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Review of maritime transport 1986

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NOTE

This Review has been prepared by the UNCTAD secretariat in accordance with item V of the programme of work of the Committee on Shipping, for consideration at the thirteenth session of the Committee. Any factual and editorial corrections that may prove necessary in the light of comments made by the Committee at that session or received directly from Governments would be reflected in a corrigendum to be issued subsequently.

As of 1986, Yugoslavia has been reclassified as a developing country in Europe (it was previously classified as a developed market-economy country, for the purposes of this annual *Review of maritime transport.*

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Symbols of United Nations documents are composed of capital letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

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ABBREVIATIONS

BAF	Bunker adjustment factor
CAF	Currency adjustment factor
CFS	Container freight station
cif	Cost, insurance, freight
dwt	Deadweight tons
EEC	European Economic Community
fob	Free on board
FEU	Forty-foot equivalent unit
GDP	Gross domestic product
GNP	Gross national product
grt	Gross registered tons
LCL	Less than container load
LDT	Light displacement tons
LNG	Liquefied natural gas
LPG	Liquefied petroleum gas
LUF	Lifting unit frame
MTO	Multimodal transport operator
NVO-MTO	Non-vessel-operating multimodal transport operator
OBO	Oil/bulk/ore
OECD	Organisation for Economic Co-operation and Development
ro/ro	Roll-on/roll-off
TEU	Twenty-foot equivalent unit
ULCC	Ultra large crude carrier
VLCC	Very large crude carrier
VO-MTO	Vessel-operating multimodal transport operator

EXPLANATORY NOTES

References to dollars ($) are to United States dollars.

Tons refer to metric tons, unless otherwise stated.

Details and percentages in tables do not necessarily add up to the totals, owing to rounding.

Two dots (..) indicate that the data are not available or are not separately reported.

A dash (-) signifies that the amount is nil, or less than half the unit used.

In some tables, data shown for earlier years have been revised and updated, and may therefore differ from those shown in previous issues of this Review.

INTRODUCTION

The Review of Maritime Transport is an annual publication prepared by the secretariat of UNCTAD, in accordance with section VI of the programme of work of the Committee on Shipping. */ The purpose of the Review is to outline and analyse the main developments in world maritime transport in the past year and to assess expected future short-term developments. Emphasis is given to the development of the merchant marines in developing countries as compared with other groups of countries.

Summary of main developments in 1986

(i) The total volume of international seaborne trade increased slightly in 1986, with goods loaded estimated at 3.38 billion tons or 1.7 per cent more than in 1985.

(ii) The declining trend in the size of the world merchant fleet also continued in 1986. At mid-year 1986 the total deadweight of the world merchant fleet was 639.1 million tons, representing a decline of 25.7 million dwt or 3.9 per cent from the previous year's figures.

(iii) Ownership remained concentrated in the developed market-economy and open-registry countries, with a combined tonnage amounting at mid-year 1986 to 69.6 per cent of the total deadweight of the world merchant fleet. The share of developing countries increased to 19.9 per cent in 1986 from 17.1 per cent in 1985. Socialist countries of Eastern Europe and Asia owned 9.5 per cent of the world merchant fleet.

(iv) The participation of developing countries in the world merchant fleet continued to be considerably lower than their share of international seaborne trade. Thus, in 1986, developing countries generated 35.9 per cent of world cargo moving in international seaborne trade (exports and imports combined) but owned only 19.9 per cent of deadweight tonnage. On the other hand, developed market-economy countries, either directly or indirectly through open-registry fleets, owned 69.6 per cent of world tonnage while generating 57.0 per cent of world trade.

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*/ Official Records of the Trade and Development Board, Tenth Session, Supplement No. 5 (TD/B/301), annex III.

(v) The supply/demand disequilibrium remained one of the most serious problems in the world shipping industry, although in 1986 the amount of surplus decreased slightly as compared with 1985, partly as a result of a so-called mini-boom in the tanker freight market and a relatively high level of demolition of world merchant fleet tonnage, especially in the dry bulk sector. Nevertheless, average surplus tonnage was still estimated at 131.7 million dwt or 20.6 per cent of the total world merchant fleet as at 1 July 1986 (surplus tanker tonnage was estimated at 77.8 million dwt or 29.8 per cent of the world tanker fleet).

(vi) The proportion of freight costs to cif import values for developing countries continued to be approximately twice as high as that for developed market-economy countries (9.55 per cent against 4.81 per cent).

(vii) Freight rate indices for dry cargo ships and for vessels engaged in liner shipping showed a significant declining trend in 1986, whilst tanker freight rate indices demonstrated a remarkable upward trend as compared with 1985.

(viii) The United Nations Conference on Conditions for Registration of Ships held the fourth part of its session from 20 January to 7 February 1986 and, on 7 February 1986, adopted the United Nations Convention on Conditions for Registration of Ships. The Convention will enter into force 12 months after the date on which not less than 40 States with a combined tonnage of at least 25 per cent of world tonnage have become Contracting Parties to it.

(ix) The UNCTAD Committee on Shipping held its twelfth regular session in Geneva from 10 to 21 November 1986. The Committee considered a large number of issues relating to international maritime policy and international co-operation in ocean shipping. The session was largely dominated by the problem of excess tonnage and surplus world shipbuilding capacity. In view of the importance of this problem, it was decided to devote the next session, which will be convened in early 1988, primarily to the consideration of questions of the imbalance between supply and demand in ocean shipping and the elaboration of practical measures to be taken in order to bring about a balanced situation in the shipping industry.

Chapter I

THE DEVELOPMENT OF INTERNATIONAL SEABORNE TRADE

1. As shown in table 1, according to preliminary estimates, the total volume of international seaborne trade increased by 1.7 per cent in 1986 as compared with 1985 and amounted to 3.38 billion tons. However, the development of trade varied greatly between commodities. Thus, crude oil and oil products shipments rose by 8.0 per cent, whilst seaborne trade in dry cargoes decreased by 3.2 per cent as compared with 1985.

2. Oil seaborne trade turned out to be a fairly positive element in world trade in 1986. The low prices of oil as compared to coal and other energy types resulted in a considerable increase in oil shipments, which amounted to 115 million tons. In 1986, tanker cargoes accounted for 45.8 per cent of the total amount of international seaborne trade, as compared with 39.5 per cent in the previous year. Dry bulk trade underwent quite a different development in 1986 from oil. Due to lower steel production and consumption in developed market-economy countries (steel production in such main producing areas as EEC, Japan and the United States of America was 6-7 per cent below the level of 1985), 1/ good crops in most areas, which resulted in an 11.6 per cent fall from the 1985 figure for grain trade, 2/ and a decrease in consumption of coking coal, international seaborne trade in the main dry bulk commodities declined by 5.5 per cent as compared to 1985.

3. Table 2 shows world seaborne trade by types of cargo in terms of ton-miles. Total 1986 ton-miles increased by 5.4 per cent as compared to the level of 1985. This increase should be attributed mainly to a significant growth in the carriage of liquid hydrocarbons (16.3 per cent). At the same time the seaborne trade of the three main dry bulk commodities was below the 1985 level. Grain suffered the biggest decline, with a 12.8 per cent decrease from the 1985 figure, and iron ore underwent a 3.3 per cent decrease. The share of liquid hydrocarbons in the total ton-miles for 1986 increased by 4.1 per cent as compared to 1985 and amounted to 43.6 per cent, while the combined share of the three main bulk commodities declined to 28.7 per cent from 31.8 per cent in 1985.

4. The distribution of world seaborne trade by goods loaded/unloaded, broad commodity classifications and country groupings is given in table 3. Globally, dry cargoes represented 54.2 per cent of goods loaded in 1986, while crude oil, as the single largest cargo group, comprised 33.3 per cent. Comparable country grouping data indicate that in 1986 developing countries generated 47.4 per cent of all goods loaded and 25.7 per cent of all goods unloaded, while developed market-economy countries accounted for 44.5 per cent of all goods loaded and 68.2 per cent of all goods unloaded. The socialist countries' shares were 8.0 per cent of the goods loaded and 6.1 per cent of the goods unloaded.

5. Developing countries experienced a slight decline in their share of world seaborne exports (all goods), which stood at 48.0 per cent of all goods loaded in 1984 and at 47.4 per cent in 1986. However, developing countries accounted for 79.9 per cent of the amount of crude petroleum and 55.3 per cent of petroleum products loaded in 1986. With respect to goods unloaded, the share of developing countries decreased from 26.2 per cent in 1984 to 25.7 per cent in 1986.

Table 1

Development of international seaborne trade, a/ 1970 and 1980-1986
(Estimates of goods loaded)

Tanker cargo			Dry cargo				Total (all goods)	
			Total		Of which: main bulk commodities b/			
Year	Millions of tons	Percentage increase/ decrease over previous year	Millions of tons	Percentage increase/ decrease over previous year	Millions of tons	Percentage increase/ decrease over previous year	Millions of tons	Percentage increase/ decrease over previous year
1970	1 440	13.1	1 165	13.0	448	16.0	2 605	13.0
1980	1 871	-6.6	1 833	3.3	796	4.5	3 704	-2.0
1981	1 693	-9.5	1 866	1.8	806	1.3	3 559	-3.9
1982	1 480	-12.6	1 793	-3.9	759	-5.8	3 273	-8.0
1983	1 461	-1.4	1 770	-1.3	732	-3.7	3 231	-1.3
1984	1 478	1.2	1 886	6.5	833	13.8	3 364	4.1
1985	1 435	-2.9	1 895	0.5	857	2.9	3 330	-1.0
1986 c/	1 550	8.0	1 835	-3.2	810	-5.5	3 385	1.7

Sources: (i) For tanker cargo, total dry cargo and all goods, base data were communicated to the UNCTAD secretariat by the United Nations Statistical Office. Owing to possible subsequent revisions or other factors, these detailed data may differ marginally from the aggregated figures reported in the United Nations Monthly Bulletin of Statistics.

(ii) For main bulk commodities: Fearnleys, World Bulk Trades 1985 (Oslo) and Review 1986.

a/ Including international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system, but excluding such traffic in main bulk commodities.

b/ Iron ore, grain, coal, bauxite/alumina and phosphate.

c/ UNCTAD preliminary estimates.

Table 2

World seaborne trade by types of cargo, 1970 and 1980-1986
(Billions of ton-miles)

Year	Crude oil	Oil product	Iron ore	Coal	Grain a/	Other cargo	Total trade
1970	5 597	890	1 093	481	475	2 118	10 654
1980	8 385	1 020	1 613	952	952	1 087	3 720
1981	7 371	1 000	1 508	1 120	1 131	3 713	16 777
1982	5 212	1 070	1 443	1 094	1 120	3 560	13 499
1983	4 478	1 080	1 320	1 057	1 135	3 510	12 580
1984	4 508	1 140	1 631	1 270	1 157	3 720	13 426
1985	4 007	1 150	1 675	1 479	1 004	3 750	13 065
1986	4 730	1 270	1 620	1 460	875	3 810	13 765

Source: Fearnleys, Review 1986 (Oslo).

a/ Including wheat, maize, barley, oats, rye, sorghum and soya beans.

Table 3

World seaborne trade in 1970, 1984, 1985 and 1986 (est.) a/
by types of cargo and shares of groups of countries b/ c/
(Millions of tons and percentages of world total)

Country group	Year	Goods loaded				Goods unloaded			
		Petroleum		Dry cargo	Total all goods	Petroleum		Dry cargo	Total all goods
		Crude	Products			Crude	Products		
		(Trade in millions of tons)							
World total	1970	1 110	330	1 165	2 605	1 101	302	1 127	2 530
	1984	1 079	399	1 886	3 364	1 166	371	1 928	3 465
	1985	1 041	394	1 895	3 330	1 128	367	1 938	3 433
	1986	1 126	424	1 835	3 385	1 220	390	1 860	3 470
		(Percentage share of each category of goods in total)							
World total	1970	42.6	12.7	44.7	100.0	43.5	11.9	44.6	100.0
	1984	32.1	11.8	56.1	100.0	33.6	10.7	55.7	100.0
	1985	31.3	11.8	56.9	100.0	32.9	10.7	56.4	100.0
	1986	33.3	12.5	54.2	100.0	35.2	11.2	53.6	100.0
		(Percentage share of trade by groups of countries)							
Developed market-economy countries	1970	2.0	27.1	60.0	31.1	80.4	79.6	79.5	79.9
	1984	11.1	28.1	65.8	43.8	71.1	77.5	63.5	67.6
	1985	11.6	28.4	66.0	44.2	71.7	78.0	63.8	68.0
	1986	11.8	28.8	66.0	44.5	72.0	78.3	64.0	68.2
Socialist countries of Eastern Europe and Asia	1970	2.0	27.1	60.0	31.1	80.4	79.6	79.5	79.9
	1984	8.4	16.0	6.4	8.2	3.6	0.8	8.8	6.2
	1985	8.3	16.0	6.3	8.1	3.6	0.8	8.8	6.2
	1986	8.3	15.9	6.3	8.0	3.6	0.8	8.7	6.1
of which:									
in Eastern Europe	1970	3.4	8.0	6.9	5.6	1.2	1.0	3.8	2.3
	1984	6.5	14.8	5.3	6.8	3.4	0.5	6.2	4.6
	1985	6.5	14.8	5.3	6.8	3.4	0.5	6.2	4.6
in Asia	1970	-	-	1.2	0.5	0.5	0.1	2.1	1.2
	1984	1.9	1.1	1.1	1.4	0.2	0.3	2.6	1.6
	1985	1.8	1.1	1.0	1.3	0.2	0.3	2.6	1.6
Developing countries	1970	94.5	64.7	31.9	62.8	17.9	17.8	15.1	16.7
	1984	80.5	55.9	27.8	48.0	25.3	21.7	27.7	26.2
	1985	80.1	55.6	27.7	47.7	24.7	21.2	27.4	25.8
	1986	79.9	55.3	27.7	47.4	24.4	20.9	27.3	25.7

Table 3 (continued)

Country group	Year	Goods loaded				Goods unloaded			
		Petroleum		Dry cargo	Total all goods	Petroleum		Dry cargo	Total all goods
		Crude	Products			Crude	Products		
		(Percentage share of trade by groups of countries)							
of which:									
in Africa	1970	25.4	2.4	9.1	15.2	1.7	4.1	3.6	2.9
	1984	15.6	8.5	4.6	8.6	7.9	3.4	5.3	5.9
	1985	15.6	8.5	4.6	8.7	7.7	3.3	5.2	5.8
in America	1970	12.2	36.2	13.8	16.0	10.5	5.1	4.4	7.2
	1984	14.0	18.5	12.8	13.8	7.2	4.1	4.1	5.2
	1985	14.0	18.3	12.7	13.7	7.0	4.0	3.9	5.0
in Asia	1970	56.9	27.0	8.1	31.3	5.5	7.9	6.7	6.4
	1984	50.9	28.9	10.0	25.4	10.2	13.6	18.0	14.9
	1985	50.5	28.8	10.0	25.1	10.0	13.4	18.0	14.8
in Europe	1970	-	-	-	-	-	0.1	0.1	-
	1984	-	-	-	-	-	0.1	0.1	-
	1985	-	-	-	-	-	0.1	0.1	-
in Oceania	1970	-	0.1	0.8	0.4	-	0.5	0.3	0.2
	1984	-	-	0.4	0.2	-	0.5	0.2	0.2
	1985	-	-	0.4	0.2	-	0.5	0.2	0.2

Source: Based on statistics provided by the United Nations Statistical Office and the UNCTAD data bank.

a/ Including international cargoes loaded at ports of the Great Lakes and St. Lawrence system for unloading at ports of the same system, but excluding such traffic in main bulk commodities. At the time of publication, figures for 1986 were available only as shown in the table.

b/ See Annex I for the composition of these groups. (See note 2 to that annex regarding the recording of trade of land-locked countries).

c/ The estimates presented here reflect the inclusion of Yugoslavia in the group "Developing countries in Europe"; in previous years Yugoslavia was classified as a developed market-economy country.

Chapter II

DEVELOPMENT OF THE WORLD FLEET

A. Size and ownership of the world fleet

6. A summary of the world merchant fleet by country groupings for the years 1970, 1985 and 1986 is shown in table 4. The declining trend in the size of the world fleet, which started in 1983, has continued. At mid-year 1986, the total dead weight tonnage of the world merchant fleet was 639.1 million tons (as compared to a peak of 693.5 million dwt in 1982). This represents a 25.7 million dwt or 3.9 per cent decline from the previous year's figure. However, the overall decrease since the peak of 1982 has been 54.9 million dwt or 7.8 per cent.

7. As in the previous year the declining trend in the size of the world merchant fleet derived mostly from a substantial increase in the scrapping of uneconomic tonnage. Tonnage broken up between mid-1985 and mid-1986 amounted to 45.3 million dwt 3/ (including ships sold for breaking and ship losses) which is 7.6 per cent more than for the period 1984-1985.

8. Ownership of the world merchant fleet remains concentrated largely in the developed market-economy countries and open-registry countries, with 38.1 per cent and 31.5 per cent of the world merchant fleet respectively. The share of developing countries increased to 19.9 per cent in 1986 from 17.1 per cent in 1985. This is partly due to the reclassification of Yugoslavia (which owned 0.7 per cent of the world tonnage as at mid-1986) as a developing country in Europe (it was previously classified as a developed market-economy country). Socialist countries of Eastern Europe and Asia owned 9.5 per cent of the world merchant fleet, with 6.6 per cent owned by socialist countries of Eastern Europe.

9. Earlier statistical reports from the UNCTAD secretariat indicated that beneficial ownership and true management of open-registry fleets is largely concentrated in a relatively small number of developed market-economy countries. The phenomenon of "flagging out" has, however, intensified rather during recent years and it is likely that both beneficial ownership and true management of open-registry fleets has become more widespread. (An updated report on this subject reflecting the situation as at mid-1987 will be issued by the UNCTAD secretariat in late 1987.)

10. Table 5 shows the development of the major open-registry fleets since 1981 and the changes in the distribution of tonnage within the group of countries concerned. Between mid-1985 and mid-1986, the combined tonnage of open-registry countries decreased slightly (by 1.1 per cent) after years of continuous growth and amounted to 201.1 million dwt as at mid-1986. However the share of this country group in the total tonnage of the world fleet increased from 30.6 per cent in 1985 to 31.5 per cent in 1986. The share of Liberia, which has the largest open-registry fleet, decreased from 55.8 per cent in mid-1985 (74.9 per cent in mid-1981) to 50.5 per cent in mid-1986. In the same period the amount of tonnage and the shares of all other open-registry countries increased. Thus, the share of Panama and Cyprus grew from 33.1 per cent and 7.0 per cent in 1985 (23.2 per cent and 1.3 per cent in 1981) to 34.0 per cent and 9.3 per cent in 1986 respectively. The Bahamas continued to show very fast growth of its fleet - its tonnage increased from

Table 4

Distribution of world tonnage (grt and dwt) by groups a/ of countries of registration, 1970, 1985 and 1986
(Mid-year figures)

Flags of registration by groups of countries	Tonnage and percentage shares b/						Increase in tonnage (mill. of dwt)	
	In grt (millions)			In dwt (millions)				
	1970	1985	1986	1970	1985	1986	1970-1986 (average)	1985-1986
World total	217.9 (100.0)	410.3 (100.0)	399.0 (100.0)	326.1 (100.0)	664.8 (100.0)	639.1 (100.0)	19.6	-25.7
Developed market-economy countries	141.8 (65.1)	176.7 (43.1)	156.0 (39.1)	209.7 (65.0)	282.9 (42.5)	243.8 (38.1)	2.1	-39.1
Open-registry countries	40.9 (18.8)	112.0 (27.3)	111.8 (28.0)	70.3 (21.6)	203.4 (30.6)	201.1 (31.5)	8.2	-2.3
Total 2 & 3	182.0 (83.9)	288.7 (70.4)	267.8 (67.1)	282.2 (86.6)	486.3 (73.1)	444.9 (69.6)	10.2	-41.4
Socialist countries of Eastern Europe and Asia	19.5 (8.9)	45.5 (11.1)	47.2 (11.8)	21.7 (6.6)	58.5 (8.8)	60.7 (9.5)	2.4	2.2
Of which:								
in Eastern Europe	18.6 (8.5)	34.1 (8.3)	34.9 (8.7)	22.7 (6.2)	41.3 (6.2)	42.0 (6.6)	1.2	0.7
in Asia	0.9 (0.4)	11.4 (2.8)	12.3 (3.1)	1.2 (0.4)	17.2 (2.6)	18.5 (2.9)	1.1	1.3
Developing countries c/	14.5 (6.7)	71.7 (17.5)	79.8 (20.0)	20.5 (6.3)	113.4 (17.1)	127.0 (19.9)	6.7	13.6
Of which:								
in Africa	0.8	5.6	5.4	1.1	8.0	7.5	0.4	-0.5
in America	6.4	15.5	16.9	8.7	23.3	25.9	1.1	2.6
in Asia	7.3	48.5	52.2	10.7	78.6	85.1	4.7	6.5
in Europe c/	-	1.8	4.9	2.2	3.0	7.9	0.4	4.9
in Oceania	-	0.3	0.3	-	0.4	0.5	-	-
Other, unallocated	1.2 (0.5)	4.3 (1.0)	4.3 (1.1)	1.7 (0.5)	6.7 (1.0)	6.6 (1.0)	0.3	0.1

Source: Compiled on the basis of data supplied by the Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd.

a/ Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes fleets, which in 1986 amounted respectively to 2.6, 1.5 and 1.8 million grt.

b/ Percentage shares are shown in brackets.

c/ Including Yugoslavia, previously classified as a developed market-economy country.

Table 5

Distribution of tonnage of open-registry fleets by open-registry countries (grt and dwt), 1981-1986
(Mid-year figures)

	Tonnage and percentage shares (shown in brackets)											
	In grt (millions)						In dwt (millions)					
	1981	1982	1983	1984	1985	1986	1981	1982	1983	1984	1985	1986
Open-registry countries Total	105.1 (100)	106.4 (100)	107.3 (100)	110.0 (100)	112.0 (100)	111.7 (100)	197.1 (100)	198.7 (100)	199.8 (100)	202.2 (100)	203.4 (100)	201.1 (100)
Liberia	74.9 (71.3)	70.7 (66.4)	67.6 (63.0)	62.0 (56.4)	58.2 (52.0)	52.6 (47.1)	147.7 (74.9)	139.2 (70.1)	133.2 (66.7)	121.4 (60.0)	113.5 (55.8)	101.6 (50.5)
Panama	27.7 (26.3)	32.6 (30.6)	34.7 (32.4)	37.2 (33.8)	40.7 (36.3)	41.3 (37.0)	45.7 (23.2)	54.8 (27.6)	58.3 (29.2)	62.0 (30.7)	67.3 (33.1)	68.3 (34.0)
Cyprus	1.8 (1.7)	2.2 (2.1)	3.4 (3.2)	6.7 (6.2)	8.2 (7.3)	10.6 (9.5)	2.7 (1.3)	3.4 (1.7)	5.8 (2.9)	11.8 (5.9)	14.3 (7.0)	18.8 (9.3)
Bahamas	0.2 (0.2)	0.4 (0.4)	0.8 (0.7)	3.2 (2.9)	3.9 (3.5)	6.0 (5.4)	0.3 (0.2)	0.6 (0.3)	1.2 (0.6)	5.7 (2.8)	6.9 (3.4)	10.6 (5.3)
Bermuda	0.5 (0.5)	0.5 (0.5)	0.8 (0.7)	0.8 (0.7)	1.0 (0.9)	1.2 (1.0)	0.7 (0.4)	0.7 (0.3)	1.3 (0.6)	1.3 (0.6)	1.4 (0.7)	1.8 (0.9)

Source: Compiled on the basis of data supplied by the Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd.

6.9 million dwt in 1985 (0.3 million dwt in 1981) to 10.6 million dwt and represented 5.3 per cent of the combined tonnage of open-registry fleets in 1986.

11. In order to slow down the decrease in the tonnage of ships flying the Liberian flag, a new registration fee structure was introduced in Liberia in 1986. The new rules, which became effective from 1 July 1986, offer a number of benefits to owners by reducing registration fees by up to 30 per cent. 4/ Meanwhile, the second largest open-registry country - Panama - also announced a considerable reduction in registration fees for new entrants to the flag of above 75,000 grt and further reductions for owners interested in registering their ships for short periods of up to three months, for example for demolition voyages. 5/

B. Types of vessel

12. The composition of the world merchant fleet by principal types of vessel at mid-year 1984, 1985 and 1986, as well as the percentage changes between 1985 and 1986, are shown in table 6. As in previous years, four types of vessel - i.e. oil tankers, bulk and combined carriers, general cargo and unitized ships - constituted the main part of the world fleet in 1986. Their combined deadweight amounted to 611.2 million tons, which represents 94.3 per cent of the world fleet, as compared with 94.6 per cent in 1985.

13. The distribution of world tonnage by country groups and by types of vessels as given in table 7 shows that the developed market-economy countries continued to own the largest share of each type of vessel. This is especially notable in such types of vessels as containerships (including lighter carriers), tankers, bulk and combined carriers, and general cargo ships, where these countries owned 59.4 per cent, 41.7 per cent, 34.8 per cent and 30.8 per cent of the world merchant fleet of vessels in question respectively. Open-registry countries as a group show the second largest concentration of tonnage, with 38.2 per cent of the world tanker fleet, 31.9 per cent of bulk and combined carriers fleets, 20.7 per cent of general cargo ships and 14.6 per cent of the world container and lighter carriers fleet. Thus, developed market-economy countries and open-registry countries combined accounted for 79.9 per cent of the world tanker fleet, 66.7 per cent of the ore and bulk carriers fleet (including combined carriers), 51.5 per cent of the world general cargo fleet, and 74.0 per cent of the world container fleet (including lighter carriers).

14. Since mid-1985 the share of developing countries in the world bulk and combined carriers fleet has increased to 23.5 per cent and in the world general cargo fleet to 25.8 per cent. However, their share in the world tanker fleet has remained relatively small, i.e. 15.2 per cent. Although the developing countries' share in the world fleet of container ships recovered to 13.0 per cent in 1986, it was lower than in 1983 and 1984 (14.3 per cent and 13.2 per cent of the world fleet respectively). At mid-1986 socialist countries of Eastern Europe and Asia owned 22.1 per cent of the world general cargo fleet, 4.5 per cent of the tanker fleet, 8.2 per cent of bulk carriers, including combined carriers, and 6.8 per cent of the world container fleet.

15. The share of developing countries in the total fleet increased from 17.1 per cent in 1985 to 19.9 per cent in 1986 (including Yugoslavia as of 1986) and amounted to 127.0 million dwt. However, the distribution of this fleet among the developing countries remained unbalanced. Ten countries or

Table 6

Analysis of the world fleet by principal types of vessel, 1984-1986 a/
(Thousands of dwt) b/

Principal types	1984	1985	1986	Percentage change 1985/1986
Oil tankers	286 786 (42.0)	268 355 (39.8)	247 523 (38.2)	- 7.8
Liquified gas carriers	10 151 (1.5)	10 249 (1.5)	10 117 (1.6)	- 1.3
Chemical carriers	5 791 (0.8)	5 832 (0.9)	6 065 (0.9)	+ 4.0
Miscellaneous tankers	439 (-)	431 (-)	405 (0.1)	- 6.0
Bulk/oil carriers (inc. ore/oil carriers)	46 840 (6.9)	45 024 (6.7)	40 303 (6.2)	- 10.5
Ore and bulk carriers	180 846 (26.5)	192 288 (28.5)	194 892 (30.1)	+ 1.4
General cargo (inc. passenger cargo)	111 286 (16.3)	108 329 (16.1)	103 578 (16.0)	- 4.4
Containerships (fully cellular) and lighter carriers	18 036 (2.6)	19 939 (3.0)	21 524 (3.3)	+ 7.9
Vehicle carriers	3 663 (0.5)	3 339 (0.5)	3 387 (0.5)	+ 1.4
Fish factories and carriers, and fishing (inc. factory trawlers)	7 888 (1.1)	7 995 (1.2)	8 118 (1.3)	+ 1.5
Ferries and passenger vessels	2 552 (0.4)	2 622 (0.4)	2 687 (0.4)	+ 2.5
All other vessels	9 008 (1.3)	9 287 (1.4)	9 040 (1.4)	- 2.7
World total	683 286 (100.0)	673 692 (100.0)	647 639 (100.0)	- 3.9

Source: Shipping Information Services of Lloyd's Register of Shipping, and Lloyd's of London Press Limited, 1984-1986 (mid-year figures).

a/ The totals in this table are not comparable with those in table 4, because they include the United States Reserve Fleet and the United States and Canadian Great Lakes fleets.

b/ Percentage shares are shown in brackets.

Table 7

Percentage shares of world tonnage by type of vessel and groups of countries (as at 1 July), 1980, 1984, 1985 and 1986 a/
(In terms of dwt)

Country group	Year	Total dwt		Tankers	Ore and bulk carriers b/ including combined carriers	General cargo ships c/	Container ships and lighter carriers	Other ships
		Millions of dwt	Percentage of world total	Percentage share by vessel type				
World total	1980	682.8	100	49.7	27.2	17.0	1.6	4.5
	1984	674.5	100	42.4	33.0	16.1	2.7	5.8
	1985	664.8	100	39.3	34.9	15.9	3.0	6.9
	1986	639.1	100	37.5	36.0	15.8	3.4	7.3
				Percentage share by groups of countries				
Developed market-economy countries	1980	350.1	51.3	52.5	52.7	43.4	74.3	50.4
	1984	303.4	45.0	48.8	42.5	35.4	66.1	48.3
	1985	282.9	42.5	46.8	38.9	34.4	63.4	46.7
	1986	243.8	38.1	41.7	34.8	30.8	59.4	42.8
Open-registry countries	1980	212.5	31.1	36.2	31.7	20.8	13.5	17.0
	1984	202.2	30.0	34.8	31.9	20.5	11.7	18.8
	1985	203.4	30.6	35.5	32.8	20.3	13.0	23.1
	1986	201.1	31.5	38.2	31.9	20.7	14.6	25.6
Socialist countries of Eastern Europe and Asia	1980	37.8	5.5	2.8	4.2	12.3	2.9	19.2
	1984	55.4	8.2	3.9	6.8	19.9	4.7	17.0
	1985	58.5	8.8	4.4	7.3	20.8	5.5	15.2
	1986	60.6	9.5	4.5	8.2	22.1	6.8	15.3
of which:								
in Eastern Europe	1980	37.8	5.5	2.8	4.2	12.3	2.9	19.2
	1984	40.3	6.0	3.0	4.5	13.7	3.5	15.7
	1985	41.3	6.2	3.4	4.7	13.9	3.3	14.0
	1986	42.1	6.6	3.3	5.3	14.4	3.9	13.8
in Asia	1980	10.9	1.6	0.6	1.6	4.7	0.1	1.3
	1984	15.1	2.2	0.9	2.3	6.2	1.2	1.3
	1985	17.2	2.6	1.0	2.6	6.9	2.2	1.2
	1986	18.5	2.9	1.2	2.9	7.7	2.9	1.5
Developing countries d/	1980	68.4	10.0	7.7	9.2	17.6	7.6	12.0
	1984	107.1	15.9	12.1	17.1	23.7	13.2	15.8
	1985	113.4	17.1	12.9	19.4	24.0	12.1	15.0
	1986	127.0	19.9	15.2	23.5	25.8	13.0	16.2
of which:								
in Africa	1980	7.1	1.1	1.1	0.1	2.3	..	2.1
	1984	7.8	1.1	1.2	0.2	2.4	..	2.6
	1985	8.0	1.2	1.4	0.4	2.5	0.1	2.3
	1986	7.5	1.2	1.1	0.5	2.7	0.1	2.3

Table 7 (continued)

Country group	Year	Total dwt		Tankers	Ore and bulk carriers b/ including combined carriers	General cargo ships c/	Container ships and lighter carriers	Other ships
in America	1980	21.8	3.2	2.3	3.3	5.6	0.1	3.7
	1984	22.2	3.3	2.8	2.9	5.8	0.3	3.6
	1985	23.3	3.5	2.8	3.3	6.0	0.5	3.7
	1986	25.9	4.1	3.6	3.7	6.5	0.8	4.0
in Asia	1980	39.1	5.7	4.3	5.7	9.8	2.7	5.7
	1984	74.6	11.1	8.1	13.4	14.5	12.9	9.5
	1985	78.6	11.8	8.5	15.0	14.4	11.5	8.9
	1986	85.1	13.3	9.8	17.6	13.9	11.8	9.7
in Europe d/	1980	1.2	..	..	..	0.1	-	-
	1984	2.1	0.3	..	0.5	0.8	-	..
	1985	3.0	0.5	0.2	0.6	0.9	-	..
	1986	7.9	1.2	0.7	1.6	2.5	0.3	0.1
in Oceania	1980	0.2	..	..	..	0.1	-	-
	1984	0.4	0.1	..	0.1	0.2	-	0.1
	1985	0.4	0.1	..	0.1	0.2	-	0.1
	1986	0.5	0.1	..	0.1	0.2	-	0.1
Other, unallocated	1980	3.0	0.5	0.2	0.6	0.9	1.6	0.1
	1984	6.4	0.6	0.4	1.7	0.5	4.3	0.1
	1985	6.7	1.0	0.4	1.6	0.6	5.9	0.1
	1986	6.6	1.0	0.4	1.6	0.6	6.2	0.1

Source: Compiled on the basis of data supplied by the Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd.

a/ Excluding the United States Reserve Fleet and the United States and Canadian Great Lakes Fleet.

b/ Ore and bulk carriers of 6,000 grt and above, including combined ore/oil and ore/bulk/oil carriers.

c/ Including passenger cargo vessels.

d/ Including Yugoslavia as of 1986.

territories 6/ represented 85.8 million dwt or 68.6 per cent of the aggregated deadweight owned by developing countries, while the next 10 most important developing countries combined owned a further 17.3 per cent.

16. Changes in the composition of the world fleet shown in table 7 indicate that the share of tanker tonnage in the world fleet continued to decline in 1986, while that of dry bulk carriers increased. There was no significant change in the shares of general cargo ships and containerships.

17. The distribution of the world container fleet and its TEU capacity at mid-1986 is shown in table 8. The total number of containerships increased from 970 in 1985 to 1,023 in 1986 (+ 5.5 per cent) and their TEU capacity rose from 942,222 to 1,087,775 (+ 15.4 per cent). As with other types of vessels, the world container fleet remained concentrated in the developed market-economy countries, which owned 49.2 per cent of the number of ships and 58.7 per cent of their TEU capacity. Open-registry countries represented 18.9 per cent and 14.8 per cent of the number of ships and world TEU capacity respectively. Although in developing countries the number of ships and their combined TEU capacity increased slightly in relation to mid-1985 and those countries' share in world TEU amounted to 13.5 per cent in 1986, that share did not, however, recover to the level of 1984. It may be noted that 92.5 per cent of the total TEU capacity of containerships owned by developing countries was concentrated in developing countries of Asia. The share of socialist countries of Eastern Europe recovered to the level of 1984 and amounted to 3.0 per cent, while the share of socialist countries in Asia amounted to 2.8 per cent.

18. During the past four years the number and TEU capacity of container/bulk carriers (so called conbulkers) have increased considerably. As shown in table 9 the number of conbulkers more than doubled from October 1982 to end-March 1986, while the TEU capacity grew by 151.1 per cent. It should be noted that during this period the total TEU capacity of the total world container fleet increased by only 56.9 per cent. 7/ Thus the capacity of the conbulker fleet reached 268,481 TEU at the end of the first quarter of 1986, which is equal to 11.2 per cent of the total TEU capacity of the world container fleet. However, the significance of conbulkers on certain routes was higher than this figure. For instance, according to Containerisation International Yearbook, conbulkers constituted 58 per cent of total TEU capacity of the fleet deployed in 1986 on the Europe/West Coast of North America route, 25 per cent on the route Europe/India, 21 per cent on the route West Coast of North America/Australia and 14 per cent on the route Europe/East Africa. 8/ The role of this vessel type, which made its debut on the container scene in the early 1970s, has thus considerably expanded as the suitability of the vessel's open hatch design for handling boxes, combined with cargo imbalances in some trades, has encouraged regular deployment of conbulkers in the container market. More specifically, the concentration of these ships on certain routes, where selected bulk commodities and cargoes such as forest products can be effectively combined with container traffic, has led to the growth of the conbulkers' proportion of tonnage deployed in these markets.

Table 8

Distribution of the world fleet and TEU capacity of fully cellular containerships by groups of countries, at mid-year 1984, 1985 and 1986

Flags of registration by groups of countries	Number of ships			TEU capacity and percentage shares a/		
	1984	1985	1986	1984	1985	1986
World total	900	970	1 023	832 112 (100.0)	942 222 (100.0)	1 087 775 (100.0)
Developed market-economy countries	496	516	503	532 229 (64.0)	577 915 (61.3)	638 068 (58.7)
Open-registry countries	161	176	193	100 217 (12.0)	122 290 (13.0)	161 399 (73.5)
Total, 2 and 3	657	692	696	632 446 (76.0)	700 205 (74.3)	799 467 (73.5)
Socialist countries of Eastern Europe and Asia	61	75	96	33 340 (4.0)	47 963 (5.1)	63 144 (5.8)
of which						
in Eastern Europe	49	48	59	23 902 (2.9)	25 674 (2.7)	33 078 (3.0)
in Asia	12	27	37	9 438 (1.1)	22 289 (2.4)	30 066 (2.8)
Developing countries	147	156	177	120 968 (14.5)	123 600 (13.1)	146 813 (13.5)
of which						
in Africa	-	3	3	-	585 (0.1)	585 (-)
in America	11	16	23	2 048 (0.2)	3 873 (0.4)	7 279 (0.7)
in Asia	136	137	146	118 920 (14.3)	119 142 (12.6)	135 792 (12.5)
in Europe	-	-	5	-	-	3 157 (0.3)
in Oceania	-	-	-	-	-	-
Other, unallocated	35	47	54	45 358 (5.5)	70 454 (7.5)	78 351 (7.2)

Source: Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd.

a/ Percentage shares are shown in brackets.

Table 9

Development of conbulker fleet, 1981-1986
(As at end of third quarter)

	1982	1983	1984	1985	1986 a/
Existing conbulker fleet (TEU capacity)	106 922	139 570	177 526	263 755	268 481
Number of ships	143	178	217	292	296
Share of conbulker fleet in total world container fleet TEU capacity (per cent)	7.0	7.9	8.6	11.1	11.2
Conbulker fleet on order (TEU capacity)	33 386	31 164	33 770	39 073	33 853
Number of ships	27	30	32	24	22
Share of conbulker fleet in the total container fleet on order TEU capacity (per cent)	9.9	9.4	11.4	12.0	11.1

Source: Containerisation International Yearbook (London), various issues; Containerisation International (London), August 1986, p. 44.

a/ As at end-March 1986.

19. Table 10 gives the latest available figures on world container port traffic in developing countries and territories for 1985. The world rate of growth for 1984/1985 was 4.6 per cent, which is considerably less than that achieved for 1983/1984, which was 15.6 per cent. The rate of growth for developing countries and territories was 5.0 per cent in the period 1984/1985 and 12.5 per cent in the period 1983/1984. The growth was unevenly spread and frequently erratic from year to year, due in several cases to lack of reliable information.

Table 10

Container port traffic of developing countries and territories
1985 and 1984

Country or territory	Container traffic 1985 (TEUs)	Container traffic 1984 (TEUs)	Percentage change 1984/1985	Percentage change 1983/1984
Hong Kong	2 288 953	2 108 583	8.5	14.7
Singapore	1 698 803	1 552 184	9.4	15.8
Republic of Korea	1 278 538	1 177 866	8.5	20.4
Saudi Arabia	946 322	1 175 543	-19.5	-1.0
United Arab Emirates	710 161	598 036	18.7	18.9
Philippines	659 520	657 792	0.3	-10.5
Brazil a/	591 550	531 013	11.4	46.7
Thailand	400 419	341 021	17.4	12.0
Malaysia a/	389 279	362 399	7.4	28.0
India	382 345	295 888	29.2	26.1
Pakistan	244 086	160 000	52.6	13.0
Kuwait	241 144	257 933	-6.5	3.3
Indonesia	228 319	219 093	4.2	-6.1
Jamaica	222 671	142 675	56.1	9.8
Sri Lanka	215 877	181 484	18.9	41.3
Cyprus	197 256	267 440	-26.2	57.0
Nigeria	180 177	167 723	7.4	-36.7
Egypt	176 386	185 758	-5.0	3.9
Côte d'Ivoire	162 522	151 252	7.4	8.6
Honduras	141 156	138 417	1.9	24.0
Panama	140 714	133 619	5.30	0
Chile	130 710	134 766	-3.0	30.8
Argentina	121 336	119 235	1.7	-0.7
Oman	113 565	91 488	24.1	36.4
Venezuela	111 294	116 519	-4.5	96.4
Jordan	108 891	102 485	6.2	18.4
Trinidad and Tobago	107 356	99 285	8.1	-0.6
Bahrain	104 081	111 809	-6.9	17.9
Kenya	103 362	92 462	11.8	10.2
Dominican Republic	96 617	104 833	-7.8	55.9
Cameroon	96 469	88 251	9.3	19.2
Costa Rica	93 966	154 593	-39.2	13.4
Syrian Arab Republic	84 727	50 770	66.9	8.5
Guam	81 955	79 342	3.2	6.2
Papua New Guinea	76 450	67 491	13.2	4.2
Guadeloupe	74 870	73 525	1.8	3.4
Morocco	71 776	65 224	10.0	3.8
Ecuador	65 687	52 065	26.2	48.7
Guatemala	63 683	47 405	34.3	20.2
Colombia	63 336	56 190	12.7	26.1
Bahamas	54 214	62 344	-13.0	-4.0
Peru	50 574	44 722	13.0	37.1
Netherlands Antilles	48 946	52 271	-6.3	-18.3
Mexico a/	46 317	118 877	61.0	-46.5

Table 10 (continued)

Country or territory	Container traffic 1985 (TEUs)	Container traffic 1984 (TEUs)	Percentage change 1984/1985	Percentage change 1983/1984
United Republic of Tanzania	42 592	33 765	26.1	23.8
Togo	41 803	36 305	15.1	14.1
Haiti	40 294	37 016	8.8	4.6
Algeria	35 618	40 969	-13.1	n.a.
Bangladesh	34 620	18 379	88.4	n.a.
Barbados	30 852	27 673	11.4	n.a.
Other reported b/	461 839	491 440	-6.0	-4.6
Total reported c/	14 153 998	13 477 218	5.0	12.5
World total reported	55 789 410	53 320 971	4.6	15.6

Source: Derived from information presented in Containerisation International Yearbooks of 1986 and 1987.

a/ Data subject to omissions.

b/ Comprising developing countries and territories where less than 30,000 TEU per year were reported or where a substantial lack of data was found.

c/ Certain ports did not respond to the background survey, although they were not among the largest ports; the total omission may be estimated at 5-10 per cent.

C. Age distribution of the world merchant fleet

20. The age distribution of the world merchant fleet by type of vessel and country grouping (in terms of dwt) in mid-1986 is presented in table 11. The average age of all ships in 1986 amounted to 11.37 years. Dry bulk carriers were the youngest type of vessel (10.43 years) and general cargo ships the oldest (13.40 years). By country groupings, developed market-economy countries and open-registry countries showed the lowest average age of ships (10.95 years and 11.31 years respectively), followed by developing countries (11.42 years) and socialist countries (13.32 years).

D. Comparison of cargo turnover and fleet ownership

21. The relationship between cargo volumes generated by different groups of countries and fleet ownership is represented in table 12. The data demonstrate the fact that developed market-economy countries, either directly or indirectly through open-registry countries, continue to own a disproportionate share of the world merchant fleet compared to total world cargo turnover. Thus, in 1986 these two country groups combined generated 57.0 per cent of the world's international seaborne trade but owned 69.6 per cent of the world's merchant fleet (in terms of deadweight tonnage). At the same time, the share of developing countries in goods loaded and unloaded in world seaborne trade in 1986 was 35.9 per cent, while their merchant fleet represented 19.9 per cent of total world deadweight fleet. The share of the socialist countries of Eastern Europe and Asia was only slightly less than their share of the world's deadweight tonnage.

Table 11

Age distribution of the world merchant fleet by type of vessel as at 1 July 1986
(Percentage of total in terms of dwt)

Country grouping	Type of vessel	Total	0-4 years	5-9 years	10-14 years	15 years and over	Average age (years) a/ July 1986
World total	All ships	100	18.0	22.2	37.0	22.8	11.37
	Tankers	100	9.2	20.6	54.5	15.7	11.62
	Bulk carriers b/	100	27.5	20.8	29.5	22.2	10.43
	General cargo	100	13.5	25.6	20.6	40.3	13.40
Developed market-economy countries	All ships	100	18.3	25.2	36.1	20.4	10.95
	Tankers	100	9.0	23.7	50.9	16.4	11.55
	Bulk carriers b/	100	26.6	23.5	30.3	19.6	10.12
	General cargo	100	19.1	31.0	16.7	33.2	11.86
Open-registry countries	All ships	100	16.1	19.4	45.6	18.9	11.31
	Tankers	100	7.3	18.2	63.8	10.7	11.43
	Bulk carriers b/	100	26.5	18.3	30.8	24.4	10.87
	General cargo	100	14.1	24.9	25.8	35.2	12.86
Subtotal	All ships	100	17.3	22.6	40.3	19.8	11.12
	Tankers	100	8.2	21.1	57.0	13.7	11.49
	Bulk carriers b/	100	26.6	21.0	30.6	21.8	10.47
	General cargo	100	17.2	28.7	20.2	33.9	12.23
Socialist countries of Eastern Europe and Asia	All ships	100	17.0	20.3	22.3	40.4	13.32
	Tankers	100	14.6	18.6	28.7	38.1	13.42
	Bulk carriers b/	100	25.1	26.3	23.7	24.9	10.66
	General cargo	100	9.8	16.6	19.6	54.0	15.59
Developing countries (excluding open-registry countries)	All ships	100	20.3	21.5	32.9	25.3	11.42
	Tankers	100	12.9	18.7	48.6	19.8	11.75
	Bulk carriers b/	100	30.8	18.7	28.8	21.7	10.15
	General cargo	100	8.8	26.7	22.8	41.7	13.95

Source: Compiled on the basis of data supplied by the Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd.

a/ To calculate average age it has been assumed that the ages of vessels are distributed evenly between the lower and upper limit of each age group. For the 15 years and over age group, the mid-point has been assumed to be 22 years.

b/ Including combined carriers.

Table 12

Comparison between total cargo turnover and fleet ownership by groups of countries, 1970 and 1981-1986
(In terms of dwt)

Country total of grouping	Year	Goods loaded and unloaded (millions of tons)		Total of goods unloaded (millions of tons)	Deadweight tonnage of loaded and fleet (millions of tons)	Percentage of world merchant goods loaded and unloaded	Percentage of world total of merchant fleet owned (dwt)
		Loaded	Unloaded				
Developed market-economy and open-registry countries	1970	802.7	2 010.4	2 812.1	282.2	54.8	86.5
	1981	1 447.2	2 430.3	3 877.5	549.5	54.9	79.8
	1982	1 370.7	2 305.3	3 676.0	543.6	55.1	78.4
	1983	1 410.4	2 218.2	3 628.6	522.2	55.4	76.1
	1984	1 492.8	2 351.5	3 844.3	505.6	56.3	75.0
	1985	1 491.9	2 344.5	3 836.4	486.3	56.7	73.1
	1986	1 526.0	2 370.0	3 896.0	444.9	57.0	69.6
Socialist countries of Eastern Europe and Asia	1970	158.8	87.6	264.4	21.7	4.8	6.7
	1981	233.5	217.7	451.2	50.7	6.4	7.4
	1982	242.3	221.1	463.4	52.0	7.0	7.5
	1983	265.7	201.2	466.9	54.4	7.1	7.9
	1984	275.8	214.4	490.2	55.4	7.2	8.2
	1985	269.7	212.9	482.6	58.5	7.1	8.8
	1986	271.0	212.0	483.0	60.6	7.1	9.5
Developing countries	1970	1 643.3	431.6	2 074.9	20.5	40.4	6.3
	1981	1 896.7	867.4	2 764.1	85.9	39.1	12.5
	1982	1 660.4	866.2	2 526.6	94.5	37.9	13.6
	1983	1 554.5	892.7	2 447.2	104.9	37.5	15.3
	1984	1 595.6	899.1	2 494.7	107.1	36.5	15.9
	1985	1 568.6	875.7	2 444.3	113.4	36.2	17.1
	1986	1 588.0	868.0	2 456.0	127.0	35.9	19.9
World total a/	1970	2 604.8	2 529.6	5 134.4	26.1	100.0	100.0
	1981	3 555.4	3 511.9	7 067.3	688.8	100.0	100.0
	1982	3 273.4	3 392.6	6 666.0	693.5	100.0	100.0
	1983	3 230.6	3 312.1	6 542.7	686.0	100.0	100.0
	1984	3 364.2	3 465.0	6 829.2	674.5	100.0	100.0
	1985	3 330.2	3 433.1	6 763.3	664.8	100.0	100.0
	1986	3 385.0	3 450.0	6 835.0	639.1	100.0	100.0

Source: As per tables 3 and 4.

a/ Including unallocated tonnage indicated in annex II.

Chapter III

PRODUCTIVITY OF THE WORLD FLEET AND THE PROBLEM OF TONNAGE OVERSUPPLY

A. Estimates of tons and ton-miles per dwt

22. Both main indicators (ton-miles performed per dwt and tons carried per dwt) estimated for the total world fleet as presented in table 13 show that the productivity of the fleet increased significantly in 1986 as compared to 1985. Tons of cargo carried per dwt amounted to 5.30 in 1986 (as compared to 5.01 in 1985) and ton-miles performed per dwt amounted to 21.54 (as compared to 19.80 in 1985). The principal reason for the generally improving trends in productivity of the world fleet can be attributed to a temporary increase in oil trade and large-scale scrapping of dry cargo ships.

Table 13

Cargo tonnage carried and ton-miles performed per dwt of the total world fleet, 1970 and 1976-1986

Year	World fleet (millions of dwt)	Total cargo carried (millions of tons)	Total ton-miles performed (thousands of millions of ton-miles)	Tons of cargo carried per dwt	Ton-miles performed per dwt (thousands)
1970	326.1	2 605	10 654	7.99	32.67
1976	601.2	3 391	17 053	5.64	28.36
1977	642.3	3 453	17 476	5.38	27.21
1978	662.8	3 461	17 022	5.22	25.68
1979	673.7	3 778	17 675	5.61	26.24
1980	682.8	3 704	16 777	5.42	24.47
1981	688.8	3 555	15 840	5.16	22.99
1982	693.5	3 273	13 699	4.72	20.46
1983	686.0	3 230	12 850	4.70	18.34
1984	674.5	3 364	13 368	4.99	19.82
1985	664.8	3 330	13 160	5.01	19.80
1986	639.1	3 385 a/	13 765	5.30	21.54

Sources: World fleet: Lloyd's Register of Shipping: Statistical Tables (London), various issues (mid-year figures); total cargo carried: UNCTAD data bank; ton-miles: Fearnleys, Review (Oslo), various issues.

a/ Preliminary estimates.

23. The above-mentioned productivity indicators (ton-miles performed per dwt and tons carried per dwt) estimated for individual types of carriers for 1976-1986, as shown in tables 14 and 15, demonstrate a considerable improvement of productivity for tankers and combined carriers in 1986 as compared with the previous year. This development may be largely attributed to an increase in world seaborne trade of crude oil and oil products in 1986. The productivity of the dry bulk cargo fleet, on the other hand, decreased, reflecting the generally depressed situation in the dry bulk trades.

Table 14

Estimated productivity of tankers, bulk carriers, combined carriers a/ and the residual fleet, b/ 1970 and 1976-1986
(Ton-miles performed per dwt)

Year	Ton-miles of oil and grain by tankers (thousands of millions) c/	Ton-miles per dwt of tankers (thousands)	Ton-miles of dry bulk cargo by bulk carriers (thousands of millions)	Ton-miles per dwt of bulk carriers (thousands)	Ton-miles of oil and dry bulk cargo by combined carriers (thousands of millions)	Ton-miles per dwt of combined carriers (thousands)	Ton-miles of the residual fleet b/ (thousands of millions)	Ton-miles per dwt of the residual fleet (thousands)
1970	6 039	43.82	1 891	39.40	745	52.46	1 979	15.69
1976	10 335	33.71	2 917	29.11	1 660	36.64	2 141	14.36
1977	10 527	32.16	3 088	27.35	1 685	35.55	2 176	14.16
1978	9 950	30.16	3 387	27.76	1 524	31.36	2 161	13.31
1979	9 997	30.52	3 575	28.58	1 665	34.19	2 438	14.14
1980	9 007	27.56	2 009	14.47	1 569	32.43	4 192	24.83
1981	8 009	24.80	2 169	14.73	1 518	32.14	4 144	24.26
1982	5 893	18.40	2 422	15.66	1 310	28.92	3 874	22.35
1983	5 230	17.38	2 640	15.60	1 016	23.57	3 694	21.38
1984	5 305	18.93	3 041	17.07	1 187	28.13	3 835	22.05
1985	4 853	18.35	3 208	17.08	1 192	29.00	3 812	22.24
1986	5 647	23.60	3 047	15.43	1 196	33.60	3 875	23.25

Source: Compiled on the basis of Fearnleys, Review, World Bulk Trades and World Bulk Fleet (Oslo), various issues.

a/ As from 1980 the data cover bulk carriers and combined bulk carriers of over 40,000 dwt, as against 18,000 dwt in the previous years. The change affects figures for the bulk carrier fleet and consequently the residual fleet, but the combined bulk fleet is not affected as the combined bulk fleet of size range 18,000 dwt-40,000 dwt forms only 0.3 per cent of the total combined bulk fleet.

b/ The "residual fleet" refers to all vessels included in table 4, excluding tankers, bulk carriers and combined bulk carriers of the size range indicated in footnote a/.

c/ Excluding grain since 1982, because data are not available.

Table 15

Estimated productivity of tankers, bulk carriers, combined carriers and the residual fleet, a/ 1970 and 1976-1986
(Tons carried per dwt)

Year	Tons of oil and grain by tankers (millions)	Tons per dwt of tanker	Tons of dry bulk cargo by bulk carriers of over 18,000 dwt (millions)	Tons per dwt of bulk carriers	Tons of oil and dry bulk cargo by combined carriers of over 18,000 dwt (millions)	Tons per dwt of combined carriers	Tons carried by the residual fleet (millions)	Tons per dwt of the residual fleet
1970	1 182	8.58	403	8.40	97	6.83	800	6.34
1976	1 563	5.10	607	6.06	244	5.39	910	6.10
1977	1 591	4.86	643	5.70	268	5.65	921	5.99
1978	1 589	4.82	675	5.53	261	5.37	966	5.95
1979	1 681	4.82	728	5.82	308	5.82	1 038	6.02
1980	1 564	4.79	396	2.85	282	5.83	1 406	8.33
1981	1 419	4.39	421	2.86	262	5.53	1 404	8.22
1982	1 191	3.72	455	2.94	232	5.12	1 321	7.62
1983	1 132	3.76	493	2.90	196	4.55	1 272	7.36
1984	1 174	4.19	566	3.18	214	5.07	1 358	7.81
1985	1 084	4.10	620	3.30	200	4.80	1 389	8.10
1986	1 169	4.89	588	2.98	201	5.65	1 404	8.42

Source: As for table 14.

a/ See footnote a/ in table 14.

B. Estimates of tonnage oversupply

24. As in previous years, the supply/demand disequilibrium remained one of the most serious problems facing the world shipping industry in 1986. Table 16 shows the development of surplus tonnage in world shipping as of 1970. The steady growth of surplus tonnage 9/ at the beginning of the 1980s reached its peak in 1983 when the average year figure of surplus tonnage amounted to 195.8 million dwt, or 28.5 per cent of the total world merchant fleet and 39.9 per cent of the world active fleet. Despite a certain decrease in the surplus tonnage during the last three years, the estimated average figure for the surplus fleet in 1986 amounted to 131.7 million dwt, or 20.6 per cent of the total world merchant fleet as at 1 July 1986 and 25.9 per cent of the active world merchant fleet.

25. The imbalance between supply and demand of tonnage affects practically all sectors of world shipping. However, about 63.3 per cent of the total bulk fleet surplus tonnage in 1986 was attributed to tankers while dry bulk carriers and tankers combined represented 93.3 per cent of the surplus tonnage of the world merchant fleet (122.9 million dwt).

26. As shown in table 17 oversupply conditions continued to be most noticeable in the tanker sector, where the estimated share of surplus tonnage in the total world tanker fleet in 1986 (average year figures) amounted to 29.8 per cent. This, however, shows a significant improvement of the situation as compared with the previous year (36.9 per cent), which may be attributed largely to a relatively high level of scrapping in the first half of the year and to a "mini-boom" in the tanker market in the spring-summer period when the prices for crude oil and oil products went down, leading to an increase in oil movements. A number of tankers were reactivated due to increased demand for tanker tonnage. Thus, 1986 was characterized by a steady growth of demand for tanker tonnage in the freight market, especially during the first three quarters of the year.

27. The situation in the dry bulk carrier sector showed some slight improvement in 1986 as compared with the previous year. Although the average demand for this type of vessel was below the level of 1985, 10/ the accelerated scrapping of dry bulk carriers led to a decrease of the surplus in this sector, although it still stood at 20.7 per cent in 1986.

28. As shown in table 17, laid-up and idle ships comprised a significant part of the bulk fleet surplus. 11/ In 1986 such ships constituted 47.1 per cent of the total dry bulk and tanker fleet surplus (below 50 per cent for the first time in the last five years). The importance of laid-up and idle tonnage as a category of the surplus fleet is mostly noticeable in the tanker sector, where it amounted to 61.3 per cent of the total tanker tonnage surplus in 1986. The share of laid-up and idle tonnage in the dry bulk surplus fleet amounted to 22.6 per cent in 1986.

29. With regard to the distribution of laid-up and idle tonnage of the bulk fleet by size groups, table 18 shows that during the period 1982-1986 VLCCs and ULCCs accounted for more than 80 per cent of such total tanker tonnage (83.9 per cent in 1986), while for medium-sized tankers the figure decreased during the same period from 16.7 per cent to 11.5 per cent. Handy-sized tankers laid up or idle amounted to 4.6 per cent of the total laid-up and idle tonnage. In the dry bulk carrier sector the order of importance of basic size

Table 16

Tonnage oversupply in the world merchant fleet, 1970, 1975, 1980-1986
(Million dwt and percentages)

	1970	1975	1980	1981	1982	1983	1984	1985	1986 (est)
					(Million dwt)				
World merchant fleet (as at mid-year)	326.1	546.3	682.2	688.8	693.5	686.0	674.5	664.8	639.1
Surplus tonnage a/	0.6	46.3	97.1	149.1	184.1	195.8	171.2	161.5	131.7
Active fleet b/	325.5	500	585.1	539.7	509.4	490.2	503.3	503.3	507.4
					(Percentages)				
Surplus tonnage as a percentage of the world merchant fleet	0.2	8.4	14.2	21.6	26.5	28.5	25.4	24.3	20.6
Surplus tonnage as a percentage of the active world merchant fleet	0.2	9.3	16.6	27.6	36.1	39.9	34.0	32.2	25.9

Sources: Shipping Information Services of Lloyds's Register of Shipping and Lloyd's of London Press Ltd.; Lloyd's Shipping Economist (London), various issues; Institute of Shipping Economics (Bremen), Shipping Statistics Yearbook 1981.

a/ Data for 1970-1975 refers to tonnage laid up for lack of employment (year-end figures). Data for 1980-1986 includes laid-up tonnage, ships idle for other reasons and estimates of surplus on account of slow steaming (figures shown are averages for the respective year).

b/ World fleet minus surplus tonnage.

Table 17

Analysis of tonnage oversupply by vessel type, 1980-1986
(Average year figures in million dwt) a/

	1980	1981	1982	1983	1984	1985	1986 (est.)
Supply of world tanker fleet	341.8	341.3	335.0	319.4	296.7	273.0	260.9
Total tanker surplus fleet, of which:	74.0	107.7	130.7	134.0	111.7	100.9	77.8
Laid-up and idle	25.3	41.1	76.7	89.2	71.3	68.5	47.7
Slow steaming	48.7	66.6	54.0	71.3	40.4	32.4	30.1
Share of surplus fleet in the world tanker fleet (per cent)	21.6	31.5	39.0	41.9	37.6	36.9	29.8
Supply of world dry bulk fleet	172.8	184.0	197.0	202.9	215.0	222.7	217.9
Dry bulk fleet surplus, of which:	19.7	36.4	46.4	52.0	50.3	50.1	45.1
Laid-up and idle	3.9	4.8	11.8	19.2	13.1	10.8	10.2
Slow steaming	15.8	31.6	34.6	32.8	37.2	39.3	34.9
Share of surplus in the world dry bulk fleet (per cent)	11.4	19.8	23.5	25.6	23.4	22.5	20.7
Supply of world general cargo fleet	103.4b/	108.4b/	85.4	82.1	79.8	74.9	70.3
General cargo fleet surplus	3	4.4	6.1	8.3	7.6	5.8	4.4
Share of surplus in the world general cargo fleet (per cent)	2.9	4.0	7.1	10.1	9.5	7.7	6.2
Supply of world unitized fleet	19.0	21.1	22.9	25.2	27.3	29.9	31.0
Surplus of unitized fleet	0.4	0.6	0.9	1.5	1.6	1.7	1.5
Share of surplus in the world unitized fleet (per cent)	2.1	2.8	3.9	5.9	5.9	5.7	4.8

Source: Based on Lloyd's Shipping Economist (London), various issues.

a/ Aggregates for all sectors as shown in the present table are averages for the years shown and therefore differ from the world total figures in table 17, which indicate estimates at mid-year.

b/ Average figures for the second half of the year.

Table 18

Distribution of world laid-up and idle tonnage of dry bulk carriers and tankers by size groups in 1982-1986 a/
(Average year figures in million dwt and percentages)

Laid-up and idle tonnage	Million dwt					Percentage				
	1982	1983	1984	1985	1986 (Est)	1982	1983	1984	1985	1986
Dry bulk carriers:										
Total	11.8	19.2	13.1	10.8	10.2	100.0	100.0	100.0	100.0	100.0
of which:										
10-39,999 dwt	4.9	8.3	6.4	5.8	6.0	41.5	43.2	48.9	53.7	58.8
40-79,999 dwt	2.9	4.9	3.2	2.7	2.2	24.6	25.5	24.4	25.0	21.6
80,000 dwt and above	4.0	6.0	3.5	2.3	2.0	33.9	31.3	26.7	21.3	19.6
Tankers:										
Total,	76.7	89.2	71.3	68.5	47.7	100.0	100.0	100.0	100.0	100.0
of which:										
10-39,999 dwt	2.4	2.7	2.4	2.5	2.2	3.1	3.0	3.4	3.6	4.6
40-149,999 dwt	12.8	14.0	8.8	6.3	5.5	16.7	15.7	12.3	9.2	11.5
150,000 dwt and above	61.5	72.5	60.1	59.7	40.0	80.2	81.3	84.3	87.2	83.9

Source: Based on Lloyd's Shipping Economist (London), various issues.

a/ Combined carriers are allocated to either dry bulk or oil trades, according to the previous trading pattern.

groups in the total amount of laid-up and idle tonnage differs. Thus, the size group of 10-39,999 dwt ships accounted for 58.8 per cent of the total laid-up and idle dry bulk surplus fleet, having grown steadily from 41.5 per cent in 1982. During the same period the share of medium-sized and large bulk carriers decreased to 21.6 per cent and 19.6 per cent respectively.

30. As shown in table 17, for the general cargo and unitized category of ships, supply and demand were more balanced. In 1986 the amount of general cargo and unitized fleet surplus and its share in the world general cargo and unitized fleet decreased as compared with the two previous years. However, it should be noted that, according to certain estimates, the surplus of the container fleet in terms of carrying capacity in 1986 was much higher than the surplus estimated in terms of dwt. The estimated average carrying overcapacity amounted to 30 to 38.5 per cent worldwide. 12/

31. During the last five years the level of imbalance between supply of tonnage and demand for it was very high in the liquid natural gas carriers' sector, where about 40-45 per cent of tonnage was considered permanently in surplus. 13/ At the beginning of December 1986, around 15 of the world's fleet of 65 LNG carriers were laid up - many having been without work for at least 18 months. Their total capacity was estimated as more than 25 per cent of the world LNG carriers' capacity. 14/

32. In spite of the fact that surplus tonnage significantly decreased during 1986, ships appeared to be generally spending longer periods in lay-up. According to estimates by the General Council of British Shipping, the average time spent in lay-up by tankers by October 1986 was about 1,081 days - compared with 824 days in October 1985. Dry cargo ships were also spending more time idle - 949 days by October 1986 compared with 792 days in the corresponding month of the previous year. 15/

33. During recent years, a considerable number of tankers have been used for oil storage. As shown in table 19, the number of ships engaged in oil storage on a permanent or long-term basis was especially high in 1982-1983, when the total tanker fleet surplus was at its highest level. As a result of heavy tanker demolition, which reached its peak in 1985 when tanker tonnage sold for breaking was estimated at about 27 million dwt, 16/ plus a certain increase of activity in the tanker market during the last quarter of 1985 and in 1986, a number of vessels were withdrawn from oil storage. However, tanker tonnage engaged in oil storage continued to play an important role in the utilization of surplus tonnage. In June 1986 it accounted for 15.7 million dwt, or 33.7 per cent of the total laid-up and idle tonnage for that month. 17/ However, by the end of the year the amount of tonnage engaged in floating storage increased by 19.1 per cent as compared with July 1986 and amounted to 19.6 million tons. Further growth of tonnage used for floating oil storage was recorded in January 1987, when 98 tankers and combined carriers having a total tonnage of 20.1 million dwt were thus utilized. About 12.2 million dwt (58 vessels), representing 60.8 per cent of tonnage used for oil storage, was owned by independent shipping companies, while the rest (7.9 million dwt (38 vessels)) was owned by oil companies. 18/ On the whole, during the last four years the amount of tonnage engaged in oil storage on a permanent basis has steadily decreased, although use of short-term contracts has increased.

Table 19

Tanker tonnage engaged in oil storage, 1981-1986
(Capacity in thousand deadweight tons)

Date	Semi-permanent		Short-term		Total	
	No.	Dwt	No.	Dwt	No.	Dwt
July 1981	52	10 649	62	16 205	114	26 854
January 1982	58	12 682	45	11 772	103	24 454
July 1982	58	12 703	16	2 753	74	15 456
January 1983	51	11 135	16	2 615	67	13 750
July 1983	53	11 837	14	1 764	67	13 601
January 1984	49	9 737	25	4 658	74	14 395
July 1984	43	9 601	48	11 134	91	20 735
January 1985	30	6 384	49	12 093	79	18 477
July 1985	38	8 342	38	9 714	76	18 056
January 1986	43	7 514	35	8 353	78	15 876
July 1986	40	6 696	33	9 196	73	15 892
December 1986	41	7 148	44	12 495	45	19 643

Source: John I. Jacobs PLC, World tanker fleet review (London), various issues.

34. With the considerable and continuous overcapacity in LNG carriers a number of companies have been reported to be examining the possibility of chartering or buying second-hand LNG carriers for conversion to floating storage of gas. At the beginning of December 1986 at least six LNG carriers of 126,530 m^3-133,000 m^3 each were being considered as possible floating storage vessels. 19/

35. Table 20 shows the 20 largest laid-up fleets by flag of registry as at mid-June 1986. Although developed market-economy and open-registry countries own the largest amount of laid-up tonnage, it will be noted that seven developing countries are included in this list, indicating the difficulties faced by developing countries in the present prolonged shipping crisis.

Table 20

Major laid-up fleets by flag country as at mid-June 1986
(Ships of 300 grt and over)

	Laid-up tonnage (thousand dwt)	Total fleet of the country (thousand dwt)	Share of the laid-up tonnage in the total fleet of the country (per cent)
Liberia	10 411.3	103 057.5	10.1
Greece	3 702.4	49 840.4	7.4
Panama	3 411.3	65 929.6	5.2
United States	3 296.1	24 506.4	13.4
Bahamas	1 995.4	10 135.3	19.7
Japan	1 758.5	59 080.1	3.0
France	1 485.8	9 245.1	16.1
Italy	1 007.2	12 062.2	8.3
United Kingdom	686.8	18 383.3	3.7
India	522.3	10 520.6	5.0
Norway	501.9	15 932.4	3.2
Portugal	355.3	1 952.5	18.2
Iraq	328.2	1 479.8	22.2
Philippines	324.7	9 896.2	3.3
Netherlands	266.8	4 996.4	5.3
Iran (Islamic Republic of)	233.8	3 730.2	6.3
Republic of Korea	207.4	10 933.6	1.9
Brazil	199.8	10 112.2	2.0
Cyprus	162.0	15 913.9	1.0
Argentina	155.1	3 366.1	4.6

Source: Based on Institute of Shipping Economics and Logistics, Bremen, Shipping Statistics, No. 8, August 1986, p. 19.

Chapter IV

SHIPBUILDING

A. Ship prices

36. Representative newbuilding prices for the years 1980 and 1982-1986 are shown in table 21. The 1986 prices for new tankers, general cargo ships and bulk carriers (except for 120,000 dwt bulk carriers) indicate a certain stabilization and recovery as compared with the previous year, while prices for LNG carriers, LPG carriers, 1,600 TEU containerships and large-size bulk carriers continued to decline in 1986. Prices for 1,200 TEU ro/ro ships remained at the level of 1985. The biggest increase in prices for newbuildings concerns 80,000 dwt and 250,000 dwt tankers and general cargo ships (13.6 per cent, 8.5 per cent and 9.3 per cent increase over the previous year's figure respectively). However, in the case of large-size tankers the prices registered in 1986 were 10.5 per cent below those of 1984, in the case of handy-size tankers they were at the level of 1984 and for medium-size tankers they were only slightly above the level of 1984. The improvement of prices for tankers in 1986 should be attributed mostly to the growth in demand for tanker tonnage due to an increase in transportation of oil and oil products. A certain increase in prices for newbuildings such as 70,000 dwt bulk carriers (+7.1 per cent) resulted, while the increase in prices for newbuildings of 30,000 dwt bulk carriers was only marginal and prices for large-size bulk carriers were 5.7 per cent below those of 1985.

Table 21

Representative newbuilding prices, 1980 and 1982-1986
(Millions of dollars)

Type and size of vessel	1980	1982	1983	1984	1985	1986	Percentage change 1985/1986
30 000 dwt bulk	16.7	18.9	14.8	13.9	11.3	11.5	+1.8
32 000 dwt tanker	18.7	27.9	23.3	18.0	17.5	18.0	+2.8
70 000 dwt bulk	23.6	29.0	22.3	17.8	14.0	15.0	+7.1
80 000 dwt tanker	28.3	34.0	30.0	24.2	22.0	25.0	+13.6
120 000 dwt bulk	32.2	40.8	32.0	27.7	26.5	25.0	-5.7
250 000 dwt tanker	75.0	75.0	72.5	57.0	47.0	51.0	+8.5
125 000 m^3 LNG	200.0	249.1	200.0	200.0	200.0	165.0	-17.5
75 000 m3 LPG	77.0	69.2	55.4	48.9	44.1	42.5	-3.6
1 200 TEU ro/ro	43.7	45.0	40.0	28.0	28.0	28.0	-
15 000 dwt general cargo ship	13.9	14.0	13.2	12.8	12.8	14.0	+9.3
1 600 TEU full container ship	31.5	36.0	28.8	22.9	21.1	20.7	-1.9

Source: Lloyd's Shipping Economist (London), various issues.

37. The most serious decline in 1986 occurred in prices for newbuildings of 125,000 m^3 LNG carriers, which were 17.5 per cent below those of 1985. Prices for LPG carriers and 1,600 TEU full containerships also experienced decreases of 3.6 per cent and 1.9 per cent respectively as compared with 1985.

38. It may be noted that practically all representative newbuilding prices recorded in 1986, even those which showed a significant improvement as compared with 1985, were still much lower than those of 1982-1983 (with the exception of general cargo ships). The decrease in newbuilding prices for practically all types of ships during the last few years can be attributed mostly to the existing and protracted imbalance between supply and demand in world shipping.

39. Table 22 shows the changes in second-hand prices for selected types of vessel during the period 1984-1986. The increase in demand for tanker tonnage led to a sharp increase in prices for second-hand tankers in 1986 as compared with 1985. Thus, during the period from August 1985 to August 1986, prices for 5 and 10-year-old 75,000 dwt tankers rose by 91.7 per cent and 107.7 per cent respectively. At the same time the price for a 10-year-old 250,000 VLCC rose by 163.2 per cent. However, over a longer period, viz from August 1984 to August 1986, an actual increase in price (+81.8 per cent) took place only for the VLCC, while the prices for 75,000 dwt tankers only recovered to about the level of 1984. Prices for dry bulk carriers of almost all sizes (except for 5-year-old 60,000 dwt bulk carriers) continued to decline during 1986, although to a smaller degree than in 1985. Meanwhile during the last biennium the decline varied from 27.0 per cent for a 5-year-old 60,000 dwt bulk carrier to 60.0 per cent for a 10-year-old 35,000 dwt bulk carrier. Certain increases were noted in prices for 5 and 10-year-old 17,000 dwt multipurpose cargo ships, which had been at a very low level in August 1985.

B. Tonnage on order

40. Table 23 summarizes the trends during the period 1984-1986 and the status of world tonnage on order at the end of the third quarter of 1986. Overall, the total tonnage on order experienced a significant decrease (20.4 per cent) from September 1985 to September 1986, when it stood at 32.0 million dwt, which is the lowest figure for the last 10 years. Bulk carriers on order showed the most significant decrease as compared with September 1985, amounting to 7.1 million dwt or 31.5 per cent. With respect to tankers, however, tonnage on order increased by 6.8 per cent or 0.7 million dwt, which can probably be attributed mostly to the mini-boom in the tanker market caused by extremely low prices for oil. As at 30 September 1986 dry bulk carriers represented 48.1 per cent of the total world tonnage on order as compared with 56.0 per cent a year before, while the share of tankers increased to 34.1 per cent (25.4 per cent in September 1985). The tonnage of other ships on order decreased during this period from 7.5 million dwt to 5.7 million dwt.

41. By year-end 1986 total outstanding tanker orders (including combined carriers) for delivery in the next two years was estimated at 13 to 15 million dwt and dry bulk carriers on order amounted to 8 to 10 million dwt. 20/

Table 22

Second-hand ship prices, 1984-1986 (as at end August)
(Millions of United States dollars and percentages)

	1984	1985	1986	Percentage change 1984/1985	Percentage change 1985/1986	Percentage change 1984/1986
5 years old						
75 000 dwt tankers	11.5	6.0	11.5	-47.8	+91.7	0.0
60 000 dwt bulk carrier	9.25	6.0	6.75	-35.1	+12.5	-27.0
35 000 dwt bulk carrier	6.75	4.0	3.75	-40.7	-6.3	-44.4
27 000 dwt bulk carrier	na	2.75	2.75	na	0.0	na
17 000 dwt multipurpose	na	2.5	3.25	na	+30.0	na
10 years old						
250 000 VLCC	5.5	3.8	10.0	-30.9	+163.2	+81.8
75 000 dwt tanker	7.0	3.25	6.75	-53.6	+107.7	-3.6
60 000 dwt bulk carrier	6.5	3.25	2.8	-50.0	-13.8	-56.9
35 000 dwt bulk carrier	4.5	2.0	1.8	-55.6	-10.0	-60.0
27 000 dwt bulk carrier	na	1.7	1.5	na	-11.8	na
17 000 dwt multipurpose	na	1.5	1.6	na	+6.7	na

Sources: Lambert Brothers Shipping Ltd (London), A Review of Developments in World Trade and their Effect on the Shipping Market, September 1985, p. 21; Hill Samuel Shipping Holding (London), World Trade Review and Outlook. Developments in Trade and Effects on the Shipping Market, September 1986, p. 19.

42. The distribution of newbuilding orders among country groupings (by countries of registry) as at 30 September 1986 shown in table 24 indicates that the combined total deadweight of developed market-economy countries and open-registry countries represents 65.7 per cent of the total tonnage on order. By comparison, developing and socialist countries accounted for 22.7 per cent and 10.0 per cent respectively. Newbuilding orders amounting to 1.6 per cent of the total figure as at 30 September were unallocated. Developed market-economy countries and open-registry countries had the largest portion of orders for all types of newbuildings as at 30 September 1986. Combined they accounted for 67.3 per cent of the deadweight tonnage of all tanker newbuilding orders, 77.7 per cent of orders for ore/oil and OBO carriers, 61.7 per cent of other bulk carriers, 68.6 per cent of full containerships, and 62.4 per cent of ro-ro cargo ships.

43. Developing countries had a 20.9 per cent share in newbuilding orders for tankers (in dwt), a 22.3 per cent share for ore/oil and OBO carriers, a 28.9 per cent share for other bulk carriers, a 13.9 per cent share for full container ships, and a 10.8 per cent share for ro-ro ships. Socialist countries of Eastern Europe and Asia accounted for 10.8 per cent of newbuilding orders for tankers, 8.1 per cent of orders for other bulk carriers, 5.8 per cent of orders for full containerships, and 26.7 per cent of orders for ro-ro cargo ships. They had no ore/oil or OBO carriers on order.

Table 23

World tonnage on order at the end of each quarter
1984, 1985 and 1986
(Millions of dwt and percentage change)

Tonnage on order as at	All ships in millions of dwt	Percentage change	Tankers in millions of dwt	Percentage change	Dry bulk carriers (inc. combined carriers) in millions of dwt	Percentage change	Other ships in millions of dwt	Percentage change
31 March 1984	47.0		7.8		30.1		9.1	
		-1.0		+1.5		+0.3		-7.0
30 June 1984	46.6		8.0		30.2		8.5	
		-		+3.4		-1.2		+0.9
30 September 1984	46.6		8.2		29.8		8.6	
		-2.1		+13.6		-5.4		-5.5
31 December 1984	45.6		9.3		28.2		8.1	
		-4.4		-		-6.8		-
31 March 1985	43.6		9.3		26.3		8.1	
		-4.3		+4.6		-6.9		-5.7
30 June 1985	41.8		9.7		24.4		7.6	
		-3.8		+4.7		-8.1		-0.9
30 September 1985	40.2		10.2		22.5		7.5	
		-7.0		-8.5		-6.3		-7.2
31 December 1985	37.4		9.3		21.0		7.0	
		-7.7		-3.0		-10.0		-6.8
31 March 1986	34.5		9.0		18.9		6.5	
		-5.3		-		-8.1		-3.3
30 June 1986	32.7		9.0		17.4		6.3	
		-2.1		+21.4		-11.5		-9.5
30 September 1986	32.0		10.9		15.4		5.7	

Source: Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd.

Note: Percentages have been calculated on the basis of the exact net deadweight tonnages (before rounding).

Table 24

World tonnage on order as at 30 September 1986
(Thousands of dwt)

Countries of registry	All ships	Tankers 150 000 dwt and over	Tankers under 150 000 dwt	Ore/oil and OBO carriers	Other bulk carriers	Full container ships	Part container ships	Ro/ro cargo ships	Other ships
World total	31 986	2 970	7 899	2 267	13 148	1 977	15	795	2 915
Developed market-economy countries	10 663	1 650	1 441	104	4 936	891	15	436	1 190
Open-registry countries	10 336	1 012	3 214	1 658	3 174	464	-	61	753
Subtotal	20 999	2 663	4 655	1 762	8 110	1 356	15	496	1 943
Socialist countries, total	3 197	307	863	-	1 068	114	-	212	632
of which:									
in Eastern Europe	2 610	307	788	-	719	101	-	198	496
in Asia	587	-	75	-	349	13	-	14	136
Developing countries, total	7 266	-	2 277	505	3 802	274	-	86	322
of which:									
in Africa	55	-	-	-	-	-	-	25	30
in America	1 836	-	539	-	1 130	38	-	17	112
in Asia	4 093	-	827	444	2 425	236	-	44	117
in Europe	1 281	-	911	61	247	-	-	-	62
in Oceania	2	-	-	-	-	-	-	-	2
Unallocated	525	-	103	-	170	234	-	-	18

Source: Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd. Lloyd's Register of Shipping, Merchant Shipbuilding Returns, September 1986.

Note: Owing to rounding, the totals do not always add up.

C. Deliveries of newbuildings

44. Data on tonnage of newbuildings delivered in the first three quarters of each year during the period 1984-1986 are presented in table 25. The total deadweight of vessels delivered by shipyards in the first three quarters of 1986 decreased by 15.7 per cent as compared with the corresponding period of the previous year, and the number of vessels was 16.2 per cent less. By vessel type there was an increase in deliveries of tankers only (37.9 per cent above the figures for the first three quarters of 1985), while deliveries of bulk/oil carriers decreased by 47.3 per cent as compared with the corresponding period of 1985. Deliveries of ore and bulk carriers and deliveries of general cargo ships decreased by 28.0 per cent and 27.0 per cent respectively. Miscellaneous types of vessels as shown under "Other ships" declined marginally by 1.0 per cent in deadweight deliveries as compared with the corresponding period of 1985. The distribution of newbuildings delivered in the first three quarters of 1986 by vessel types was as follows: tankers - 20.8 per cent (as compared with 12.7 per cent during the corresponding period of 1985); bulk/oil carriers - 1.8 per cent (2.8 per cent in 1985); ore and bulk carriers - 51.5 per cent (60.3 per cent in 1985); general cargo ships - 6.9 per cent (8.0 per cent in 1985), other ships - 19.0 per cent (16.2 per cent in 1985).

45. New deliveries by country groupings - according to countries of build - are presented in table 26. Figures based on January to September deliveries in terms of grt show that the share of developed market-economy countries in 1986 newbuildings decreased to 62.4 per cent, while the share of developing countries increased to 26.6 per cent (as compared with 18.9 per cent for the first three quarters of 1985). At the same time the share of socialist countries of Eastern Europe and Asia increased slightly from 6.6 per cent in 1985 to 8.2 per cent in 1986.

D. Demolition of ships

46. The imbalance between supply and demand in world shipping has led to increasing levels of demolition of ships which started gathering momentum in 1982 when the amount of merchant fleet tonnage sold for breaking rose by 94 per cent over 1981 (see table 27). The following years showed an extremely high level of demolition of merchant ships.

47. About 90 per cent of tonnage reported as sold for breaking during recent years consisted of bulkers (including combined carriers) (92.3, 92.0, 88.7, 86.9, 89.4 and 85.1 per cent in the years 1981 to 1986 respectively). 21/ As shown in table 28, for a number of years tankers represented the major quantity of tonnage sold for breaking: 88.4 per cent (12.9 million dwt) in 1981, 82.2 per cent (23.2 million dwt) in 1982, 74.5 per cent (24.3 million dwt) in 1983, 67.9 per cent (19.8 million dwt) in 1984, and 64.3 per cent (26.8 million dwt) in 1985. However, their share in the total amount of tonnage sold for demolition significantly decreased as that of demolished bulk carriers constantly grew. Thus the share of bulk carriers amounted to 2.2 per cent in 1981, 3.9 per cent in 1982, 8.1 per cent in 1983, 13.8 per cent in 1984 and 16.0 per cent in 1985.

Table 25

Deliveries of newbuildings, 1984-1986 a/
(Number of ships and thousands of grt/dwt)

Type of ship		1984	1985	1986
Tankers	Number	100	105	92
	Grt	1 406	1 494	2 028
	Dwt	2 464	2 508	3 458
Bulk/oil carriers	Number	6	8	5
	Grt	105	310	183
	Dwt	172	554	292
Ore and bulk carriers	Number	275	268	147
	Grt	6 587	6 847	4 853
	Dwt	11 131	11 876	8 547
General cargo ships b/	Number	228	186	136
	Grt	1 480	1 132	853
	Dwt	1 931	1 565	1 143
Other ships	Number	955	837	797
	Grt	3 507	3 654	3 533
	Dwt	3 452	3 189	3 156
Total	Number	1 564	1 404	1 177
	Grt	13 085	13 437	11 450
	Dwt	19 150	19 692	16 596

Source: Information provided by the Shipping Information Services of Lloyd's Register of Shipping and Lloyd's of London Press Ltd.

a/ The figures in this table refer to the period January-September for each year.

b/ Vessels of 2,000 grt and over.

Table 26

Distribution of deliveries of newbuildings by groups of countries of build, 1984-1986 a/
(Thousands of grt) b/

Country grouping	1984	1985	1986
Developed market-economy countries	10 012 (77.0)	9 740 (72.9)	7 178 (62.4)
Developing countries	1 264 (9.7)	2 506 (18.8)	3 052 (26.6)
Socialist countries	1 086 (8.4)	877 (6.6)	943 (8.2)
Other, unallocated	632 (4.9)	233 (1.7)	321 (2.8)
World total	12 993 (100.0)	13 355 (100.0)	11 494 (100.0)

Source: Compiled by the UNCTAD secretariat on the basis of data contained in Lloyd's Register of Shipping: Merchant shipbuilding returns, quarterly issues of the respective years.

a/ As for table 25, this table is based on the period January to September (there remains a slight statistical discrepancy in the total tonnages as compared to those shown in table 25).

b/ Percentage shares of the world total are indicated in brackets.

Table 27

Broken-up tonnage trends, 1980-1986

	1980	1981	1982	1983	1984	1985	1986
Tonnage sold for breaking a/ (million dwt)	10.0	14.6	28.3	32.7	29.2	41.7	31.2
Share of broken-up tonnage in the total world fleet (percentage)	1.5	2.1	4.1	4.8	4.3	6.3	4.9

a/ Source: Fearnleys, Review, various issues.

Table 28

Tonnage reported sold for breaking by type of vessel, 1979-1986
(Thousands of dwt and percentage shares)

	Thousands of dwt								Percentage shares							
	1979	1980	1981	1982	1983	1984	1985	1986	1979	1980	1981	1982	1983	1984	1985	1986
Tankers	5 660	7 951	12 904	23 253	24 348	19 822	26 794	12 306	52.9	79.6	88.4	82.2	74.5	67.9	64.3	39.4
Combined carriers	161	71	251	1 683	2 022	1 516	3 794	2 889	1.5	0.7	1.7	5.9	6.2	5.2	9.1	9.3
Dry bulk carriers	1 062	349	323	1 097	2 651	4 024	6 673	11 365	9.9	3.5	2.2	3.9	8.1	13.8	16.0	36.4
Other dry cargo ships	3 821	1 622	1 117	2 271	3 677	3 836	4 414	4 654	35.7	16.2	7.7	8.0	11.2	13.1	10.6	14.9
Total	10 704	9 993	14 593	28 304	32 698	29 198	41 675	31 214	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Fearnleys, Review, various issues.

48. A sharp drop in the number and tonnage of demolished tankers was recorded in 1986, when the volume of tanker tonnage sold for breaking was estimated at 12.3 million dwt (as compared with 26.8 million dwt in 1985), or about 39.4 per cent of the total tonnage scrapped during the year. This was the lowest yearly total since 1981, when 12.9 million dwt were demolished. However, dry bulk carriers scrap sales almost doubled compared with 1985 and showed a record of 11.4 million dwt in 1986, amounting to 36.4 per cent of the total demolished tonnage. Combined carriers accounted for 2.9 million dwt or 9.3 per cent of tonnage sold for demolition in 1986. 22/

49. The decrease in demolition of tankers in 1986 is closely connected with a temporary improvement in the tanker freight market which led to a reactivation of tonnage. Conversely, increases in the demolition of dry bulk carriers could be attributed to a recession in the dry cargoes' freight market during the whole of 1986.

50. In this connection the current situation in the market is characterized by a significant amount of tonnage which is laid up without any significant prospect of being reactivated, i.e. which is expected to be sold in the future for scrapping directly from lay-up. As shown in table 29, the estimated volume of tanker and combined carriers tonnage laid up and idle which was unlikely to trade again at mid-September 1986 (when the demand for it was at a very high level) was four times lower than a year before. However the figure was still rather significant and amounted to 4.8 million dwt. This tonnage consisted mostly of ULCC and VLCC (88.8 per cent). Whether these ships will be scrapped in the near future mostly depends on demolition prices.

51. Changes in demolition prices in 1986 are shown in table 30. A rise in scrap prices in the first half of the year towards the level of the last month of 1985 was followed by a certain decrease during the July-October period. After this, demolition prices showed signs of improvement, especially for such markets as the Far East and in Pakistan/India. Thus, November-December prices were at the highest level for the year in those markets.

52. Table 31 shows the average age of bulk carriers sold for scrapping during the last six years. The average age of tankers and combined carriers sold for demolition in 1986 was the highest in the period in question (13.3 per cent above the previous year's figure), while that of dry bulk carriers was the lowest (6.1 per cent below the previous year's figure).

Table 29

Tankers and combined carriers laid up and idle and estimated as tonnage unlikely to trade again, 1983-1986
(As at mid-September)

	1983		1984		1985		1986	
	000 dwt	%	000 dwt	%	000 dwt	%	000 dwt	%
10- 24 999	647	1.7	181	1.0	211	1.1	93	1.9
25- 49 999	1 205	3.2	312	1.7	531	2.7	157	3.3
50- 99 999	5 720	15.0	1 593	8.5	339	1.7	131	2.7
100- 199 999	3 802	10.0	1 400	7.4	660	3.4	160	3.3
over 200 000	26 655	70.1	15 275	81.4	17 826	91.1	4 258	88.8
Total	38 029	100.0	18 761	100.0	19 567	100.0	4 799	100.0

Source: E.A. Gibson, Shipbrokers Ltd., London. Monthly bulletins, various issues.

Table 30

Demolition prices in 1986
(Dollars per LDT)

Month	Market		
	Far East	Pakistan/India	South Europe
January	125.0	100.0	77.5
February	122.5	100.0	70.0
March	127.5	100.0	70.0
April	122.5	100.0	65.0
May	127.5	102.5	75.0
June	127.5	102.5	75.0
July	126.0	97.5	75.0
August	107.5	100.0	65.0
September	112.5	100.0	65.0
October	122.5	107.5	65.0
November	135.0	112.5	67.5
December	135.0	112.5	70.5

Source: Institute of Shipping Economics, Bremen, Shipping Statistics, various issues.

Table 31

Average age of bulk carriers sold for demolition in 1981-1986
(Years)

	Tankers and combined carriers	Dry bulk carriers
1981	14.03	23.51
1982	14.53	21.35
1983	14.08	18.95
1984	15.14	21.34
1985	13.86	19.87
1986	15.71	18.66

Source: Howard Houlder Chartering (London); see Fairplay International, (London), 4 December 1986, p. 43, and Lloyd's List, 6 January 1987.

Chapter V

FREIGHT MARKETS

A. Freight rates of main cargo sectors

53. As shown in table 32, the annual average freight rate indices in the dry cargo and liner sectors in 1986 showed a significant decline as compared with 1985, reflecting the current tonnage oversupply and stagnant world economy. In the meantime, the mini-boom in the tanker sector caused by a temporary fall in prices for crude oil and oil products led to a remarkable increase of all tanker freight rate indices, especially in the third quarter, as the drastic fall in crude oil and product prices during this period led to a significant growth in demand for tanker tonnage. Thus, the indices for VLCC/ULCC showed an increase from 32 in January 1986 to 50 in June. Medium-size crude and small crude and product carriers' indices increased from 64 to 79 and from 84 to 98 points respectively during the same period. Handy-size clean tankers' indices followed the same pattern, with an increase from 134 in January to 168 in June 1986.

54. Average worldscale rates estimated for the main crude oil trades for 1986, shown in table 33, confirm the above-mentioned trends in the tanker freight market. Average worldscale rates for crude oil decreased at the start of the year, but already in March they exceeded the January level. After a temporary decrease in April the upward tendency started gathering momentum and in August the rates were at their highest level. From September onwards the rates went down. In December they showed signs of improvement, but most of them (with the exception of movements from the Mediterranean Sea to the United Kingdom/Continent) were below the January level, mostly due to the decline in rates for VLCC and ULCC widely used in the main long distance trades. Average worldscale rate changes during the year generally reflected the changes in demand for tanker tonnage; that demand was closely connected with the decrease of oil prices, which reached their lowest level during the summer.

55. Freight rates in individual tanker trades recorded substantial changes during 1986. Thus, worldscale spot rates for 30,000 dwt dirty tankers from the Caribbean to the United States East Coast were reported to be 116 in January, 145 in June and 137 in December 1986. Worldscale spot rates for 90,000 dwt carriers from the Persian Gulf to West Europe were reported to be 54 in January 1986, 82 in June and 57 by the year end. 23/

56. The dry bulk carrier freight market suffered a considerable depression in 1986. The increase in oil consumption was accompanied by reduced coal movements, while steel production was reduced and world seaborne trade in grain also declined further. These developments led to a certain decrease in demand for dry bulk carriers. Monthly figures for dry cargo tramp trip charter indices for practically the whole of 1986 were below those for 1985. As a result, the annual average for 1986 was 158, which is the lowest figure since 1979.

57. The trends in the dry bulk carriers freight market in 1986 can be illustrated by reference to the pattern of grain trade from the United States (Gulf of Mexico) to Japan (cargo sizes of 50,000-55,000 tons). Freight rates for this cargo at the beginning of the year stood at about $13.15 per ton, in April decreased to $9.45 and in August to $6.35. There was an improvement

Table 32

Freight rate indices, 1984-1986
(Monthly or quarterly figures)

Freight rate indices	Liner freight rates a/ (1980 = 100)			Dry cargo tramp time charter b/ (1976 = 100)			Dry cargo tramp trip charter c/ (July 1965 to June 1966 = 100)			Tanker freight indices c/															
										VLCC/ULCC			Medium-size crude carriers			Small crude and product carriers			Handy size dirty			Handy size clean		
Period	1984	1985	1986	1984	1985	1986	1984	1985	1986	1984	1985	1986	1984	1985	1986	1984	1985	1986	1984	1985	1986	1984	1985	1986
January	138	168	144				173	170	166	28	34	32	58	53	64	98	81	84	135	104	128	125	117	134
February	138	172	139	117	115	92	173	172	152	23	36	26	64	53	56	92	93	76	141	120	128	145	117	156
March	136	171	135				173	171	157	33	30	27	62	55	59	89	78	96	135	111	149	135	120	158
April	142	161	136				182	177	158	29	35	29	56	54	54	92	73	91	134	109	132	130	120	143
May	149	164	135	128	116	85	178	172	158	33	25	31	56	54	74	92	74	99	121	112	163	133	117	154
June	146	163	134				168	166	153	68	23	50	61	49	79	91	67	98	116	105	129	132	112	168
July	154	156	131				166	161	151	56	22	38	53	43	68	77	62	97	118	107	159	124	109	154
August	155	153	128	114	91	88	167	161	148	29	26	46	49	47	81	72	72	110	111	113	142	109	102	149
September	161	155	128				167	158	163	27	34	38	53	59	71	80	87	101	121	115	133	125	112	146
October	163	150	127				171	166	161	30	31	23	55	60	50	92	83	90	123	119	143	136	120	137
November	160	148	127	134	102	95	178	165	164	31	40	26	58	76	58	96	104	90	129	142	137	121	151	141
December	165	146	126				175	164	161	32	42	29	56	78	67	94	97	99	124	138	134	119	166	152
Annual average	151	159	133	123	106	90	173	167	158	35	32	33	57	57	65	89	81	94	126	116	140	128	122	149

Note: All indices have been rounded to the nearest whole number.

a/ Liner index compiled by the Ministry of Transport of the Federal Republic of Germany. Monthly weighted assessments of freight rates on cargoes loaded or discharged by liners of all flags at ports in the Antwerp/Hamburg range. (See paragraph 61 for certain comments regarding this index.)

b/ Compiled and published on a quarterly basis by the General Council of British Shipping.

c/ Compiled and published by Shipping News International (Oslo). Worldscale = 100, as effective in each year. For tankers, vessel size groups are as follows: VLCC/ULCC: 150,000 dwt upwards; medium-sized crude carriers; 60,000-150,000 dwt; small crude and product carriers: 30,000-60,000 dwt; and handy-sized clean and dirty tankers: below 30,000 dwt.

in freight rates during the September-November period, when they stood at $12.05-$12.55. However, they decreased to $10.9 in December. 24/ Thus, in this particular trade the annual average rate was $10.2 per ton as compared to $13.6 in 1985, $15.0 in 1984 and $16.4 in 1983, and all monthly freight rates in 1986 (except for September) were below those in 1985. 25/

Table 33

Average worldscale rates for crude oil movements in 1986

1986	Persian Gulf to west	Persian Gulf to east	Mediterranean Sea to Med/UK/Continent	Caribbean Sea to US Atlantic Coast
January	39.86	38.66	69.47	83.34
February	29.83	32.83	61.19	74.90
March	42.36	39.00	69.96	98.01
April	35.21	37.53	62.15	85.71
May	43.31	49.13	88.51	88.27
June	53.49	56.58	95.20	88.12
July	41.08	46.21	71.65	86.49
August	50.75	60.88	84.52	99.01
September	43.61	50.39	82.07	84.71
October	28.08	31.49	56.97	72.02
November	31.89	33.25	65.71	76.35
December	35.85	36.88	71.78	81.22

Source: Howard Houlder Chartering (London), Lloyds' List, (London), 8 January 1987.

58. The highest and lowest rates recorded during 1986 (together with comparisons for 1984 and 1985) for single voyages in certain leading trades which are of particular interest to developing countries are summarized below:

Commodity	Route	Freight rate range					
		1984		1985		1986	
		$US/ton					
		High	Low	High	Low	High	Low
Grain	United States (Gulf of Mexico)/China	29.00	23.50	23.25	21.00	17.75	-
Iron ore	Liberia/Continental Europe	6.00	4.25	5.75	3.00	4.50	2.97
Iron ore	Brazil/Continental Europe	5.50	5.50	6.50	3.60	4.50	2.70
Fertilizers	Aqaba/India	14.00	11.25	13.75	12.00	13.00	7.75
Fertilizers	United States (Gulf of Mexico)/India	37.00	30.00	36.50	25.00	21.00	19.75
Sugar	Queensland/Japan	15.75	14.25	15.75	13.50	12.95	12.00
Sugar	Mauritius/United Kingdom a/	15.50	13.80	16.95	13.85	14.00	12.75

Sources: Fairplay International, 2 January 1986; International Transport Journal, 1986, No. 52, p. 6,049; Lloyd's List, 5 January 1987.

a/ Freight rates for this trade are in pounds sterling.

Both high and low freight rates for the dry bulk commodities shown above showed a further decline in 1986 as compared to the previous years, with the most significant decreases shown for fertilizers from the United States to India (42.5 per cent below the level of 1985) and for grain from the United States to China (23.6 per cent below 1985 and 38.8 per cent below 1984).

59. The tramp time charter rates in the dry bulk sector also reflected the general situation of the dry cargo freight market. The 1986 annual average freight rate index for dry cargo tramp time charter was 15.1 per cent below that of the previous year and was at its lowest level since 1977. An analysis by vessel size shows that a 12-month period fixture for a 50,000 dwt bulker amounted, at the beginning of the year, to $2.55/dwt/month, which was 27.1 per cent less than in January of the previous year. A steady decline in freight rates started from the very beginning of 1986, with the lowest level of $1.80/dwt/month recorded in July. Despite a certain improvement in the last quarter, the December 1986 figure amounted to $2.30/dwt/month, which is 9.8 per cent lower than in 1985. The average rate for this vessel size in 1986 was 23.7 per cent lower than in 1985. Handy-size (25,000 dwt) and large-size dry bulkers also experienced a decrease in freight rates, though to a smaller extent than medium-size vessels. The difference between average rates in 1985 and 1986 amounted to 12.9 per cent and 15.1 per cent respectively. 26/

60. Although freight rates in the dry bulk market were much lower in 1986 than in 1985, it should be borne in mind that owners' real costs of operation were also reduced significantly, as prices for bunkers, the value of which frequently comprises 50-60 per cent of operating costs, were at an extremely low level in 1986. As shown in table 34, representative marine bunker prices in December 1986 ranged from 52.1 to 66.4 per cent of the December 1985 figure.

61. The liner freight rate indices shown in table 32 are compiled by the Ministry of Transport of the Federal Republic of Germany and are based on the foreign trade of that country. Consequently, the indices may not be truly representative of trends for this sector in the world shipping industry. Nevertheless, it is considered that they provide a general indication of such trends. It should be borne in mind that this index is also seriously influenced by changes of currency rates of the deutsche mark versus the United States dollar. During 1986 a constant decrease in liner freight rate indices was seen. Moreover all 1986 monthly indices were significantly lower than those for corresponding months of the previous year. Thus, the annual average for 1986 was 16.4 per cent lower than the 1985 annual average.

62. A more general indication of liner conference freight trends is provided by the number and percentage changes announced by liner conferences. Of nine conferences serving developing countries monitored by the UNCTAD secretariat in 1986, three announced general increases in tariffs at the level of 5 per cent. However, the data available cover only general rate changes. Information on special liner rates for individual commodities, which may be more important, is lacking. Also recorded were 118 increases in CAFs and 7 increases in BAFs and, on the other hand, decreases in 27 CAFs and 54 BAFs. These surcharges ranged from +56.50 per cent to -35.96 per cent.

Table 34

Fluctuations in marine bunker fuel prices, 1984-1986
($US/tonne)

Prices at mid-month:		1984	1985	1986											Dec.1986 to Dec.1985 (per cent)
		12	12	1	2	3	4	5	6	7	8	9	10	11	12	
North West Europe (Rotterdam)	HVF	183	136	125	101	103	65	55	63	45	66	72	68	76	81	59.5
	MDO	218	228	195	183	181	151	130	112	90	113	112	109	116	121	53.1
Mediter-ranean (Genoa)	HVF	185	153	146	100	98	70	65	59	59	64	88	80	79	87	56.9
	MDO	248	270	245	201	188	160	158	130	109	129	138	140	135	142	52.3
Gulf of Mexico (Houston)	HVF	169	142	131	100	86	74	59	67	54	63	73	80	71	81	57.0
	MDO	247	252	248	204	188	165	150	150	140	135	144	142	137	143	56.7
West Coast of USA (Los Angeles)	HVF	166	142	133	95	62	64	67	50	51	64	81	73	68	74	52.1
	MDO	228	226	225	215	187	165	175	162	147	135	146	140	135	150	66.4
Far East (Singapore)	HVF	178	154	146	103	90	74	59	54	47	82	79	73	68	87	56.5
	MDO	232	240	235	207	176	155	140	126	91	111	110	111	115	129	53.7

HVF - High viscosity fuel oil
MDO - Marine diesel oil

Source: Drewry Shipping Consultants (London), Dry Bulk Market Quarterly Report, November 1986, p. 22; January 1987, p. 22.

B. Liner freight rates as a percentage of prices of selected commodities

63. For many developing countries, most non-bulk key exports and imports are moved by liner services. Liner freight rates may thus have a significant effect on the national income of developing countries, their balance of payments and their competitiveness. Table 35 gives liner freight rates as a percentage of prices for selected commodities. The ratio of freight for such commodities as jute (Bangladesh-Europe), cocoa beans (Ghana-Europe) and coffee (Brazil-Europe) decreased in 1985 as compared with 1984. Jute showed the largest decline (from 11.4 per cent in 1984 to 6.4 per cent in 1985). This could be explained by a relatively high decrease in freight rates accompanied by an increase in prices for this commodity.

Table 35

The ratio of liner freight rates to prices of selected commodities, 1970 and 1982-1985

Commodity	Route	Freight rate as a percentage of price a/ b/ c/				
		1970	1982	1983	1984	1985
Rubber	Singapore/Malaysia-Europe	10.5	8.7	5.9	8.1	n.a.
Tin	Singapore/Malaysia-Europe	1.2	1.2	0.9	0.7	n.a.
Jute	Bangladesh-Europe	12.1	21.7	21.4	11.4	6.4
Sisal hemp	East Africa-Europe	19.5	15.3	13.6	14.6	n.a.
Cocoa beans	Ghana-Europe	2.4	3.6	2.6	2.1	1.9
Coconut oil	Sri Lanka-Europe	8.9	17.3	9.8	5.7	12.6
Tea	Sri Lanka-Europe	9.5	10.7	6.9	5.1	6.9
Coffee	Brazil-Europe	5.2	7.8	7.4	6.0	5.0
Palm kernels	Nigeria-Europe	8.8	31.7	22.6	12.7d/	29.7
Coffee	Colombia (Atlantic ports)-Europe	4.2	4.2	4.4	n.a.	6.7
Cocoa beans	Brazil-Europe	7.4	11.9	9.7	6.9	6.9
Coffee	Colombia (Pacific ports)-Europe	4.5	5.0	5.2	4.9	6.1

Source: Compiled by the UNCTAD secretariat on the basis of data supplied by the Royal Netherlands Shipowners' Association.

a/ C.i.f. prices were quoted for rubber (London-RSS), tin, jute (UK-pwc grade), sisal hemp, cocoa beans (Ghana-Europe), and palm kernels. For cocoa beans (Brazil-Europe) and coffee (Colombia-Europe and Brazil-Europe), unit values of exports were quoted. Prices of the remaining commodities are quoted on f.o.b. terms.

b/ Freight rates include, where applicable, bunker surcharges and currency adjustment factors, a "tank cleaning surcharge" (for coconut oil only), port delay and additional port surcharges (for Colombia only). Conversion of rates to other currencies is based on parities given in International Financial Statistics published by the International Monetary Fund. Annual freight rates were calculated by taking a weighted average of various freight rates quoted during the year, weighted by their period of duration.

c/ For the period 1982-1985, the prices of jute, coconut oil and sisal hemp were taken from UNCTAD, Monthly Commodity Price Bulletin, the December issue of each following year.

d/ For 1984, the ratio was calculated on the basis of the official COWAC quote, as the Nigerian Palm Produce Board regulated sailings on the basis of chartered-in capacity.

64. The most significant increase in the ratio of freight rates to prices relates to coconut oil (Sri Lanka-Europe) and palm kernels (Nigeria-Europe) where the ratios grew from 5.7 per cent and 12.7 per cent in 1984 to 12.6 per cent and 29.7 per cent in 1985 respectively. In both cases this increase could be attributed on the whole to a drastic fall in prices. Thus 1985 coconut oil prices were 48.9 per cent lower than those of 1984 and the prices for palm kernels were 44.1 per cent lower. At the same time freight rates for these commodities increased. The growth in the ratios of freight rates to prices for tea (Sri Lanka-Europe) and coffee (Columbia-Europe) was also connected with the decrease in prices for these commodities.

C. Estimates of global freight costs

65. Table 36 shows estimates of total freight costs in world trade as the ratio of ocean freight to the total c.i.f. value of imports by groups of countries. Globally, total freight costs in 1985 were estimated at $103.6 billion, which is 0.5 per cent less than in 1984. At the same time the value of international trade increased by 0.8 per cent. Consequently, the proportion of freight costs in the total value of world trade decreased insignificantly, i.e. by 0.8 per cent, and amounted to 5.78 per cent in 1985. For developing countries, however, and especially those in Africa and Oceania, this ratio continued to be approximately double that for developed market-economy countries, i.e. 9.55 per cent as against 4.81 per cent. The differences in the ratio of ocean freight to the total c.i.f. value of imports by groups of countries can be partly attributed to the following factors: developed market-economy countries are substantial importers by sea of bulk cargoes, for which freight rates are relatively low; furthermore, importers in developed market-economy countries can exercise greater control over levels of freight rates applicable to liner imports than importers in developing countries; the high level of freight factors applicable to the imports of developing countries particularly in Africa and Oceania may also to a certain extent be attributed to the fact that they generally import goods by sea over longer distances and may be using more relatively expensive liner services.

Table 36

Estimates of total freight costs in world trade a/ by groups b/ of countries, 1980, 1984 and 1985

Year	Country group	Estimate of total freight costs of imports (millions of dollars)	Value of imports (c.i.f.) (millions of dollars)	Freight costs as a percentage of import value
1980	1. World total	123 264	1 856 834	6.64
	2. Developed market-economy countries	78 286	1 425 979	5.49
	3. Developing countries - total	44 978	430 855	10.44
	of which: in Africa	10 432	77 757	13.42
	in America	10 929	123 495	8.85
	in Asia	21 979	211 089	10.41
	in Europe	1 320	16 037	8.23
	in Oceania	318	2 477	12.84
1984	1. World total	104 210	1 778 296	5.86
	2. Developed market-economy countries	64 370	1 375 410	4.68
	3. Developing countries - total	39 840	402 886	9.89
	of which: in Africa	6 864	63 453	10.82
	in America	7 200	79 279	9.08
	in Asia	24 429	245 073	9.97
	in Europe	1 056	12 711	8.31
	in Oceania	291	2 370	12.28
1985	1. World total	103 638	1 792 285	5.78
	2. Developed market-economy countries	68 499	1 424 420	4.81
	3. Developing countries -total	35 139	367 865	9.55
	of which: in Africa	5 813	51 576	11.27
	in America	6 825	81 259	8.40
	in Asia	21 162	219 956	9.62
	in Europe	1 074	12 919	8.31
	in Oceania	265	2 155	12.30

Source: Derived from IMF f.o.b./c.i.f. factors and IMF import data.

a/ The estimate for the world is not complete, since data for countries which are not members of IMF are not included.

b/ The estimates presented here reflect the inclusion of Yugoslavia in this review in "Developing countries in Europe"; in previous years Yugoslavia was classified as a developed market-economy country.

Chapter VI

MULTIMODAL AND INLAND TRANSPORT

A. Multimodal transport

66. While progress at the regulatory level has been slow, at the operational level the introduction of multimodal transport continued in 1986. On a volume basis, the limited available statistics on multimodal transport tend to show that the increase was greater in trades between developed countries than in trades from or to developing countries, but this does not detract from the fact that increasing tonnages now move multimodally in the developing countries' trades.

67. A number of developments relating to the field of multimodal transport took place in 1986. They concern transport operations, infrastructure developments and new approaches to multimodal transport services. New trends are emerging in specific areas such as cargo tracing, international physical distribution, etc. The UNCTAD secretariat has been contributing to those changes through the organization of meetings of groups of experts, the preparation of documents and deliveries of workshops and seminars.

1. Multimodal transport traffic and operations

68. While information concerning multimodal transport statistics is still sketchy, the available data indicate a continuing move towards multimodal transport.

2. Change from road to rail or inland waterways

69. Inland movement of containers by road has been the prevailing method of transport between most continental countries, although, when it comes to long hauls, it has long been clear that road transport is not competitive with rail. In the United States, the use of double-stacked trains has increased the direct price advantage of rail over road and, in that country, long-haul traffic by road has virtually ceased. As a result of the switch from road to rail, the removal of a large number of trucks from heavily-congested roads has also been of considerable economic benefit in terms of the reduction of road maintenance and upgrading. It is estimated in Los Angeles, for example, that greater use of trains directly from the port (Long Beach) rather than from an inland rail terminal will remove as many as 800 trucks from the city's highway system each week.

70. Economic reasoning also lies behind the gradual change from road to rail and inland waterway transport for containers to and from Rotterdam. It is for example estimated that the barges' share of this traffic will increase from 13.3 per cent in 1984 to 23 per cent in 1990, while the railways' share would increase from 13 per cent in 1984 to 17 per cent, giving a total of 40 per cent to non-road transport.

Unit trains - United States, Malaysia, USSR

71. One reason for this switch from road to rail, as mentioned above, has been the introduction of unit or block trains in railways operations, and more

specifically to the American context, the introduction of double-stacked trains. These unit trains leave on fixed schedules, primarily from the main west-coast ports to inland points or even to cities on the east coast. These trains cater first of all to the large containerized import traffic from Japan and developing countries in East Asia. Their development therefore has a significant impact on the competitiveness of developing countries' products. The traffic is heavily imbalanced in an eastbound direction, requiring the multimodal transport operators (MTOs) to return many containers empty. Some of the operators have reduced this problem by using some of the empty containers for domestic westbound traffic, one to an extent where this movement has become a very important profit factor in its own right. The latest operators to consider the introduction of double-stacked trains are the major Japanese liner operators. The ports themselves also pay increasing attention to double-stacked services. For example, the port of Oakland, California, is in the process of constructing on-dock double-stack facilities, even though the port already has three major rail terminals within 1.5 miles of the port.

72. Double-stacked trains were originally used only for very long hauls, e.g. from the west coast of the United States to the centre of the country, or even all the way across to the east coast, but shorter services are now being introduced. For example, a new dedicated intermodal train now connects the port of Savannah, Georgia, with Mobile, Alabama, and New Orleans, Louisiana, with a transit time of approximately 24 hours. Double-stacked trains are only suitable under special conditions where no bridges, tunnels or overhead electric wires for electrified railways are found. Such conditions are not found in many countries. However, as they carry large quantities of developing country produce, their importance cannot be neglected. For these double-stack trains new light-weight wagons have been developed. These new cars, and the new cars also developed for single-stack rail transport, are considerably lighter and cheaper than traditional railwagons. As they are lighter, they are also less costly to operate, requiring less fuel. Table 37 shows the current status of double-stack train services in the United States.

73. In other countries, regular unit trains carrying a single tier of containers can, however, be used by all railways. Use of such unit trains can be an important element in attracting cargoes to a certain port or country or in utilizing the national infrastructure to save foreign exchange. Unit trains were, for example, introduced in Malaysia on a trial basis in early 1986 between Port Kelang and Penang, with delivery of the containers to the inland clearance depot (ICD) in Butterworth within 24 hours of discharge in Port Kelang. The service is jointly arranged by Kelang Container Terminal, the newly privatized container terminal at Port Kelang, the Malaysian railways (KTM) and Kontainer National, the major road hauliers, who have developed the ICD at Butterworth across from Penang. The railways now offer daily departures of unit trains between Port Kelang and Penang, and will additionally offer extra trains provided 24 hours advance notice is given. Negotiations are also underway to extend this service all the way to Bangkok.

Table 37

Operation of double-stack trains in the United States of America

VO-MTO	Route (from west coast to inland points)	Frequency per week	Loading capacity (FEUs)	Railway (west coast)
NYK	Los Angeles/Chicago-Cincinnati (separated in St. Louis)	1	200	SP
MOL	Los Angeles/Chicago-Columbus/New York (separated in St. Louis)	1	200	SP
KLine	Long Beach/Chicago/New York	1	200	UP
APL	Los Angeles/Chicago	3	600	UP
	Los Angeles/New York	1	200	UP
	Los Angeles/Houston/New Orleans/Atlanta	1	200	UP
	Oakland/Chicago	1	270	UP
	Seattle/Chicago	1	270	UP
	Seattle/New York	1	270	UP
	Sub-total	8	1 740	
SLS	Long Beach/Chicago/New York	1	200	ATSF
	Long Beach/Memphis/Atlanta	1	200	ATSF
	Long Beach/Chicago/New York	1	200	SP
	Tacoma/Chicago	3	600	BN
	Tacoma/Chicago/New York	1	200	BN
	Sub-total	7	1 400	
USL	Oakland/Chicago	1	200	UP
	Savannah/New Orleans/Houston (service from east coast)	1	150	SBS
	Sub-total	2	350	
Maersk	Tacoma/Chicago/New York	1	280	UP
OOCL	Long Beach/Chicago-Houston/New Orleans (separated at El Paso)	1	180	SP
Eight VO-MTOs		22	4 550	

Source: Shipping and Trade News (Tokyo), 1986.

Trans-Siberian Landbridge

74. Contrary to the relatively new United States landbridge services, the Trans-Siberian Landbridge (TSLB) has been in operation for many years. It is operated by dedicated unit trains hauling 50 flatcars with a capacity of 100 TEUs per train. In 1985 a total of 67 trains were in operation. The operator of the TSLB, Sojuztranzit, only acts as a sub-operator, with all containers being managed by the various non-vessel-operating multimodal transport operators (NVO-MTOs), European and Japanese, that primarily utilize the service. The maximum haulage of containers was reached in 1981, with 150,724 TEUs being transported, but this figure dropped to 99,214 TEUs in 1985 owing to the general decline in world dry-cargo trade.

Sea/air or sea/land movements

75. Combinations of modes may in some cases increase the competitiveness of exports. Both sea/air and sea/land (as opposed to pure ocean transport) combinations may be relevant. Some vessel-operating MTOs (VO-MTOs) can now offer sea/land transit times from, for example, Hong Kong to New York of only 16 days using fast container vessels and double-stacked trains, compared to an all-water transit time of over three weeks. From Bombay to New York, the figures are 36 days and 61 days respectively. For sea/air shipments, it is estimated that shipments from Japan to Europe via Seattle, with the Japan/Seattle leg being carried out by sea and the Seattle/Europe leg by air, are 50 per cent faster than all-water services and 50 per cent cheaper than all-air services. In general, sea/air multimodal transport is only of interest to cargo normally moving totally by air but for which time may not be so critical. In the case of cargoes from the Far East, it may actually be possible for the VO-MTOs to complete directly with pure airfreight owing to relatively slow airport handling procedures. For example, it has been said that air cargo spends 91 per cent of its total time on the ground as a result of customs delays, regulations, inadequate airport facilities, poorly co-ordinated timetables and inadequate routing.

3. Infrastructure developments to facilitate multimodal transport

Inland clearance depots

76. Due to the growing attention given to the development of inland facilities for the concentration and dispatching of international traffic, a definition of what constitutes an inland clearance depot (ICD) - also known as an inland dry port - has been drafted jointly by UNCTAD and ECE. By early 1987, the definition was under consideration by the Customs Co-ordination Council. The definition reads as follows:

"INLAND CLEARANCE DEPOT (DRY PORT)

A common-user facility, other than a port or an airport, with public authority status, equipped with fixed installations and offering services for handling and temporary storage of any kind of goods (including containers) carried under Customs transit by any applicable mode of transport, placed under Customs control and with Customs and other agencies competent to clear goods for home use, warehousing, temporary admission, re-export, temporary storage for onward transit and outright export."

77. It was agreed to use the term "clearance" rather than "container" since it was felt that, on a number of occasions, cargoes that move multimodally may not do so in containers. Similarly, inland depots frequently have container freight stations (CFS) located within their facilities, in which case cargo which enters or leaves the CFS break bulk will also be covered by the term "clearance".

78. ICDs have been established in a number of developing countries. Apart from the ICDs mentioned elsewhere in this chapter, examples are Brazil with ICDs in Sao Paolo and Brasilia, Kenya with the Embakasi ICD, Nigeria with an ICD in Kano, and Paraguay with an ICD in Asunción. Land-locked countries in southern Africa are also planning to establish ICDs within the framework of UNDP/UNCTAD technical assistance projects.

4. New trends in institutional aspects of multimodal transport

Development of non-vessel-operating MTOs (NVO-MTOs)

79. Non-vessel-operating MTOs often operate under very difficult conditions. For this reason, the past year has seen a number of failures of the less capitalized among them. Maybe that is why more and more developed countries' shipping companies have been able to connect NVO-MTOs to their ocean services in order to be able to control the flow of cargoes. This approach makes use of available local transport expertise and combines it with the expertise available in national shipping companies to form an effective alternative to foreign multimodal transport operators. An example here would be the co-operation in China between COSCO and SINOTRANS.

Spreading of multimodal transport

80. It was recently reported 27/ that the Italian ports are facing a new challenge owing to the increasing development of multimodal transport for northern Italian trade. The quality and number of links with the hinterland of Italian ports puzzle shipping lines in the determination of ports to give services, in particular regarding containerized cargo. Italian traffic is being routed towards the ports of northern Europe, which have duly adapted their organization and integrated the concept of multimodal transport into their planning process. The current development of a new transalpine railway line and the operation of block-trains between northern Italy and northern Europe ports make the situation even more critical.

81. VO-MTOs are increasingly realizing that, in the context of the transport chain for container traffic, hinterland traffic is becoming crucial. Savings can now be realized not on the ocean transport leg itself, but essentially in the organization and operation of transport services related to the hinterland. In certain trades pre- and post-transport in the hinterland represent as much as 70 per cent of the total costs of the transport chain. The development of additional ICDs has become a necessity. This requires a new approach to co-operation between different transport modes.

5. New concepts related to multimodal transport

Cargo tracing systems

82. One of the most important aspects of multimodal transport is that it allows constant tracking of the whereabouts of cargo during its move from door to door. Several companies have recently introduced sophisticated cargo tracking systems. One such system allows the shippers and consignees direct access to the carrier's host computer with full on-line capabilities.

83. A similar system has been introduced in the field of customer-carrier data interface. This offers its customers a dial-up computer service designed to keep them in touch with cargo and vessel activities. Spot checks on individual shipments can be made through this service.

84. A third system involves the development of a computerized data bank for multimodal transport. Shipping lines will feed directly into the computer information on their vessel movements through ports, as well as changes in their tariffs. Customers, mainly large shippers and freight forwarders, will be able to obtain the latest information on vessel movements through the telephone network (Minitel).

85. A fourth system comprises an electronic information service, designed to provide everyone involved in the freighting industry with the most comprehensive and accurate information on transport supply and demand throughout Europe. The service links those people that provide freighting services - carriers - with those that use such services - shippers - and covers all modes of transportation.

New technological developments

86. Double-stack trains may be of interest in the United States and a few other countries but, in most countries of the world, a number of constraints makes it impossible to utilize their superior economy-of-scale structures. However, a number of other new technologies may offer potential savings in the through-transport chain. These include such futuristic ideas as:

(a) Conveyor-belt handling of containers in terminals;

(b) Inter-terminal monorail transport;

(c) LUF rolling platforms moving up to 10 containers per move;

(d) Berthing container vessels in docks so that the vessels could be worked from both sides, each with its own rail track thereby making it possible to discharge to one side and to load from the other.

6. Developments in standardization of containers and related activities

87. Maintaining a high degree of stability of international container standards and avoiding frequent changes in this field is very important for ensuring interchangeability, compatibility and intermodality of containers and for promoting the effective use of container-handling facilities, ships and inland transport vehicles. According to estimates made by a trade journal,28/

by early 1986 the world container population had reached 4.8 million TEUs or 3.6 million physical units. About 85 per cent of these are estimated to conform to ISO 668 of 20' or 40' container size standards (see tables 38 and 39).

Table 38

World container population by length and type
(At the beginning of 1986, actual units)

Type	20 ft units	%	40 ft units	%	35 ft units	%	Other units	%	Total units	%
General cargo	2 030 098	56.0	990 612	27.3	26 747	0.8	29 824	0.8	3 077 281	84.9
Others	395 233	10.9	132 592	3.7	9 735	0.3	8 251	0.2	545 811	15.1
Total	2 425 311	66.9	1 123 204	31.7	36 482	1.1	38 075	1.0	3 623 092	100.0

88. However, there are indications, especially those which came out of the discussions held at a round table meeting on the evolution of standards and dimensions of intermodal transport engines in Strasbourg in April 1986, that the recent phenomenon of so-called "dimensional deregulation" can be observed to have increased and is expected to continue to increase, resulting in a substantial rise in the container fleet having dimensions exceeding those prescribed by the ISO standards.

89. The round table conference confirmed what was already known, viz. that container dimensions have continued to increase: in height from 8'06" to 9'06", in width from 8' to 8'06" or 2.5 m, and in length from 40' to 45' and even 48' (in the United States) and from 12 m (40') to 13.6 m (in Europe). About three quarters of the global number of 9'06" containers have been delivered since 1982. Their proportion of the global fleet delivered after 1982 amounts to about 5 per cent.

90. Non-ISO-sized containers in Europe are primarily used in intra-European transport, but American-controlled long-length containers are already being introduced on certain trade routes. However, long-length containers which have gone to ports outside the United States have not yet moved beyond the port gates.

91. This development is now the subject of various measures, including a study which analyses the evolution of the dimensions of maritime containers entering or leaving European ports in order for inland transport means and ports to be able to handle larger-sized containers. As an intermediate step, use of special rolling stock is already being considered by the railways. Similarly, measures have been taken in some countries to limit the use of high cube containers to the maximum extent possible in view of certain inland transport problems.

Table 39

World container population by height and type
(At the beginning of 1986, actual units)

Height	20ft	40ft	35ft	Others	Total	%
8'	201 539	1 738	214	13 455	216 946	6.0
8'06"	2 185 102	1 013 318	35 668	13 385	3 250 473	89.7
9'	381	7 799	0	0	8 180	0.2
9'06"	1 971	93 269	0	8 082	103 322	2.9
Others	36 338	7 080	600	153	44 171	1.2
Total	2 425 331	1 123 204	36 482	38 075	3 623 092	100.0

B. UNCTAD's contribution to multimodal transport development

92. During 1986, the UNCTAD Shipping Division continued its efforts to promote multimodal transport and to contribute in new ways to the improvement of the international transport of goods.

Model rules for multimodal container tariffs

93. One of the most significant developments in 1986 concerned the two meetings of a Group of Experts to Develop and Recommend Model Rules for Multimodal Container Tariffs. The Group consisted of 19 experts acting in their personal capacity and representing all the regions of the world, as well as all interested parties, namely Governments, carriers, MTOs, shippers, freight forwarders and port authorities.

94. The Group, which based its work on the principles for developing model rules for multimodal container tariffs elaborated by a previous group consisting of virtually the same experts, reached a number of important decisions all of which will be submitted to the Committee on Shipping at its thirteenth session:

It defined 41 terms for use in multimodal container tariffs. Many of these terms had been in use in the past, but their exact definition had varied from trade to trade. The Group's definitions are intended to replace existing definitions to the extent that this is compatible with local conditions in specific trades;

It decided on one standard sequence for the various sections of multimodal container tariffs and the sequence in which individual items will appear within each section. This will greatly facilitate the practical use of such tariffs for shippers and carriers alike;

It drew up a number of model rules for use in multimodal container tariffs. Such model rules were confined to those of a "global" nature, while rules which would have to be shaped to "local" conditions in most cases were left undefined;

It decided that it would be extremely useful for users of multimodal container tariffs to have access to a reference library where different types of tariffs would be available for consultation. It was the intention of the Group that such tariffs should be examples of different steps of development of multimodal transport. A reference library is therefore being established within the Shipping Division of UNCTAD;

It decided, once the reference library has been established, that the secretariat should investigate the possibilities of making the library EDP-based.

Multimodal transport (MT) document

95. The UNCTAD secretariat has issued a document entitled "Elaboration of a standard form and model provisions for MT documents" (TD/B/C.4/269). This study contains a draft proposal for a standard MT document based on the United Nations Convention on International Multimodal Transport of Goods and has been suggested as a basis for discussions on the final shape of such a document. A similar study will be made on a MT document based on the existing liability régimes. It is the secretariat's intention to invite a number of parties to participate in an informal meeting on the contents of these documents in order to ensure that they correspond to commercial needs.

MULTISHIP computer programs

96. The Multimodal Transport and Technological Development Section has continued its development of its MULTISHIP computer software programs. Nineteen-eighty-six saw the release of the latest version of its Model II, called MULTISHIP Model II Version 5C, which is available to interested multimodal transport operators and shipping companies moving cargoes not only between ports but also inland. During 1987, it is hoped that another of the MULTISHIP family of programs, Model I, will be released for use on compatible microcomputers. Model I is particularly suited for multimodal transport services where ocean carriers have very limited information regarding cost and time for inland moves, or for neo-bulk services. 29/

UNCTAD MT workshops

97. The UNCTAD secretariat has developed a series of workshops on multimodal transport. These are now available in three basic versions: an 8.5-day version (#05.1) for middle managers in Governments and transport organizations; six-day version (#05.5) for senior managers in the same organizations; and a 3-day version (#05.6) for the very top managers. The workshops first deal with the concept of multimodal transport in a general way, then enter into specific areas such as the changes in the legal régimes which the entry into force of the Hamburg Rules and the MT Convention will have on cargo transport. The two shorter versions of the workshop are particularly aimed at policy-makers wishing to gain a good understanding of the issues involved in the introduction of multimodal transport. The workshops have been delivered in Africa and Asia in association with the Economic Commission for Africa and the Economic and Social Commission for Asia and the Pacific.

98. In 1986, the Multimodal Transport and Technological Development Section of the Shipping Division only delivered version #05.5 twice, once in Abidjan in French and once in Beijing in English. In 1987, however, seven deliveries

have so far been planned: in Alexandria, Egypt, in English, in January; in Douala, Cameroon, in French, in February; In Bangalore, India, in English, in March; in Casablanca, Morocco, in French, in April; and in Malaysia, in English, in September. The first of these has already taken place. Deliveries have also been planned for the autumn of 1987. Further deliveries are expected to take place in 1988.

99. Deliveries are normally "self-financed". The host country or region bears all the costs in connection with the delivery. This does not normally include the travel and subsistence of participants, who must arrange to pay their own way. The cost of an average Workshop delivery varies according to the distance from Geneva, but rarely exceeds $US 10,000.

100. In order to cater to the increasing number of requests for workshop deliveries, the Shipping Division is now in the process of identifying suitable training institutions which have the requisite level of transport know-how, particularly in the field of transport law and land and maritime transport, to associate such organizations with future deliveries of the workshops. The first of these organizations to have been selected to work with UNCTAD is the Alexandria Maritime Transport Academy (AMTA) in Egypt, which together with the Association of African Training Institutions (AAMTI), will be responsible for a number of deliveries in the years to come. It is hoped that other institutions will be added to the list in 1987. 30/

Integrated transport logistics/physical distribution

101. International transport logistics have recently been the subject of particular attention. There are political, cultural, economic and technological differences among countries, and distribution systems around the world are vastly different. Service expectations vary from region to region, as do regulatory régimes. The reasons for overcoming these barriers are sufficienty compelling to assure that changes occur in the future. Distribution may be the last area where companies can still achieve significant economies.

102. In order to remain competitive, shippers in developing countries have emphasized the need to have access to pertinent information and guidelines on international physical distribution and multimodal transport. This need refers to the provision of information and guidelines on transport facilities, packaging, unitization, warehousing, handling, freight rates, insurance, customs procedures, administration and capital costs and so on in the context of international trade.

103. The absence of a focal point for information on all cost elements of international physical distribution presents a real problem for developing countries. This lack of information hampers their ability to influence freight costs, which often results in vulnerable and non-competitive positions in markets.

104. The Shipping Division of UNCTAD has initiated research work and technical assistance activities to bridge this important gap.

Development of statistics on multimodal transport

105. The UNCTAD secretariat has observed that no proper statistics exist in developing countries showing the percentage of containers which move intact beyond the port to an inland destination. To remedy this situation, and within the framework of UNCTAD technical assistance activities, attempts are now under way to introduce a system of ports/customs statistics which will allow observation of the movements of cargoes on through bills of lading or multimodal transport documents (or sea-way bills) to inland points. This will be of significant assistance to government officials such as transport planners and customs officers who will be able better to judge the likely need for infrastructure, equipment and procedure innovations on the basis of such statistical material.

C. Inland transport

Inland transport - India

106. A total of 21,600 TEUs were moved to or from the six functioning Indian ICDs in 1985/86. The level of traffic inspected in 1989/90 under the current seventh plan is shown in table 40. To service the main container ports, it is estimated that a total of 21 ICDs will be in operation by 1990.

Table 40

Multimodal traffic in India - estimates for 1989/90

Port	Total traffic (TEUs)	Percentage moving by rail	Total TEUs to/from ICD
Nhava Sheva	200 000	30	60 000
Bombay	180 000	10	18 000
Calcutta/Haldia	105 000	15	20 000
Madras	160 000	30	50 000
Cochin	80 000	20	17 000
Total	725 000	22.8	165 000

Source: Seminar on Containerization, Madras, India, July 1986.

Inland transport - China

107. Similarly, in China steps are being taken to facilitate the inland movement of containers and thereby also multimodal transport. It has been estimated that the national container trade will grow threefold between 1985 and 1990 to reach 1.65 million TEUs annually. Among developments to cater for this trend is a new highway between Hong Kong and Canton and the offer, by COSCO, of through transport to more than 160 inland destinations in China, while SINOTRANS connects a total of 35 Chinese cities to its "Land-Bridge"

Container Transportation Service. SINOTRANS handles large numbers of multimodal containers, both from Europe via the Trans Siberian Railway and from Japan, and it can offer multimodal transport from 71 branches throughout the country. Export containers also move by rail to Hong Kong for re-export to overseas destinations. The increase in multimodal transport to and from Japan in the second half of 1985 (latest figures available to the secretariat) is shown in table 41. In spite of these encouraging figures, the majority of import containers continue to be stripped in the ports.

Table 41

Multimodal traffic between China and Japan

Period	Total exports in tons	of which LCL cargoes	Total import in tons	of which LCL cargoes
2nd half 1984	101 000	8 000	141 000	18 000
1st half 1985	na	23 000	na	na
2nd half 1985	124 000	43 000	155 000	38 000

Source: Shipping and Trade News (Tokyo), 31 July 1986.

Special terminals for land-locked developing countries

108. To service land-locked countries depending on an ocean port in a transit country, use has long been made of special areas, for example container terminals located just off the port itself. Such areas have for example been created in Dar-es-Salaam to service Zambia, Zimbabwe and Malawi, while plans for their establishment are being considered in Botswana, Lesotho and Swaziland. Transport between the land-locked countries and Dar-es-Salaam is carried out both by road and by rail. Road transport is mainly conducted in the form of convoys of heavy trucks to enhance security and facilitate assistance in case of breakdowns. The so-called "Beira and Nacala Corridors" are considerably shorter, for the southern African land-locked countries, than the route through Dar-es-Salaam or Durban but, for a number of reasons, traffic through these corridors virtually ceased in 1986. The current attempt to rehabilitate the two corridors should be completed in 1988, at which time it is likely that cargoes will switch back to the shorter route.

109. Another development is taking place in the United Republic of Tanzania, where the Government has given Rwanda a piece of land located at Isaka, along the Mwanza/Dar-es-Salaam railway line of TRC, in order to build an ICD for containers transiting to/from Rwanda and using the port of Dar-es-Salaam. Simplified customs procedures would allow containers to move in block trains between Dar-es-Salaam and Isaka and by truck convoys between Isaka and Kigali (Rwanda). EEC is considering the financing of this project. Feasibility studies and tender documents have been prepared by UNCTAD through its technical assistance activities.

110. Japan. One way to improve the standing of NVO-MTOs is to give such organizations some status. This can be done by creating an association of

NVO-MTOs, as has happened in Japan, where the Japan International Freight Forwarders' Association (JIFFA) became a separate juridical person as of 1 October 1985. In spite of its name, JIFFA's members are in fact freight forwarders acting as multimodal transport operators. In 1986 JIFFA adopted the "JIFFA Multimodal Transport bill of lading" which incorporates the United Nations MT Convention, although not in its entirety.

111. India. A similar situation exists in India, where the latest developments in multimodal transport show a continuously better appreciation of the potential benefits of this method of transport. At present, Indian NVO-MTOs have not been able to issue through MT documents as carriers because of the regulations of the Foreign Exchange Dealers Association which only authorize ocean carriers to issue such documents. However, the need to create standards for the licensing of MTOs has been clearly perceived, and a group of MTOs which has been working on this subject since 1984 is now finalizing qualifying standards at the subcommittee level. These standards include such stipulations as:

The NVO-MTO must be a corporate body, either private or public, under the Companies Act;

At least 75 per cent of the board must be controlled by customs house agents (freight forwarders) of no less than 10 years' standing;

Adequate insurance cover must be possessed for liability and third-party coverage;

Adequate company infrastructure such as warehousing facilities, agency network, CFS facilities, etc. must be available;

Paid-up capital must be at least Rs 25 lakh ($US 210,000);

Minimum assets must be at least Rs 30 lakh ($US 250 000), although this level is still being discussed.

112. Republic of Korea. Minimum standards for NVO-MTOs have been established here also. NVO-MTOs in the Republic of Korea are required, among other things, to register with a governmental agency and comply with the following standards:

To have a paid-up capital of about $US 100,000;

To earn a freight revenue per year of about $US 200,000; and

To carry an indemnity bond of about $US 110,000.

113. France. As transport modes are more and more extending their services to include multimodal transport operations, they compete with actual international freight forwarders. Freight forwarders have therefore been looking into new forms of services to attract shippers and demonstrate that they are the perfect partners in international trade involving multimodal transport.

114. The French organization GACEF (Groupement des Entreprises de Transports Françaises Auxiliaires du Commerce Extérieur de la France), grouping the main French international carriers and freight forwarders, has launched a new transport contract labelled Contrat OTM (organisateur de transport multimodal). This contract has been designed to better serve importers and exporters and to assist them in the control of their transport chain. By this contract, the multimodal transport operator commits himself to the performance, from door-to-door, of the international transport of goods requiring at least two modes of transport and offers a maximum insurance cover against risks related to transport, without increasing the costs to the user. In other words, the operator takes full responsibility for the goods during their international transport movement, from the time they are taken in charge at origin to the time they are delivered at destination.

115. This new service has the following features:

There is a single entity responsible for the transport of the goods;

This entity assumes total liability for the due performance of the transport operation;

All transport risks and consequences are covered from door-to-door;

Cargo insurance is arranged according to the declared value of the goods;

Service is based on an international logistics network;

It has access to appropriate technical, administrative, commercial and financial resources;

A new GACEF-OTM transport document serves as contract.

This new service can only be obtained from the member companies of GACEF. Membership is open to any freight forwarder ready to accept the conditions of participation, basically a high fee.

Chapter VII

OTHER DEVELOPMENTS

A. United Nations Convention on a Code of Conduct for Liner Conferences

116. During 1986 two countries became contracting parties to the Convention, which entered into force on 6 October 1983. Thus, at the end of 1986 the total number of contracting parties stood at 68, 31/ accounting for about 50 per cent of relevant world tonnage. The UNCTAD secretariat has continued to give assistance to countries, on request, with respect to the implementation of the Code.

117. Several documents regarding the implementation of the Code have been prepared by the UNCTAD secretariat. 32/ A Review Conference on the Convention on a Code of Conduct for Liner Conference is to be convened in 1988 in accordance with the provisions of article 52 of the Convention.

B. United Nations Convention on International Multimodal Transport of Goods

118. The United Nations Convention on International Multimodal Transport of Goods, 33/ which was adopted by consensus on 24 May 1980 by the United Nations Conference of Plenipotentiaries, was opened for signature in New York from 1 September 1980 to 31 August 1981 and has remained open for accession thereafter. It will enter into force 12 months after 30 States have become Contracting Parties by definitive signature, ratification or accession. By January 1987 four countries - namely Chile, Malawi, Mexico and Senegal - had ratified or acceded to the Convention, while three countries - namely Morocco, Norway and Venezuela - had signed the Convention subject to ratification.

C. United Nations Convention on the Carriage of Goods by Sea

119. This Convention, 34/ which was adopted on 30 March 1978 by a conference of plenipotentiaries, was opened for signature in New York from 31 March 1978 to 30 April 1979 and has remained open for accession since then. It will enter into force 12 months after 20 States have become Contracting Parties by definitive signature, ratification or accession. By January 1987 11 countries, namely Barbados, Chile, Egypt, Hungary, Lebanon, Morocco, Romania, Senegal, Tunisia, Uganda and the United Republic of Tanzania, had ratified or acceded to the Convention.

D. United Nations Conference on Conditions for Registration of Ships

120. The United Nations Conference on Conditions for Registration of Ships held the fourth part of its session in Geneva from 20 January to 7 February 1986. The Conference was convened pursuant to General Assembly resolution 37/209 of 20 December 1982 to consider the adoption of an international agreement concerning the conditions under which vessels should be accepted on national shipping registers. The Conference completed its work by the adoption on 7 February 1986 of the United Nations Convention on Conditions for Registration of Ships. 35/

121. The Convention was opened for signature from 1 May 1986 up to and including 30 April 1987 at the Headquarters of the United Nations in New York and will remain open for accession thereafter. The Convention will enter into force 12 months after the date on which not less than 40 States, the combined tonnage of which amounts to at least 25 per cent of world tonnage stipulated in annex III to the Convention, have become Contracting Parties to it.

122. As at 30 April 1987, the Convention had been signed at United Nations Headquarters in New York by the following 13 States: Algeria, Bolivia, Cameroon, Côte d'Ivoire, Czechoslovakia, Egypt, Indonesia, Libyan Arab Jamahiriya, Mexico, Morocco, Poland, Senegal, USSR.

E. UNCTAD Committee on Shipping

123. The UNCTAD Committee on Shipping held its twelfth regular session in Geneva from 10 to 21 November 1986. The two-week session was dominated by the problem of excess tonnage in world shipping and surplus world shipbuilding capacity. At the conclusion of the meeting four resolutions were unanimously adopted. In view of the importance of the problem of imbalance in world shipping, it was decided to schedule the next session of the Committee in early 1988 to consider primarily the imbalance between supply and demand in ocean shipping and to recommend practical measures to be taken in order to bring about a balanced situation in the shipping industry.

F. UNCTAD model clauses on marine hull and cargo insurance

124. At its twelfth session in November 1986, the Committee on Shipping decided to recommend to the Trade and Development Board that it endorse the UNCTAD non-mandatory model clauses on marine hull and cargo insurance as proposed by the Rapporteur of the Working Group on International Shipping Legislation which adopted the model clauses, and to instruct the UNCTAD secretariat, having assured the correspondence of the text in all languages, to circulate this version to the commercial parties concerned.

125. The model clauses thus adopted are a truly international legal basis governing the rights and duties of parties to insurance contracts involving international seaborne trade. The model clauses have maintained a degree of national market flexibility without losing the need for and the benefits gained from international uniformity.

126. The UNCTAD secretariat has also been requested to prepare explanatory material in order to promote the use of the model clauses.

G. Maritime liens and mortgages - Joint Intergovernmental Group of Experts on Maritime Liens and Mortgages and Related Subjects

127. A Joint Intergovernmental Group of Experts on Maritime Liens and Mortgages and Related Subjects has been established by UNCTAD and IMO with a mandate to examine the subject of maritime liens and mortgages, including the possible consideration of:

(a) The review of the maritime liens and mortgages Conventions and related enforcement procedures, such as arrest;

(b) The preparation of model laws or guidelines on maritime liens, mortgages and related enforcement procedures, such as arrest;

(c) The feasibility of an international registry of maritime liens and mortgages.

128. The first session of the Joint Intergovernmental Group was held in Geneva from 1 to 12 December 1986 and featured a general debate on a number of issues, in particular: the maritime lien to be recognized internationally; identification of the essential characteristics of maritime liens and mortgages, including the need for definitions; relationship between liens and mortgages; consequences of forced sale; review of enforcement procedures, such as arrest; need for a new international agreement or agreements.

129. The Joint Intergovernmental Group decided to hold its second session in London from 11 to 15 May 1987.

H. Maritime fraud

130. At its twelfth session in November 1986, the Committee on Shipping considered the reports prepared by the UNCTAD secretariat on the various subjects relating to ways and means to combat maritime fraud. The reports cover such subjects as:

Prevention of documentary fraud associated with bills of lading: use of sea waybills;

Measures to improve the exchange of shipping information: establishment of a Maritime Fraud Prevention Exchange;

Measures to increase co-operation in the investigation and prosecution of maritime fraud.

131. The Committee on Shipping requested the UNCTAD secretariat to monitor the progress made in the establishment of a proposed Maritime Fraud Prevention Exchange, which would be a central collecting point co-ordinating the services of the participating organizations providing information and which would provide shipping interests with immediate access to the existing data banks. The Committee also requested the UNCTAD secretariat to report to it on the progress made in the development of a training programme, in co-operation with the relevant national and international organizations, on measures to combat maritime fraud. In addition, the UNCTAD secretariat is also undertaking a comparative study of the different minimum standards for shipping agents and the subsequent preparation of a draft set of standards for shipping agents.

I. Ad hoc Intergovernmental Group of Port Experts

132. This Group was convened in response to decision 54 (XI) of the Committee on Shipping and met in Geneva from 25 February to 5 March 1986. A significant number of Governments sent experts to the meeting and a number of intergovernmental and non-governmental organizations active in the ports field were also present. Of the 46 States members participating, 37 sent officials from transport ministries, port authorities and training institutes. The meeting provided a unique opportunity to analyse, at the intergovernmental level, the problems facing ports in developing countries.

133. This was the first intergovernmental meeting convened by UNCTAD solely to discuss ports. The secretariat's past programme of work in this field was thoroughly reviewed and recommendations were made for the future programme.

The Group was of the opinion that the work carried out by the secretariat had been of great value to the port industry and particularly to ports in developing countries.

134. The Group identified areas of research and training where further work was required by the secretariat and indicated priorities for this work. The Group recommended that UNCTAD's technical advisory service in the field of ports should be continued and if possible extended. The Group also requested that the dissemination of UNCTAD documents to port managers be improved. The Group prepared a report (TD/B/C.4/298) which was submitted to the twelfth session of the Committee on Shipping. The Committee took note of the report and requested the secretariat to adapt its work programme in the light of the Group's recommendations.

J. Developments towards the establishment of a common shipping policy and as regards shipbuilding within EEC and OECD

135. On 22 December 1986, after more than five years of deliberations aimed at the establishment of an EEC common maritime policy, the Council of the European Communities adopted four regulations designed to form the first stage of an EEC shipping policy. (The second stage will consider measures to be taken in order to strengthen the competitive position of the EEC shipping industry.)

136. The regulations adopted foresee, inter alia:

(a) The application of the principle of freedom to provide services to maritime transport between Member States and between Member States and third countries and the gradual phasing out of existing cargo-sharing arrangements and prohibition of cargo-sharing arrangements in any future agreements between Member States and third countries (subject to certain exemptions in exceptional circumstances);

(b) Detailed rules for the application of EEC competition policy to maritime transport providing for the anti-trust exemption (exemption from the prohibition of Article 85 (1) of the Treaty of Rome) of liner conferences subject to certain conditions and obligations. The Commission is entrusted with monitoring the exempted agreements with a view to determining whether obligations are being fulfilled and conditions underlying the block exemption are being complied with;

(c) The application by EEC of measures to protect European shipping from unfair pricing practices by third-country shipowners engaged in international liner shipping;

(d) The taking of co-ordinated action by EEC countries against a non-Community country, which in accordance with its legislation restricts or threatens to restrict, in the opinion of the EEC Council, the free access of EEC shipping operators to international maritime trade. 36/

137. The regulations concerning relations between the European Community and third countries and their shipping companies, as well as the application of co-ordinated actions of the EEC countries against them, will enter into force on 1 July 1987.

138. In February 1987 the OECD Council approved a set of 13 principles concerning a common shipping policy, five of them dealing with a co-ordinated response of OECD countries to protectionist practices of non-member countries. The official recommendation adopted by OECD in this connection calls on member countries to "actively oppose the imposition of régimes which restrict the access to cargo moving internationally by shipping companies adhering to the principle of free competition on a commercial basis". 37/

139. With respect to subsidies to shipbuilding, it was decided at a top level industry ministers' meeting in December 1986 to fix shipbuilding subsidy limits in the EEC countries at a maximum level of 28 per cent. 38/ As regards subsidies to shipbuilding, it was also reported that a target date of end 1989 had been set by OECD for phasing out shipbuilding aid in the member States. 39/

K. Contracts for freight futures

140. The Baltic International Freight Futures Exchange (BIFFEX) and the International Futures Exchange, Bermuda (INTEX) continued trading in freight futures contracts on spot dry bulk shipments, started on 1 May 1985, using the Baltic freight index (BFI). These organizations provide the freight futures market with a hedge against the freight risks of the dry bulk ocean freight industry. On 10 February 1986, BIFFEX also introduced freight futures contracts for tanker shipments which, however, did not attract the expected attention from the tanker market. Due to lack of current interest on the part of the oil industry, tanker owners and speculators, BIFFEX suspended trading on the tanker futures market after 19 December 1986. 40/

Notes

1/ Fearnleys, Review 1986 (Oslo), p. 5.

2/ Ibid., p. 30.

3/ Based on Institute of Shipping Economics and Logistics (Bremen), Shipping Statistics, No. 8, August 1986, p. 20.

4/ Lloyd's List (London), 22 August 1986, Fairplay International (London), 11 September 1986, p. 2.

5/ Fairplay International (London), 2 October 1986, p. 2.

6/ Hong Kong, Philippines, Republic of Korea, India, Singapore, Brazil, Iran (Islamic Republic of), Saudi Arabia, Yugoslavia, Kuwait (in order of importance).

7/ Based on Containerisation International Yearbook 1983 (London), p. 21 and Containerisation International (London), August 1986, p. 44.

8/ Containerisation International (London), August 1986, p. 49.

9/ Surplus tonnage defined as tonnage which is not fully utilized owing to slow steaming, lay-up status, or lying idle for reasons other than lay up (i.e. casualty, storage, under repair, etc.). For the calculation of surplus tonnage in the dry bulk and tanker sectors, a proportion of the total combined carrier fleet has been allocated to either dry bulk or oil trades according to an analysis of trading patterns and the surplus in each sector has been calculated accordingly.

10/ See Lloyd's Shipping Economist (London), February 1987, p. 36.

11/ The other important category being estimates of surplus on account of slow steaming.

12/ Institute of Shipping Economics and Logistics (Bremen), Shipping Statistics No. 12, 1986, p. 4.

13/ Lloyd's Shipping Economist (London), various issues.

14/ Lloyd's List (London), 12 December 1986.

15/ Lloyd's List (London), 6 December 1986.

16/ See Fearnleys, Review 1985 (Oslo), p. 31, and Drewry Shipping Consultants Ltd., Shipping statistics and economics (London), March 1986, p. 42.

17/ See table 19 and Lloyd's Shipping Economist (London), November 1986.

18/ Lloyd's List (London), 16 January 1987.

19/ Lloyd's List (London), 4 December 1986.

20/ Estimates by R.F. Platou, Shipbrokers (Oslo). See Lloyd's List (London), 10 January 1987; Fearnleys, Review 1986 (Oslo), p. 35.

21/ Estimates based on Fearnleys, Review (Oslo), various issues.

22/ Based on Fearnleys, Review (Oslo), various issues.

23/ Fearnleys, Review 1986 (Oslo), p. 36.

24/ Ibid., p. 37.

25/ Ibid.

26/ Ibid.

27/ Journal pour le Transport International (Basel), 1986, No. 49.

28/ Containerisation International (London), 1986, No. 9.

29/ Further information concerning the MULTISHIP programmes can be obtained from the Multimodal Transport and Technological Development Section of the Shipping Division of UNCTAD.

30/ Further information concerning the MT workshops can be obtained from the Multimodal Transport and Technological Development Section of the Shipping Division of UNCTAD.

31/ Algeria; Bangladesh; Barbados; Benin; Bulgaria; Cameroon; Cape Verde; Central African Republic; Chile; China; Congo; Costa Rica; Côte d'Ivoire; Cuba; Czechoslovakia; Denmark; Egypt; Ethiopia; Finland; France; Gabon; Gambia; German Democratic Republic; Germany, Federal Republic of; Ghana; Guatemala; Guinea; Guyana; Honduras; India; Indonesia; Iraq; Jamaica; Jordan; Kenya; Kuwait; Lebanon; Madagascar; Malaysia; Mali; Mauritius; Mexico; Morocco; Netherlands; Niger; Nigeria; Norway; Pakistan; Peru; Philippines; Republic of Korea; Romania; Saudi Arabia; Senegal; Sierra Leone; Sri Lanka; Sudan; Sweden; Togo; Trinidad and Tobago; Tunisia; Union of Soviet Socialist Republics; United Kingdom (also on behalf of Gibraltar and Hong Kong); United Republic of Tanzania; Uruguay; Venezuela; Yugoslavia; Zaire.

32/ Implementation of the United Nations Convention on a Code of Conduct for Liner Conferences (TD/B/C.4/300 and Corr.1); Guidelines towards the application of the Convention on a Code of Conduct for Liner Conferences (UNCTAD/ST/SHIP/1); Implementation of the United Nations Convention on a Code of Conduct for Liner Conferences - Supplemental material (UNCTAD/ST/SHIP/2). These documents are available from the UNCTAD secretariat upon request.

33/ For the text of the Convention, see United Nations Conference on a Convention on International Maritime Transport, vol. I, Final Act and Convention on International Multimodal Transport of Goods (United Nations publication, Sales No. E.81.II.D.7 (vol.I)).

34/ For the text of the Convention, see United Nations Conference on the Carriage of Goods by Sea (United Nations publication, Sales No. E.80.VIII.1).

35/ The text of the Convention is contained in document TD/RS/CONF/23, which is available from the UNCTAD secretariat upon request.

36/ The text of the regulations (Council Regulations (EEC) Nos. 4055, 4056, 4057 and 4058 of 22 December 1986) is contained in Official Journal of the European Communities, L 378, of 31 December 1986.

37/ Lloyd's List (London), 18 February 1987. For the full text of the recommendation and the principles, as well as observations and reservations by member States, see OECD document C(87)11 (Final) of 20 February 1987 (General distribution).

38/ Lloyd's List (London), 23 December 1986.

39/ Fairplay International (London), 17 July 1986.

40/ Lloyd's List (London), 27 November 1986; Fairplay International (London), 4 December 1986.

Annex I

CLASSIFICATION OF COUNTRIES AND TERRITORIES

Code 1 -	Canada	United States of America
Code 2 -	Japan	
Code 3 -	Australia	New Zealand
Code 4 -	Austria (L)	Italy
	Belgium	Monaco
	Denmark	Netherlands
	Faeroe Islands	Norway
	Finland	Portugal
	France	Spain
	Germany, Federal Republic of	Sweden
	Gibraltar	Switzerland (L)
	Greece	Turkey
	Iceland	United Kingdom of Great Britain and Northern Ireland
	Ireland	
	Israel	
Code 5 -	South Africa	
Code 6 -	Albania	Poland
	Bulgaria	Romania
	Czechoslovakia (L)	Union of Soviet Socialist Republics
	German Democratic Republic	
	Hungary (L)	
Code 7 -	China	Viet Nam
	Democratic People's Republic of Korea	
Code 8 - 8.1	Northern Africa	
	Algeria	Morocco
	Egypt	Tunisia
	Libyan Arab Jamahiriya	
8.2	Western Africa	
	Angola	Guinea-Bissau
	Benin	Liberia
	Cameroon	Mali (L)
	Cape Verde	Mauritania
	Congo	Nigeria
	Côte d'Ivoire	St. Helena
	Equatorial Guinea	Sao Tome and Principe
	Gabon	Senegal
	Gambia	Sierra Leone
	Ghana	Togo
	Guinea	Zaire

8.3	Eastern Africa	
	Burundi (L)	Reunion
	Comoros	Seychelles
	Djibouti	Somalia
	Ethiopia	Sudan
	Kenya	Uganda (L)
	Madagascar	United Republic of Tanzania
	Mauritius	Zambia (L)
	Mozambique	
Code 9 - 9.1	Caribbean and North America	
	Anguilla	Grenada
	Antigua and Barbuda	Guadeloupe
	Aruba	Haiti
	Bahamas	Jamaica
	Barbados	Martinique
	Bermuda	Montserrat
	British Virgin Islands	St. Pierre and Miquelon
	Cayman Islands	Saint Kitts and Nevis
	Cuba	Saint Lucia
	Dominica	Saint Vincent and the Grenadines
	Dominican Republic	Turks and Caicos Islands
	Greenland	United States Virgin Islands
9.2	Central America	
	Belize	Honduras
	Costa Rica	Mexico
	El Salvador	Nicaragua
	Guatemala	Panama
9.3	South America-Northern seaboard	
	Guyana	Suriname
	French Guyana	Trinidad and Tobago
	Netherlands Antilles	Venezuela
9.4	South America-Western seaboard	
	Chile	Ecuador
	Colombia	Peru
9.5	South America-Eastern seaboard	
	Argentina	Falkland Islands (Malvinas) a/
	Bolivia (L)	Paraguay (L)
	Brazil	Uruguay
Code 10-10.1	Western Asia	
	Bahrain	Lebanon
	Cyprus	Oman
	Democratic Yemen	Qatar
	Iran (Islamic Republic of)	Saudi Arabia
	Iraq	Syrian Arab Republic
	Jordan	United Arab Emirates
	Kuwait	Yemen

10.2	Southern and Eastern Asia	
	Bangladesh	Malaysia
	Bhutan	Maldives
	Brunei Darussalam	Pakistan
	Burma	Philippines
	Democratic Kampuchea	Republic of Korea
	Hong Kong	Singapore
	India	Sri Lanka
	Indonesia	Thailand
	Macau	
Code 11 -	Malta	Yugoslavia
Code 12 -	American Samoa	Papua New Guinea
	Christmas Island (Australia)	Samoa
	Fiji	Solomon Islands
	French Polynesia	Tonga
	Guam	Tuvalu
	Kiribati	Vanuatu
	Nauru	Wake Island
	New Caledonia	

Notes

1. This classification is for statistical purposes only and does not imply any judgement regarding the stage of development of any country.

2. Trade statistics are based on data recorded at the ports of loading and unloading. Trade originating in or destined for neighbouring countries is attributed to the country in which the ports are situated; for this reason land-locked countries do not figure in these tabulations. On the other hand statistical tabulations on merchant fleets include data for land-locked countries that possess fleets: these countries are marked "(L)".

3. The groups of countries or territories used for presenting statistics in this Review are made up as follows:

- Developed market-economy countries and territories: Codes 1, 2, 3, 4 and 5

- Socialist countries of Eastern Europe and Asia: Codes 6 and 7

- Developing countries and territories: Codes 8, 9, 10, 11 and 12

of which:

in Africa:	Codes 8.1, 8.2 and 8.3
in America:	Codes 9.1, 9.2, 9.3, 9.4 and 9.5
in Asia:	Codes 10.1 and 10.2
in Europe:	Code 11
in Oceania:	Code 12

In certain tables, where appropriate, five open-registry countries are recorded as a separate group. The composition of this group was revised in 1981. The group comprises Bahamas, Bermuda, Cyprus, Liberia and Panama.

a/ A dispute exists between the Governments of Argentina and of the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Annex II

MERCHANT FLEETS OF THE WORLD BY FLAG OF REGISTRATION, a/ GROUPS OF COUNTRIES AND TYPES OF SHIPS, b/
IN GRT AND DWT, AS AT 1 JULY 1986
(dwt figures are shown in parentheses)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
World total e/	398 987 972 (639 082 535)	123 630 519 (239 461 996)	130 048 892 (230 520 827)	70 907 885 (100 806 676)	19 609 456 (21 523 691)	54 791 220 (46 769 345)
Developed market-economy countries and territories						
Australia	2 368 462 (3 653 570)	622 352 (1 084 366)	1 185 041 (2 036 320)	183 231 (239 003)	73 932 (75 934)	303 906 (217 947)
Austria	124 794 (210 632)	- -	63 038 (109 712)	61 756 (100 920)	- -	- -
Belgium	2 419 661 (3 916 538)	115 417 (189 974)	1 415 729 (2 638 277)	139 031 (203 490)	227 867 (251 875)	521 617 (632 922)
Canada	1 338 696 (1 165 175)	183 690 (285 134)	396 811 (715 711)	9 658 (5 556)	16 083 (14 022)	732 454 (144 752)
Denmark	4 651 224 (6 805 176)	1 830 270 (3 516 459)	290 177 (524 800)	681 042 (885 297)	1 030 725 (1 097 343)	819 010 (781 277)
Faeroe Islands	115 394 (83 943)	499 (1 221)	- -	25 763 (32 745)	- -	89 132 (49 977)
Finland	1 469 927 (1 907 837)	557 640 (1 040 474)	121 088 (180 840)	389 863 (509 922)	3 895 (4 225)	397 441 (172 376)
France	5 936 268 (9 305 297)	2 588 580 (5 127 029)	957 241 (1 657 568)	879 181 (1 155 075)	708 227 (781 782)	803 039 (583 843)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Germany, Federal Republic of	5 565 214 (7 744 600)	593 213 (1 135 272)	558 641 (883 104)	1 797 762 (2 849 466)	1 757 388 (2 014 962)	858 210 (861 796)
Gibraltar	1 612 948 (2 998 964)	855 656 (1 697 869)	618 029 (1 094 336)	129 305 (197 643)	- -	9 958 (9 116)
Greece	28 390 800 (51 294 326)	10 234 774 (20 625 896)	13 201 894 (23 877 677)	3 974 790 (6 066 259)	141 961 (208 557)	837 381 (515 937)
Iceland	176 409 (161 593)	1 539 (2 651)	- -	63 437 (107 110)	- -	111 433 (51 832)
Ireland	149 308 (148 938)	3 754 (6 438)	- -	52 786 (82 763)	18 385 (26 156)	74 383 (33 581)
Israel	556 628 (679 228)	991 (1 897)	74 124 (124 713)	140 897 (186 826)	333 750 (364 530)	6 866 (1 262)
Italy	7 896 569 (12 407 125)	2 513 197 (4 584 714)	3 059 102 (5 415 820)	889 415 (1 224 398)	247 025 (272 717)	1 187 830 (909 476)
Japan	38 487 773 (59 978 976)	12 116 867 (22 714 201)	13 894 759 (24 696 232)	3 911 274 (5 781 311)	1 831 466 (1 663 850)	6 733 407 (5 123 382)
Netherlands	4 324 135 (5 993 883)	666 813 (1 226 142)	523 814 (903 226)	1 486 362 (2 226 289)	546 826 (540 256)	1 100 320 (1 097 970)
New Zealand	314 206 (344 796)	73 496 (116 670)	12 776 (20 118)	99 820 (99 359)	60 860 (60 999)	67 254 (47 650)
Norway	9 294 630 (14 202 683)	3 201 801 (6 069 998)	2 479 364 (4 325 012)	997 110 (1 351 124)	58 716 (42 162)	2 557 639 (2 414 387)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Portugal	1 114 444 (1 747 097)	533 351 (1 013 632)	230 591 (393 127)	188 188 (246 878)	3 425 (6 060)	158 889 (87 400)
South Africa	599 509 (661 706)	38 990 (63 758)	124 681 (226 099)	13 410 (14 624)	285 046 (274 454)	137 382 (82 771)
Spain	5 422 002 (9 286 019)	2 350 291 (4 900 015)	1 174 882 (2 130 064)	885 868 (1 400 995)	117 278 (163 993)	893 683 (690 952)
Sweden	2 516 614 (3 037 436)	459 025 (859 806)	271 409 (443 542)	996 863 (1 179 483)	119 528 (107 994)	669 789 (446 611)
Switzerland	346 220 (550 711)	799 (1 132)	264 210 (434 972)	64 642 (84 480)	- -	16 569 (30 127)
Turkey	3 423 745 (5 712 544)	1 029 048 (1 907 268)	1 352 662 (2 363 841)	826 174 (1 315 271)	- -	215 861 (126 164)
United Kingdom	11 567 117 (16 871 643)	4 302 604 (8 023 323)	2 149 716 (3 823 863)	1 124 850 (1 560 279)	1 418 666 (1 345 505)	2 571 281 (2 118 673)
United States of America	15 799 895 (22 959 085)	6 568 454 (13 543 437)	615 673 (1 210 998)	1 847 324 (1 963 553)	3 234 503 (3 464 026)	3 533 941 (2 777 071)
Subtotal:	155 982 592 (243 829 521)	51 443 111 (99 738 776)	45 035 452 (80 229 972)	21 859 802 (31 070 119)	12 235 552 (12 781 402)	25 408 675 (20 009 252)
Open-registry countries						
Bahamas	5 985 011 (10 600 356)	4 111 092 (7 913 506)	901 708 (1 646 314)	391 407 (522 748)	52 472 (71 050)	528 332 (446 738)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Bermuda	1 208 276 (1 759 709)	301 229 (504 501)	319 182 (555 603)	227 050 (313 675)	33 994 (33 731)	326 821 (352 199)
Cyprus	10 616 809 (18 762 952)	4 397 519 (8 563 809)	3 739 219 (6 472 624)	2 119 225 (3 294 407)	80 615 (134 716)	280 231 (297 396)
Liberia	52 649 444 (101 587 640)	27 828 073 (58 149 069)	18 028 289 (34 168 509)	1 939 684 (2 859 490)	448 416 (551 288)	4 404 982 (5 859 284)
Panama	41 305 009 (68 349 383)	8 208 806 (16 311 897)	17 399 973 (30 747 884)	9 162 092 (13 928 935)	1 904 521 (2 352 325)	4 629 617 (5 008 342)
Subtotal:	111 764 549 (201 060 040)	44 846 719 (91 442 782)	40 388 371 (73 590 934)	13 839 458 (20 919 255)	2 520 018 (3 143 110)	10 169 983 (11 963 959)
Socialist countries of Eastern Europe and Asia						
Socialist countries of Eastern Europe						
Albania	56 133 (79 940)	- -	- -	54 894 (79 940)	- -	1 239 (-)
Bulgaria	1 385 009 (1 989 051)	316 562 (516 195)	572 104 (905 839)	347 236 (457 683)	19 097 (18 282)	130 010 (91 052)
Czechoslovakia	197 868 (299 270)	- -	116 158 (188 272)	81 710 (110 998)	- -	- -
German Democratic Republic	1 518 944 (1 923 583)	35 860 (63 257)	352 721 (564 886)	799 633 (1 046 243)	82 222 (102 225)	248 508 (146 972)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Hungary	86 395 (122 277)	- 	- 	86 395 (122 277)	- 	-
Poland	3 457 242 (4 694 249)	289 888 (512 911)	1 499 410 (2 409 526)	1 236 745 (1 492 165)	- 	431 199 279 647)
Romania	3 233 906 (4 843 345)	383 720 (699 760)	1 589 649 (2 615 320)	993 703 (1 337 443)	- 	266 834 (190 822)
Union of Soviet Socialist Republics	24 960 888 (28 145 633)	4 086 850 (6 255 399)	3 433 324 (5 544 099)	7 663 943 (9 877 305)	706 342 (720 010)	9 070 429 (5 748 820)
Subtotal:	34 896 385 (42 097 348)	5 112 880 (8 047 522)	7 563 366 (12 227 942)	11 264 259 (14 524 054)	807 661 (840 517)	10 148 219 (6 457 313)
Socialist countries of Asia						
China	11 566 974 (17 423 970)	1 634 692 (2 638 265)	3 871 490 (6 530 590)	4 933 621 (6 975 683)	452 437 (626 047)	674 734 (653 385)
Democratic Peoples' Republic of Korea	407 253 (615 292)	58 761 (115 801)	64 054 (111 748)	237 297 (355 995)	- 	47 141 (31 748)
Viet Nam	338 668 (507 975)	39 619 (68 143)	14 200 (23 706)	257 699 (403 545)	- 	27 150 (12 581)
Subtotal:	12 312 895 (18 547 237)	1 733 072 (2 822 209)	3 949 744 (6 666 044)	5 428 617 (7 735 223)	452 437 (626 047)	749 025 (697 714)
Subtotal socialist countries of Eastern Europe and Asia:	47 209 280 (60 644 585)	6 845 952 (10 869 731)	11 513 110 (18 893 986)	16 692 876 (22 259 277)	1 260 098 (1 466 564)	10 897 244 (7 155 027)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Developing countries and territories of Africa						
Algeria	881 670 (1 018 510)	119 079 (194 805)	57 494 (93 910)	211 132 (303 428)	- -	493 965 (426 367)
Angola	92 285 (127 431)	2 052 (3 036)	- -	72 137 (112 895)	- -	18 096 (11 500)
Benin	4 887 (4 880)	- -	- -	3 104 (4 550)	- -	1 783 (330)
Cameroon	76 660 (88 679)	- -	- -	67 057 (83 586)	- -	9 603 (5 093)
Cape Verde	14 095 (22 092)	- -	- -	11 594 (20 301)	- -	2 501 (1 791)
Comoros	1 261 (2 194)	- -	- -	936 (1 793)	- -	325 (401)
Congo	8 458 (10 840)	- -	- -	- -	- -	8 458 (10 840)
Côte d'Ivoire	120 679 (151 496)	789 (1 170)	- -	102 329 (132 977)	- -	17 561 (17 349)
Djibouti	3 051 (2 650)	- -	- -	1 780 (2 300)	- -	1 271 (350)
Egypt	1 063 020 (1 484 890)	98 141 (163 499)	343 079 (565 499)	494 007 (670 856)	- -	127 793 (85 036)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Equatorial Guinea	6 412 (6 700)	-	-	6 412 (6 700)	-	-
Ethiopia	66 926 (84 752)	1 317 (2 200)	-	63 068 (78 760)	-	2 541 (3 792)
Gabon	97 967 (170 176)	74 471 (141 162)	-	19 326 (26 462)	-	4 170 (2 552)
Gambia	2 588 (4 046)	-	-	1 597 (2 900)	-	991 (1 146)
Ghana	165 644 (178 268)	965 (1 167)	-	99 391 (134 705)	-	65 288 42 396)
Guinea	7 179 (2 927)	-	-	210 (185)	-	6 969 (2 742)
Guinea-Bissau	4 070 (2 843)	-	-	1 301 (1 340)	-	2 769 (1 503)
Kenya	9 040 (6 431)	-	-	1 168 (1 590)	-	7 872 (4 841)
Libyan Arab Jamahiriya	825 231 (1 459 615)	708 030 (1 340 988)	-	71 773 (96 324)	-	45 428 (22 303)
Madagascar	73 715 (96 587)	8 863 (13 859)	-	55 727 (77 523)	-	9 125 (5 205)
Malawi	424 (300)	424 (300)	-	-	-	-

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Mauritania	22 752			299		22 453
	(10 230)	-	-	(721)	-	(9 509)
Mauritius	151 978		125 039	19 590		7 349
	(257 529)	-	(224 896)	(28 368)	-	(4 265)
Morocco	416 482	10 077	124 833	74 224	4 608	202 740
	(595 364)	(19 069)	(212 410)	(114 636)	(10 071)	(239 178)
Mozambique	42 801	885		18 178		23 738
	(38 811)	(1 620)	-	(28 413)	-	(8 778)
Nigeria	563 912	219 076		294 536		50 300
	(809 278)	(429 203)	-	(350 858)	-	(29 217)
Sao Tome and Principe	1 488			495		993
	(1 172)	-	-	(180)	-	(992)
St. Helena	3 640	490				3 150
	(2 829)	(565)	-	-	-	(2 264)
Senegal	50 429	1 422		15 640		33 367
	(41 651)	(1 860)	-	(23 391)	-	(16 400)
Seychelles	3 813					3 813
	(2 491)	-	-	-	-	(2 491)
Sierra Leone	6 979					6 979
	(1 752)	-	-	-	-	(1 752)
Somalia	15 719			9 679		6 040
	(14 960)	-	-	(10 555)	-	(4 405)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Sudan	95 742			93 082		2 660
	(126 381)	-	-	(125 609)	-	(772)
Togo	54 882	434		53 571		877
	(78 009)	(559)	-	(77 370)	-	(80)
Tunisia	285 535	131 836	37 230	48 140		68 329
	(449 685)	(259 350)	(58 572)	(56 788)	-	(74 975)
United Republic of Tanzania	50 726	3 682		31 875		15 169
	(59 048)	(5 652)	-	(46 008)	-	(7 388)
Uganda	5 091			5 091		
	(8 600)	-	-	(8 600)	-	-
Zaire	65 833			51 739		14 094
	(91 012)	-	-	(76 269)	-	(14 743)
Subtotal:	5 363 064	1 382 033	687 675	2 000 188	4 608	1 288 560
	(7 515 109)	(2 580 064)	(1 155 287)	(2 706 941)	(10 071)	(1 062 746)
Developing countries and territories of America						
Anguilla	4 106			3 200		906
	(5 612)	-	-	(4 856)	-	(756)
Antigua	1 048			785		263
	(1 048)	-	-	(1 048)	-	(-)
Argentina	2 117 017	653 964	514 617	718 791	15 956	213 689
	(3 171 154)	(1 078 876)	(890 225)	(1 003 289)	(22 189)	(176 575)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Aruba	128 610	126 943		300		1 367
	(261 678)	(260 831)	-	(653)	-	(194)
Barbados	7 572			3 638		3 934
	(8 066)	-	-	(8 001)	-	(65)
Belize	620			620		
	(805)	-	-	(805)	-	-
Bolivia	14 913			14 913		
	(18 934)	-	-	(18 934)	-	-
Brazil	6 212 287	1 877 026	2 802 250	1 066 851	87 555	378 605
	(10 277 850)	(3 435 733)	(4 845 118)	(1 428 390)	(107 721)	(460 888)
Cayman Islands	1 389 903	694 846	283 412	267 558	14 916	129 171
	(2 121 733)	(1 114 539)	(456 959)	(390 563)	(19 219)	(140 453)
Chile	566 881	582	313 701	138 600	3 245	110 753
	(907 538)	(820)	(613 577)	(203 201)	(4 543)	(85 397)
Colombia	380 074	31 954	29 296	308 556		10 268
	(486 423)	(51 835)	(43 569)	(382 472)	-	(8 547)
Costa Rica	13 325			5 113		8 212
	(9 539)	-	-	(6 881)	-	(2 658)
Cuba	958 613	68 184	61 907	663 946		164 576
	(1 274 167)	(103 315)	(100 039)	(911 058)	-	(159 755)
Dominica	2 013			1 910		103
	(2 953)	-	-	(2 953)	-	(-)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Dominican Republic	42 241 (67 477)	674 (1 635)	11 171 (19 356)	24 814 (39 736)	- -	5 582 (6 750)
Ecuador	437 682 (611 570)	154 725 (278 164)	11 153 (20 147)	234 277 (285 587)	- -	37 527 (27 672)
El Salvador	3 819 (3 318)	- -	- -	- -	- -	3 819 (3 318)
Falkland Islands f/	6 907 (4 125)	- -	- -	537 (630)	- -	6 370 (3 495)
Grenada	425 (577)	- -	- -	321 (435)	- -	104 (142)
Guatemala	9 432 (13 603)	- -	- -	6 432 (10 305)	2 523 (3 298)	477 (-)
Guyana	22 731 (22 167)	125 (200)	- -	9 947 (14 486)	- -	12 659 (7 481)
Haiti	2 688 (1 705)	- -	- -	247 (361)	- -	2 441 (1 344)
Honduras	555 202 (827 066)	67 255 (118 333)	96 185 (156 972)	353 496 (530 237)	7 086 (8 853)	31 180 (12 671)
Jamaica	9 419 (12 878)	- -	- -	4 358 (7 703)	3 428 (5 110)	1 633 (65)
Mexico	1 520 246 (2 206 643)	554 693 (938 823)	311 467 (523 468)	142 876 (196 689)	- -	511 210 (547 663)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Montserrat	711			711		
	(1 016)	-	-	(1 016)	-	-
Nicaragua	22 930	687		20 099		2 144
	(31 947)	(1 564)	-	(30 383)	-	(-)
Paraguay	43 298	2 935		34 660		5 703
	(51 540)	(3 880)	-	(44 920)	-	(2 740)
Peru	754 179	147 469	190 419	245 995		170 296
	(997 089)	(251 507)	(324 233)	(347 877)	-	(73 472)
Saint Kitts and Nevis	256					256
	(91)	-	-	-	-	(91)
Saint Lucia	2 766			2 409		357
	(3 415)	-	-	(3 415)	-	(-)
Saint Vincent and the Grenadines	509 878	79 746	297 585	123 265		9 282
	(833 209)	(142 806)	(513 688)	(164 517)	-	(12 198)
Suriname	12 655	208		8 874	1 343	2 230
	(15 285)	(360)	-	(12 384)	(1 771)	(770)
Trinidad and Tobago	19 381			3 673		15 708
	(12 801)	-	-	(4 616)	-	(8 185)
Turks and Caicos Islands	3 583	890		1 448		1 245
	(3 904)	(1 450)	-	(2 171)	-	(283)
Uruguay	149 811	76 378		44 316		29 117
	(224 854)	(142 617)	-	(58 492)	-	(23 745)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Venezuela	998 296 (1 428 634)	458 900 (751 281)	85 569 (142 095)	305 401 (427 845)	497 (1 180)	147 929 (106 233)
Virgin Islands (British)	8 077 (8 600)	818 (997)	- -	4 736 (6 734)	- -	2 523 (869)
Subtotal:	16 933 595 (25 931 014)	4 999 002 (8 679 566)	5 008 732 (8 649 446)	4 767 673 (6 553 643)	136 549 (173 884)	2 021 639 (1 874 475)
Developing countries and territories of Asia						
Bahrain	51 713 (64 419)	3 308 (5 333)	16 623 (29 443)	7 812 (12 836)	- -	23 970 (16 807)
Bangladesh	378 563 (517 772)	39 640 (65 598)	8 211 (12 000)	293 281 (425 032)	- -	37 431 (15 142)
Brunei	1 973 (1 728)	382 (420)	- -	- -	- -	1 591 (1 308)
Burma	125 524 (150 880)	2 935 (4 713)	- -	99 034 (136 221)	- -	23 555 (9 946)
Democratic Kampuchea	3 558 (3 839)	- -	- -	998 (1 481)	- -	2 560 (2 358)
Democratic Yemen	12 543 (13 215)	1 866 (3 185)	- -	2 643 (4 234)	- -	8 034 (5 796)
Hong Kong	8 179 670 (13 664,489)	846 155 (1 537 104)	6 089 624 (10 676 240)	428 987 (545 256)	475 284 (509 671)	339 620 (396 218)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
India	6 540 121	1 782 667	2 943 378	1 452 650	1 339	360 087
	(10 691 035)	(3 105 896)	(5 136 247)	(2 118 335)	(1 840)	(328 717)
Indonesia	2 085 635	603 394	128 832	921 575	59 648	372 186
	(2 927 103)	(1 031 447)	(194 703)	(1 361 335)	(74 825)	(264 793)
Iran, Islamic	2 911 359	1 241 904	1 106 991	415 076		145 388
Republic of	(5 064 254)	(2 471 784)	(1 876 363)	(567 609)	-	(148 498)
Iraq	1 016 343	775 280		111 726		129 337
	(1 699 613)	(1 436 245)	-	(150 950)	-	(112 418)
Jordan	42 365		25 948	9 481		6 936
	(61 427)	-	(43 832)	(13 717)	-	(3 878)
Kuwait	2 580 924	1 593 263		328 376	185 593	473 692
	(4 121 279)	(2 882 318)	-	(500 393)	(198 859)	(539 709)
Lebanon	484 624	14 087	130 773	279 849	1 946	57 969
	(766 784)	(23 246)	(229 585)	(432 018)	(1 543)	(80 392)
Malaysia	1 743 629	237 514	456 318	392 387	190 507	466 903
	(2 506 631)	(402 899)	(792 165)	(588 708)	(225 442)	(497 417)
Maldives	84 808	1 808	45 102	32 016		5 882
	(132 978)	(2 666)	(73 835)	(50 280)	-	(6 197)
Oman	14 793	432		3 681		10 680
	(12 953)	(542)	-	(6 228)	-	(6 183)
Pakistan	434 079	43 429	11 950	356 298		22 402
	(623 182)	(89 937)	(17 527)	(505 099)	-	(10 619)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Philippines	6 922 499 (11 668 566)	646 514 (1 245 734)	4 804 698 (8 484 082)	1 042 164 (1 572 700)	31 390 (48 453)	397 733 (317 597)
Qatar	306 673 (457 500)	112 197 (207 151)	- -	94 908 (149 706)	88 181 (91 537)	11 387 (9 106)
Republic of Korea	7 183 617 (11 561 917)	965 943 (1 835 481)	4 269 074 (7 458 651)	845 225 (1 350 557)	361 316 (383 164)	742 059 (534 064)
Saudi Arabia	2 978 016 (4 954 572)	1 587 969 (3 012 681)	372 848 (619 209)	458 159 (662 936)	83 661 (99 344)	475 379 (560 402)
Singapore	6 267 627 (10 603 737)	1 604 411 (3 118 615)	2 477 784 (4 474 386)	1 096 821 (1 661 403)	624 682 (770 989)	463 929 (578 344)
Sri Lanka	622 226 (972 049)	139 870 (262 392)	242 117 (399 354)	229 982 (306 485)	- -	10 257 (3 818)
Syrian Arab Republic	63 142 (92 480)	- -	- -	58 569 (87 221)	- -	4 573 (5 259)
Thailand	533 138 (772 437)	59 315 (107 093)	28 467 (46 919)	346 482 (513 599)	35 462 (48 287)	63 412 (56 539)
United Arab Emirates	653 525 (1 018 926)	371 684 (652 338)	8 586 (14 407)	150 592 (230 526)	79 473 (86 993)	43 190 (34 662)
Yemen	7 115 (6 100)	- -	- -	5 172 (6 100)	- -	1 943 (-)
Subtotal:	52 229 802 (85 131 865)	12 675 967 (23 504 818)	23 169 324 (40 578 948)	9 463 944 (13 960 965)	2 218 482 (2 540 947)	4 702 085 (4 546 187)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Developing countries of Europe						
Malta	2 014 947 (3 415 403)	515 214 (998 064)	952 414 (1 647 138)	498 862 (728 279)	- -	48 457 (41 922)
Yugoslavia	2 872 613 (4 476 264)	308 214 (536 885)	1 182 146 (2 029 114)	1 254 991 (1 814 595)	49 329 (64 675)	77 933 (30 995)
Subtotal	4 887 560 (7 891 667)	823 428 (1 534 949)	2 134 560 (3 676 252)	1 753 853 (2 542 874)	49 329 (64 675)	126 290 (72 917)
Developing countries and territories of Oceania						
Fiji	29 954 (26 340)	4 933 (7 473)	- -	11 226 (9 935)	- -	13 795 (8 932)
Kiribati	3 197 (2 685)	- -	- -	1 701 (1 470)	- -	1 496 (1 215)
Nauru	66 725 (93 391)	- -	36 976 (59 321)	27 853 (33 557)	- -	1 896 (513)
Papua New Guinea	30 922 (37 670)	2 421 (3 581)	- -	14 893 (22 472)	- -	13 608 (11 617)
Solomon Islands	6 022 (5 150)	- -	- -	2 294 (3 131)	- -	3 728 (2 019)

Annex II (continued)

	Total	Oil tankers	Bulk carrier c/	General cargo d/	Container ships and lighter carriers	Others
Tonga	16 349			12 609		3 740
	(21 141)	-	-	(18 483)	-	(2 658)
Tuvalu	526			353		173
	(458)	-	-	(250)	-	(208)
Vanuatu	164 953	25 780	76 599	49 147		13 427
	(274 074)	(43 619)	(133 231)	(85 935)	-	(11 289)
Samoa	26 087			24 930		1 157
	(34 751)	-	-	(34 325)	-	(426)
Subtotal:	344 735	33 134	113 575	145 006		53 020
	(495 660)	(54 673)	(192 552)	(209 558)	-	(38 877)
Subtotal developing countries and territories:	79 758 756	19 913 564	31 113 866	18 130 664	2 408 968	8 191 694
	(126 965 315)	(36 354 070)	(54 252 485)	(25 973 981)	(2 789 577)	(7 595 202)
Other unallocated	4 272 795	581 173	1 998 093	385 085	1 184 820	123 624
	(6 583 074)	(1 056 637)	(3 553 450)	(584 044)	(1 343 038)	(45 905)

Source: Lloyd's Register of Shipping - Statistical tables, 1986 (London), and supplementary data regarding the Great Lakes fleets of the United States and Canada and the United States Reserve Fleet.

a/ The designations employed and the presentation of material in this table refer to flags of registration and do not imply the expression of any opinion by the Secretariat of the United Nations concerning the legal status of any country or territory, or of its authorities, or concerning the delimitation of its frontiers.

b/ Ships of 100 grt and over, excluding the Great Lakes fleets of the United States of America and Canada and the United States Reserve Fleet.

c/ Ore and bulk carriers of 6,000 grt and over, including ore/bulk/oil carriers.

d/ Including passenger/cargo.

e/ Excluding estimates of the United States Reserve Fleet and United States and Canadian Great Lakes fleets, which amounted respectively to 2.6 million grt (3.2 million dwt), 1.5 million grt (2.7 million dwt) and 1.8 million grt (2.7 million dwt).

f/ A dispute exists between the Governments of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

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