Cambodia, Honduras, Sri Lanka, etc.) also have open registries, albeit with less coverage. Maintaining a good flag reputation is not always easy, as was shown when the US Coast Guard discovered that some officers aboard a vessel flying the flag of Saint Vincent and the Grenadines had improper certificates, which had been endorsed by flag authorities. Elsewhere, Cambodia reported positive results in respect of its registry and the Marshall Islands and Gibraltar reported significant increases in registered tonnages.

Analysis by type of vessel for the six major registries indicated that tankers reduced their share of the total deadweight in 2003 to 35.8 per cent as compared with 37.7 per cent in 2002, while dry bulk carriers increased their share to 41.5 per cent. For the six major open registries, the combined tonnage of these two types of vessels accounts for 77.3 per cent of the total deadweight and 75.5 per cent when the minor registries are included. General cargo ships (3,422 ships) accounted for 33.2 per cent of the total number of ships, followed by dry bulk carriers (2,663 ships or 25.9 per cent of the total). These figures reflect the importance of open registries for the maritime industry.

### 3. Nationality of vessels

Table 18 indicates the participation of nationals in the registry of a number of open and international registers for the three most recent years. The data compare the total tonnage registered in the listed countries of registry with the tonnage owned by nationals of, and registered in, the countries of registry. The 20 countries or territories of registry have been divided into three groups: six major open registers, six minor open registers and eight

international registers. In open registers, the share of tonnage owned by nationals of open-registry countries is minimal, well below 10 per cent. For international registers, however, two factors are noted. First, nationals of the country or territory of the registry have a significant share of the tonnage registered — as is the case with Denmark, Norway, Hong Kong (China) and Singapore. Second, nationals of a country that have a privileged relationship with the territory of registry have a significant share of the tonnage registered — as is the case with the United Kingdom with the Isle of Man, the United States with the Marshall Islands, France with the French Antarctic Territory (the Kerguelen Islands) and the Netherlands with the Netherlands Antilles.

In those international registers, the share of tonnage owned by nationals of international registers and of nationals of countries that have a privileged relationship with the territory of registry is high, well above 30 per cent and in some cases above 80 per cent. Some countries and territories with the highest share, namely Denmark, Norway and Hong Kong (China), were ranked 13<sup>th</sup>, 3<sup>rd</sup> and 7<sup>th</sup> respectively of the 35 most important maritime countries in 2003.

The true nationalities of the vessels registered in the 12 open registries are analysed in table 19. In 2003, 35 countries or territories accounted for 89 per cent of the total tonnage of the 12 open-registry fleets. This percentage was the same as that in 2002. Ownership is particularly concentrated in 10 countries or territories, which control 75.0 per cent of the deadweight of vessels registered in these open-registry countries, while the top five countries or territories control 58.0 per cent. Greece was ranked first in 2003 for the tenth consecutive year with the largest share (22.0 per cent) of the open-registry fleets. Greece also had the largest foreign-flag ownership, representing 107.2 million dwt or 21.4 per cent of the total world foreign-flag tonnage, followed by Japan with 97.0 million dwt or 19.4 per cent of the total tonnage. The two countries' combined foreign-flag tonnage accounted for 40.8 per cent of the total world tonnage under foreign flags.

Table 19 also provides an overview of the way in which the 35 countries were registering their vessels at the beginning of 2004 under open registries. Overall, the share of the six major open registers stands at 93.9 per cent, with the share of the minor open register considerably less — only 6.1 per cent.

Table 18

Tonnage owned by nationals of, and registered in, the country or territory of registry in the total fleet of the most important open and international registers, as of 1 January <sup>a</sup>  
(thousands of dwt)

Country or territory of registry	Total tonnage registered country of registry			Participation of nationals of country of registry and of nationals of countries having a privileged relationship with country of registry					
				in tonnage of registered fleet			in percentage of registered fleet (%)		
	2002	2003	2004	2002	2003	2004	2002	2003	2004
<i>Six major open registries</i>									
<b>Panama</b>	171 874	168 508	168 710	0	0	0	0.0	0.0	0.0
<b>Liberia</b>	73 180	68 413	74 083	0	0	0	0.0	0.0	0.0
<b>Bahamas</b>	45 327	44 122	42 552	0	0	0	0.0	0.0	0.0
<b>Malta</b>	42 130	36 649	35 348	36	0	0	0.1	0.0	0.0
<b>Cyprus</b>	32 940	32 097	31 706	756	824	1 062	2.3	2.6	3.3
<b>Bermuda</b>	8 082	6 293	5 446	0	0	0	0.0	0.0	0.0
<i>Six minor open registries</i>									
<b>St. Vincent and the Grenadines</b>	8 602	6 554	6 562	0	0	0	0.0	0.0	0.0
<b>Antigua and Barbuda</b>	5 856	6 039	7 306	0	0	0	0.0	0.0	0.0
<b>Cayman Islands</b>	2 539	3 321	4 086	0	0	0	0.0	0.0	0.0
<b>Luxembourg</b>	2 101	1 990	1 273	0	0	0	0.0	0.0	0.0
<b>Vanuatu</b>	1 534	1 381	1 785	0	0	0	0.0	0.0	0.0
<b>Gibraltar</b>	999	1 261	1 068	0	0	0	0.0	0.0	0.0
<b>Total open registries</b>	395 164	376 628	379 923	0	0	0	0.0	0.0	0.0
<i>Eight international registries</i>									
<b>Singapore</b>	32 082	31 246	36 486	11 826	12 627	11 704	36.9	40.4	32.1
<b>Norwegian International Ship Registry (NIS)</b>	28 709	27 373	24 007	24 532	23 654	19 873	85.5	86.4	82.8
<b>Hong Kong (China)</b>	20 333	24 892	34 468	16 530	13 207	15 376	81.3	53.1	44.6
<b>Marshall Islands</b>	18 058	21 860	31 625	8 023	8 667	11 018	44.4	39.6	34.8
<b>Isle of Man</b>	9 552	8 830	9 355	5 070	4 827	5 255	53.1	54.7	56.2
<b>Danish International Ship Registry (DIS)</b>	8 167	8 830	8 976	7 986	8 493	8 547	97.8	96.2	95.2
<b>French Antarctic Territory</b>	5 055	4 748	5 043	2 379	2 073	1 811	47.1	43.7	35.9
<b>Netherlands Antilles</b>	1 335	1 442	1 940	469	592	626	35.1	41.1	32.3

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

<sup>a</sup> Ships of 1,000 grt and above. This table is not fully comparable with tables 13 and 15, which list ships of 100 grt and above as the base.

Table 19

## True nationality of major open-registry fleets as of 1 January 2004

Country or territory of domicile	Panama			Liberia			Bahamas			Malta			Cyprus		
	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%
<b>Greece</b>	548	22 250.0	11.9	166	9 702.7	11.8	166	8 171.8	17.1	571	27 640.7	67.4	480	21 499.6	60.9
<b>Japan</b>	1 807	82 795.2	44.3	109	4 863.2	5.9	43	1 644.5	3.4	3	105.0	0.3	18	262.4	0.7
<b>Norway</b>	85	2 621.6	1.4	66	5 442.1	6.6	250	9 248.3	19.4	37	582.2	1.4	16	72.9	0.2
<b>Germany</b>	19	947.1	0.5	510	17 175.4	20.9	17	773.3	1.6	47	907.2	2.2	220	5 452.5	15.4
<b>China</b>	262	8 735.6	4.7	59	2 871.6	3.5	7	221.8	0.5	16	248.1	0.6	12	215.8	0.6
<b>USA</b>	134	2 566.4	1.4	107	5 792.4	7.1	173	9 896.3	20.7	9	532.6	1.3	3	9.6	0.0
<b>Hong Kong (China)</b>	129	8 631.3	4.6	26	1 862.8	2.3	8	283.7	0.6	0	0.0	0.0	2	37.4	0.1
<b>Republic of Korea</b>	300	15 072.0	8.1	8	538.5	0.7	1	16.6	0.0	1	11.3	0.0	3	98.0	0.3
<b>Singapore</b>	67	2 149.6	1.2	35	4 176.6	5.1	13	798.5	1.7	2	209.8	0.5	1	29.9	0.1
<b>Taiwan Province of</b>															
<b>China</b>	313	11 695.3	6.3	42	1 847.3	2.3	0	0.0	0.0	1	22.3	0.1	0	0.0	0.0
<b>United Kingdom</b>	30	611.5	0.3	24	742.1	0.9	89	1 275.3	2.7	4	72.5	0.2	13	530.3	1.5
<b>Russian Federation</b>	7	34.8	0.0	65	5 429.3	6.6	3	13.3	0.0	91	1 082.8	2.6	67	1 215.4	3.4
<b>Denmark</b>	14	415.5	0.2	5	275.6	0.3	59	555.2	1.2	3	12.5	0.0	0	0.0	0.0
<b>Italy</b>	4	57.7	0.0	10	897.5	1.1	9	344.5	0.7	25	598.6	1.5	1	5.1	0.0
<b>India</b>	9	180.8	0.1	6	506.6	0.6	2	106.8	0.2	0	0.0	0.0	5	106.4	0.3
<b>Saudi Arabia</b>	8	93.6	0.1	24	7 077.1	8.6	13	2 974.6	6.2	0	0.0	0.0	0	0.0	0.0
<b>Malaysia</b>	15	159.5	0.1	0	0.0	0.0	13	81.7	0.2	0	0.0	0.0	0	0.0	0.0
<b>Iran, Islamic Rep. of</b>	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	4	272.7	0.7	3	225.0	0.6
<b>Turkey</b>	9	51.7	0.0	3	141.2	0.2	5	62.5	0.1	99	1 254.0	3.1	0	0.0	0.0
<b>Switzerland</b>	148	5 203.6	2.8	13	373.1	0.5	2	105.9	0.2	43	852.2	2.1	5	101.9	0.3
<b>Netherlands</b>	22	295.7	0.2	9	130.4	0.2	40	1 946.6	4.1	6	33.5	0.1	22	219.1	0.6
<b>Belgium</b>	10	573.8	0.3	5	792.7	1.0	14	178.1	0.4	10	126.8	0.3	2	9.4	0.0
<b>Canada</b>	1	15.3	0.0	4	265.5	0.3	11	373.7	0.8	8	30.6	0.1	7	313.8	0.9
<b>Sweden</b>	4	19.7	0.0	12	1 024.3	1.2	13	680.6	1.4	1	8.4	0.0	7	29.9	0.1
<b>Philippines</b>	14	278.1	0.1	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	2	31.2	0.1
<b>Brazil</b>	4	561.6	0.3	5	762.5	0.9	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
<b>France</b>	10	276.6	0.1	4	92.2	0.1	25	634.3	1.3	0	0.0	0.0	2	26.3	0.1
<b>Spain</b>	42	300.7	0.2	1	94.5	0.1	6	682.7	1.4	0	0.0	0.0	4	124.8	0.4
<b>Indonesia</b>	47	555.5	0.3	1	79.0	0.1	2	82.2	0.2	2	25.6	0.1	0	0.0	0.0
<b>Cyprus</b>	9	636.3	0.3	1	96.1	0.1	10	521.8	1.1	3	54.5	0.1	41	1 062.0	3.0
<b>Kuwait</b>	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0
<b>Monaco</b>	16	648.2	0.3	10	508.4	0.6	24	668.7	1.4	7	163.0	0.4	0	0.0	0.0
<b>Australia</b>	5	166.0	0.1	3	417.7	0.5	7	191.3	0.4	2	64.1	0.2	0	0.0	0.0
<b>Thailand</b>	11	50.1	0.0	0	0.0	0.0	1	16.9	0.0	0	0.0	0.0	0	0.0	0.0
<b>Ukraine</b>	8	60.1	0.0	3	104.9	0.1	0	0.0	0.0	25	437.0	1.1	2	27.0	0.1
<b>Subtotal</b>	4 111	168 710.4	90.3	1 336	74 083.4	90.3	1 026	42 551.5	89.1	1 020	35 347.8	86.2	938	31 705.5	89.7
<b>Others</b>	2 190	18 149.6	9.7	225	8 001.6	9.7	264	5 198.5	10.9	285	5 650.2	13.8	246	3 626.5	10.3
<b>Total</b>	6 301	186 860.0	100.0	1 561	82 085.0	100.0	1 290	47 750.0	100.0	1 305	40 998.0	100.0	1 184	35 332.0	100.0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

Table 19 (continued)

Bermuda		Six minor open registries			Subtotal		Total foreign flag fleet			Country or territory of domicile	
No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels	000 dwt	%	No. of vessels		000 dwt
4	506.0	7.8	155	4 420.7	17.0	2 090	94 191.6	22.1	2 361	107 179.3	Greece
0	0.0	0.0	27	751.9	2.9	2 007	90 422.2	21.3	2 216	97 036.1	Japan
5	58.2	0.9	53	620.6	2.4	512	18 645.9	4.4	813	29 926.2	Norway
1	22.3	0.3	928	8 413.2	32.4	1 742	33 691.0	7.9	2 161	42 247.1	Germany
0	0.0	0.0	111	1 561.7	6.0	467	13 854.6	3.3	788	23 195.8	China
14	171.4	2.6	163	1 475.8	5.7	603	20 444.5	4.8	948	35 240.7	USA
4	593.0	9.1	14	246.8	1.0	183	11 654.9	2.7	238	15 507.8	Hong Kong (China)
0	0.0	0.0	4	11.1	0.0	317	15 747.5	3.7	380	16 651.7	Republic of Korea
0	0.0	0.0	2	33.0	0.1	120	7 397.4	1.7	291	11 574.6	Singapore
0	0.0	0.0	4	15.7	0.1	360	13 580.5	3.2	426	17 678.9	Taiwan Province of China
29	2 601.7	40.1	33	314.9	1.2	222	6 148.4	1.4	392	10 430.4	United Kingdom
0	0.0	0.0	26	139.6	0.5	259	7 915.2	1.9	391	8 507.4	Russian Federation
0	0.0	0.0	23	487.1	1.9	104	1 745.9	0.4	338	7 685.2	Denmark
0	0.0	0.0	30	688.4	2.7	79	2 591.7	0.6	121	3 674.3	Italy
0	0.0	0.0	10	86.1	0.3	32	986.6	0.2	45	1 470.4	India
0	0.0	0.0	5	40.8	0.2	50	10 186.1	2.4	76	11 175.1	Saudi Arabia
0	0.0	0.0	0	0.0	0.0	28	241.3	0.1	73	3 783.0	Malaysia
0	0.0	0.0	0	0.0	0.0	7	497.7	0.1	9	505.6	Iran, Islamic Republic of
0	0.0	0.0	12	42.6	0.2	128	1 552.0	0.4	171	2 210.4	Turkey
1	2.9	0.0	23	441.2	1.7	235	7 080.7	1.7	267	7 788.4	Switzerland
1	273.4	4.2	39	154.1	0.6	139	3 052.8	0.7	196	3 524.5	Netherlands
0	0.0	0.0	31	1 018.9	3.9	72	2 699.8	0.6	122	5 197.2	Belgium
16	499.0	7.7	6	304.0	1.2	53	1 802.0	0.4	104	3 330.9	Canada
5	576.1	8.9	19	175.6	0.7	61	2 514.6	0.6	157	4 375.0	Sweden
0	0.0	0.0	2	38.9	0.1	18	348.2	0.1	37	1 073.1	Philippines
0	0.0	0.0	0	0.0	0.0	9	1 324.1	0.3	11	1 609.1	Brazil
1	6.7	0.1	28	325.9	1.3	70	1 362.0	0.3	103	2 358.6	France
0	0.0	0.0	3	15.3	0.1	56	1 217.9	0.3	255	4 676.0	Spain
1	1.9	0.0	1	4.0	0.0	54	748.2	0.2	101	1 282.3	Indonesia
0	0.0	0.0	5	49.6	0.2	69	2 420.3	0.6	68	2 519.3	Cyprus
0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	Kuwait
0	0.0	0.0	9	57.6	0.2	66	2 045.9	0.5	95	3 032.5	Monaco
2	133.8	2.1	5	39.8	0.2	24	1 012.9	0.2	42	1 455.4	Australia
0	0.0	0.0	0	0.0	0.0	12	67.1	0.0	33	298.4	Thailand
0	0.0	0.0	7	103.6	0.4	45	732.7	0.2	91	1 105.1	Ukraine
84	5 446.5	83.9	1 778	22 078.7	85.1	10 293	379 923.8	89.3	13 920	489 305.9	Subtotal
21	1 041.5	16.1	1 111	3 865.3	14.9	4 342	45 533.2	10.7	1 031	11 260.1	Others
105	6 488.0	100.0	2 889	25 944.0	100.0	14 635	425 457.0	100.0	14 951	500 566.0	Total

## D. SHIPBUILDING AND THE SECOND-HAND MARKET

### 1. Newbuilding orders

In 2003, 1,159 newbuilding contracts were placed for the six major ship types — an increase of 5.0 per cent in comparison with 2002 (see table 20). In the tanker sector, optimism prevailed, with 456 orders, as compared to with 447 units in 2002. The peak was reached in October with 75 orders, followed by January and July with 48 orders each. The 2003 newbuilding orders for dry bulk carriers decreased to 193, about 30 per cent less than the orders of the previous year (275 contracts).

Newbuilding orders for containerships more than doubled — 325 contracts in 2003 as compared with 135 in 2002. These newbuilding contracts continued to reflect the recent trend for post-Panamax containerships. The newbuilding orders for general cargo ships decreased by a third in 2003 to 91 contracts, compared with 136 units in 2002. Orders for passenger ferries decreased by 15 per cent to 94 contracts (111 in the previous year).

### 2. Tonnage on order

World tonnage on order, by groups of countries of registry and by principal types of vessel, is shown in table 21. World tonnage on order at the beginning of 2004 stood at 180.1 million dwt, representing an impressive increase of 51.6 per cent over the previous year. Tonnage on order by developed market-economy countries amounted to 47 million dwt, accounting for 26.1 per cent of the total world tonnage on order, as compared with 40 million dwt or 33.7 per cent at the beginning of 2003. Major open-registry countries had 87.2 million dwt or 48.4 per cent of world tonnage on order, as compared with 60.7 million dwt or 51.1 per cent at the beginning of last year. The share of the countries of Central and Eastern Europe in 2002 stood at 0.4 million dwt or 0.2 per cent of the world total on order, while the tonnage on order of the socialist countries in Asia almost doubled in 2003, ending the year with 6.1 million dwt or 3.3 per cent of the world total on order.

Developing countries' tonnage on order recorded a 41.6 per cent increase over the previous year, reaching 19.7 million dwt or 10.9 per cent of the total world tonnage on order at the beginning of 2004. Tonnage on order by Asian developing countries rose at a higher rate

to 18.4 million dwt at the beginning of 2004, which accounted for 93.3 per cent of the developing countries' total tonnage on order. African newbuilding orders doubled to 403,000 dwt at the beginning of 2004, while the developing countries in America's orders contracted by 42 per cent to 0.8 million dwt.

In 2003, oil tanker orders rose by 15.1 per cent to 69.9 million dwt, accounting for 38.8 per cent of the world total on order. Developing countries had 8.8 million dwt on order, representing 12.6 per cent of the total tankers on order, with Asian developing countries representing 8.7 million dwt or 98.9 per cent of the developing countries' total. The number of dry bulk carriers on order at the beginning of 2004 increased from 2003 by a remarkable 71.4 per cent to 52.3 million dwt, accounting for 29.0 per cent of the world total on order. For this type of vessel, developed market-economy countries and major open-registry countries accounted for 15.1 per cent and 59.0 per cent, representing a combined share of 74.1 per cent. The volume of containerships on order doubled in 2003 to 32.9 million dwt at year's end, representing 18.3 per cent of the world total on order. For containerships on order, developed market-economy countries accounted for 28.4 per cent and major open-registry countries accounted for over 54.5 per cent. At the beginning of 2004 developing countries' containership orders increased by 22.3 per cent to 2.3 million dwt, or 7.1 per cent of the total containerships on order. Asian developing countries had 2.1 million dwt or 93.3 per cent of the developing countries' total on order.

### 3. Prices of newbuildings and second-hand tonnage

Table 22 indicates newbuilding prices for the main types of vessel. In 2003, prices for all the main types and sizes of newbuildings, with the exception of LNG and LPG carriers, increased significantly over those of the previous year. Price increases were more pronounced for bulk carriers and reflected the high demand for transporting dry bulk. Newbuilding prices for Cape-sized dry bulk carriers fared particularly well with a 51.6 per cent increase in 2003, while prices for handy-sized Panamax increased by 46.7 and 25.0 per cent respectively. Major shipbuilding countries continued to discuss measures to align shipbuilding capacity with forecast demand. Increases in oil tanker newbuilding prices for all sizes were all double-digit in 2003 in sharp contrast with the 2002 price reductions. Prices of 2,500 TEU cellular

Table 20

**Newbuilding contracts placed for the main types of ship <sup>a</sup> during 1993–2003**  
(number of ships, thousands of dwt)

Year	Tankers		Bulk carriers		Combined carriers		General cargo ships		Container vessels		Passenger ferries		Total <sup>b</sup>	
	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt	Number	Thousand dwt
<b>1993</b>	267	17 327	299	18 303	1	83	261	2 102	182	5 057	122	163	1 132	43 035
<b>1994</b>	256	13 833	339	19 896	2	220	227	1 493	242	6 497	118	159	1 184	42 098
<b>1995</b>	243	9 143	381	22 418	4	440	345	2 449	345	8 562	144	224	1 462	43 236
<b>1996</b>	274	13 875	271	14 250	-	-	257	2 107	292	6 978	144	155	1 238	37 365
<b>1997</b>	428	32 516	282	17 983	2	220	299	2 701	166	3 618	96	149	1 273	57 187
<b>1998</b>	280	21 922	166	11 835	0	0	333	2 488	178	5 975	117	231	1 074	42 451
<b>1999</b>	206	16 822	346	23 934	-	-	162	1 323	170	7 183	116	348	1 000	49 610
<b>2000</b>	446	41 865	344	20 081	-	-	255	2 534	373	15 025	136	308	1 554	80 121
<b>2001</b>	550	34 260	165	9 496	-	-	142	1 222	180	6 564	101	80	1 138	51 622
<b>2002</b>	447	23 979	275	20 799	-	-	136	1 593	135	6 223	111	131	1 104	52 725
<b>2003</b>														
<b>Jan</b>	48	..	23	..	0	..	14	..	33	..	14	..	132	..
<b>Feb</b>	21	..	15	..	0	..	6	..	16	..	14	..	72	..
<b>Mar</b>	33	..	30	..	0	..	16	..	19	..	6	..	104	..
<b>Apr</b>	32	..	6	..	0	..	2	..	32	..	4	..	76	..
<b>May</b>	40	..	3	..	0	..	12	..	17	..	9	..	81	..
<b>Jun</b>	33	..	2	..	0	..	1	..	19	..	13	..	68	..
<b>Jul</b>	48	..	18	..	0	..	5	..	44	..	8	..	123	..
<b>Aug</b>	30	..	18	..	0	..	3	..	21	..	12	..	84	..
<b>Sept</b>	46	..	23	..	0	..	6	..	29	..	9	..	113	..
<b>Oct</b>	75	..	22	..	0	..	4	..	27	..	0	..	128	..
<b>Nov</b>	22	..	11	..	0	..	1	..	39	..	3	..	76	..
<b>Dec</b>	28	..	22	..	0	..	21	..	29	..	2	..	102	..
<b>Total</b>	456	..	193	..	0	..	91	..	325	..	94	..	1 159	..

Sources: Compiled by the UNCTAD secretariat. For figures up to 2002 based on data from Institute of Shipping Economics and Logistics (2004), *Shipping Statistics and Market Review*, Jan./Feb., table II-1.1.1.1. For 2003, based on data published in Institute of Shipping Economics and Logistics (2004), *Shipping Statistics and Market Review*, January/February 2004, page 70, from monthly data provided by Baird Publications (Australia).

<sup>a</sup> Ships of 300 grt and over.

<sup>b</sup> Total does not include data on newbuilding contracts for other types of ship.



Table 21

**World tonnage on order as of 1 January 2004**  
(thousands of dwt)

Country groups of registry	Total	Oil tankers	Bulk carriers	General cargo	Container ships	Other ships
<b>World total</b>	160 379	61 076	46 560	3 020	30 584	19 139
<b>Developed market-economy countries</b>	47 017	20 079	7 920	1 059	9 350	8 609
<b>Major open-registry countries</b>	87 172	29 597	30 862	1 169	17 952	7 592
<b>Countries of Central and Eastern Europe</b>	410	58	0	154	0	198
<b>Socialist countries of Asia</b>	6 087	2 529	2 030	66	951	511
<b>Developing countries, total</b>	19 692	8 813	5 748	572	2 330	2 229
<i>of which:</i>						
<b>Africa</b>	403	1	0	10	0	392
<b>Americas</b>	819	87	82	256	157	237
<b>Asia</b>	18 375	8 725	5 666	306	2 173	1 504
<b>Europe</b>	95	0	0	0	0	95
<b>Oceania</b>	0	0	0	0	0	0

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Lloyd's Register – Fairplay.

Table 22

**Representative newbuilding prices in selected years <sup>a</sup>**  
(millions of dollars)

Type and size of vessels	1980	1985	1990	1995	2000	2002	2003	% change 2002/2003
<b>30-50,000 dwt bulk carrier</b>	17	11	24	25	20	15	22	46.7
<b>32-45,000 dwt tanker</b>	19	18	29	34	29	26	30	15.4
<b>70-74,000 dwt bulk carrier</b>	24	14	32	29	23	20	25	25.0
<b>80-105,000 dwt tanker</b>	28	22	42	43	41	35	41	17.1
<b>120,000 dwt bulk carrier</b>	32	27	45	40	40	31	47	51.6
<b>250-280,000 dwt tanker</b>	75	47	90	85	76	67	75	11.9
<b>125-138,000 m3 LNG</b>	200	200	225	245	165	164	155	-5.5
<b>75,000 m3 LPG</b>	77	44	78	68	60	60	59	-1.7
<b>15,000 dwt general cargo</b>	14	12	24	21	19	16	16	0.0
<b>2,500 TEU full containership</b>	-	26	52	50	35	28	38	35.7

Source: Compiled by the UNCTAD secretariat on the basis of data from *Lloyd's Shipping Economist*, various issues.

<sup>a</sup> From 1995 on, prices correspond to the large vessel size.

containerships also fared well, increasing by 35.7 per cent, while prices for general cargo vessels were steady. Modest price reductions of 5.5 and 1.7 per cent were observed for LNG and LPG gas carriers. In general, the upward trend of shipbuilding prices during the year reflected increased ship ordering.

As table 23 indicates, average second-hand prices for tankers and bulk carriers recorded substantial increases. Dry bulk carriers recorded gains above 40 per cent, with

the largest one being for Panamax vessels. The number of transactions was also up — to 359 from the 2002 level of 325, with Panamax and Cape-size being most popular and the small handy-size vessels accounting for 116 transactions. In the tanker sector, double-digit price increases were seen during the year, with Aframax tonnage recording 26.7 per cent increases. A record number of transactions were reported for 2003, when 348 units changed hands (138 units the year before), with 229 units being over 50,000 dwt.

Table 23

**Second-hand prices for five-year-old vessels, 1998–2003**  
(as of year's end, in millions of dollars)

Vessel	1998	1999	2000	2001	2002	2003	% change 2002/2003
40,000 dwt tankers	20	20	27	26	24	28	16.7
80-95,000 dwt tankers <sup>a</sup>	25	26	39	33	30	38	26.7
130-150,000 dwt tankers <sup>a</sup>	37	36	50	43	42	48	14.3
250-280,000 dwt tankers <sup>a</sup>	50	50	71	60	53	75	41.5
45,000 dwt dry bulk carrier	13	16	15	12	15	21	40.0
70,000 dwt dry bulk carrier	15	17	16	14	17	28	64.7
150,000 dwt dry bulk carrier	24	28	25	22	26	41	57.7

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by Fearnleys, *Review 2003*.

<sup>a</sup> Prices correspond to the larger vessels in the range.