# COMMISSION OF THE EUROPEAN COMMUNITIES

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REPORT FROM THE COMMISSION

ON THE STATE OF
THE SHIPBUILDING INDUSTRY IN THE COMMUNITY

SITUATION IN 1991

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## I. INTRODUCTION

This report, issued pursuant to the Council Resolution of 19 September 1978, is aimed at providing an overview of the shipbuilding industry and market in 1991.

During this period, the more favourable trend wich had begun to be seen in 1988, and was confirmed in 1990, was reversed as far as demand for new ships is concerned, even if other parameters remained favourable.

World seaborne trade grew further, but demand for new ships declined by 16,7% on a world scale. For the EC the total decline amounted to 31% and for Japan to 27.5%.

New building benefitted however from full order books and world wide deliveries in 1991 declined by not more than 1.1%, compared with 1990, and 1.9% for the EC.

Ship prices in US-Dollar continued however to improve slightly, as demand for big ships remained rather unchanged.

The market for small ships and for smaller yards in the EC showed however considerable decline in terms of demand.

## II. GENERAL ECONOMIC BACKGROUND

In 1991, world economic activity practically stagnated with world GDP increasing by only 0.3% in real terms. The economies of the United States, Canada and the EFTA countries went into a recession and experienced a decline in their GNP. In the countries of Central and Eastern Europe, the inevitable adjustment process led to a new substantial drop in production. The only dynamic areas were once again the Asian economies with Japan experiencing a rate of growth of 4.4% and the group for the so called "Dynamic Asian Economies"(1) recording an impressive 6.9%. The economy of the Community was significantly affected by the slowdown in the EFTA countries and the USA and, not withstanding the growth impulses coming from Germany, expanded by only 1.3% in real terms.

The world economy is recovering somewhat in 1992. The recession is giving way to a gentle recovery in North America and in the EFTA countries. On the other hand, the economy of Japan, which had already started showing signs of weakness at the end of last year, should expand by less than 2%. On the whole, world GDP is expected to increase in 1992 by just over 1%. In the Community, the slowdown of the German economy after four years of rapid growth is contributing to a much more depressed outlook. In 1992, Community GDP is projected to increase by just over 1 %.

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(1) Hong Kong, Korea, Malaysia, Singapore, Taiwan and Thailand.

In 1991, the growth of world trade deccelerated in line with output growth: imports of goods increased by only 3.3% in reals terms, with the Community again contributing positively with a rate of increase of its imports of 5.1%. In 1992, it is expected that world trade will pick up somewhat and expand by about 4 percent in real terms.

Investment is traditionally the component of final demand which shows the most pronounced cyclical behaviour. In 1991, gross fixed capital formation declined by as much as 6.5% in real terms in the USA. In 1992, investment is expected to pick up substantially in the USA (4-5%), but to increase by only half a percentage point in Japan. In the Community, the 1992 investment performance is forecast to be as poor as that of 1991 with gross fixed capital formation practically stagnating.

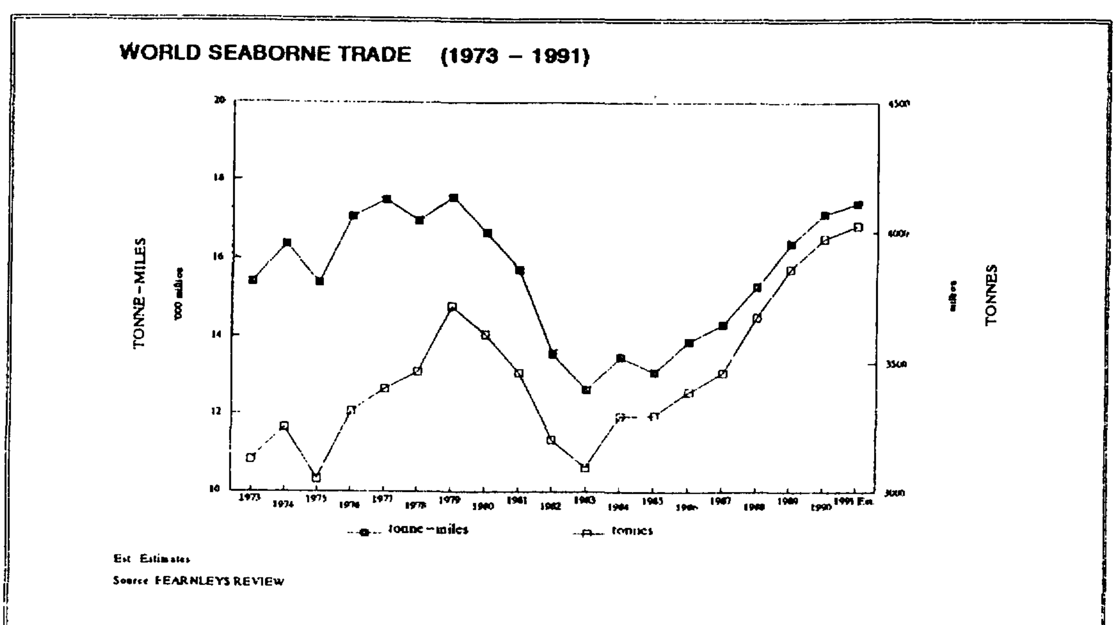
## III. SHIPPING TRENDS

World seaborne trade saw a new record in 1991 following the upward trend, which started in 1984/85.

In terms of tonnes world seaborne trade increased by 1.2% in 1991, compared with 3% in 1990, from 3.977 million tonnes to 4.025 tonnes.

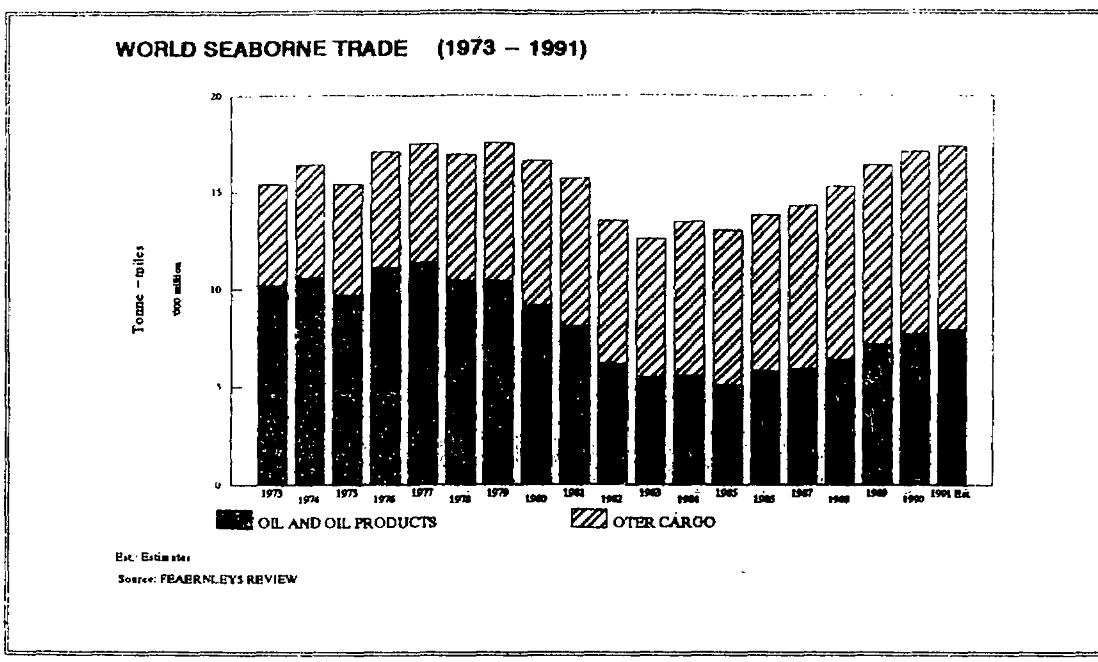
In tonne-mile the increase was slightly more from 17.035 billion tonne-miles in 1990 to 17.390 billion in 1991. However, the record level of 1979 with 17.555 billion tonne-miles was not attained.

Fig. 1



Crude oil shipments increased only slightly from 1.190 to 1.200 billion tonnes in 1991. Iron ore shipments increased from 347 to 352 mt. By contrast coal shipments continued to grow more strongly from 342 mt to a new record of 360 mt. Grain shipments on the other hand decreased from 192 mt to 180 mt.

Fig. 2

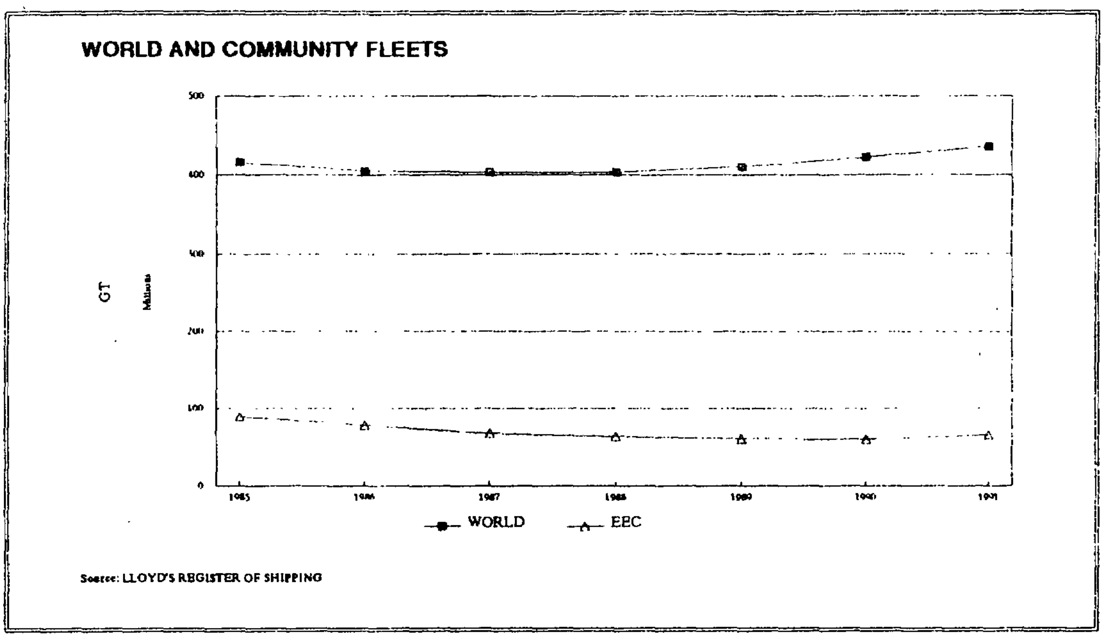



Freight rate developments in 1991 varied over the year and according to ship types. VLLC's, Suezmax and Aframax tankers benefitted from a strong increase, but experienced a deterioration at the end of the year.

## IV. FLEET TRENDS

The growth trend, which started in 1988 continued and the world fleet increased from 423,6 million gt in 1990 to 436 million gt in 1991 (see annex 1, table 3).

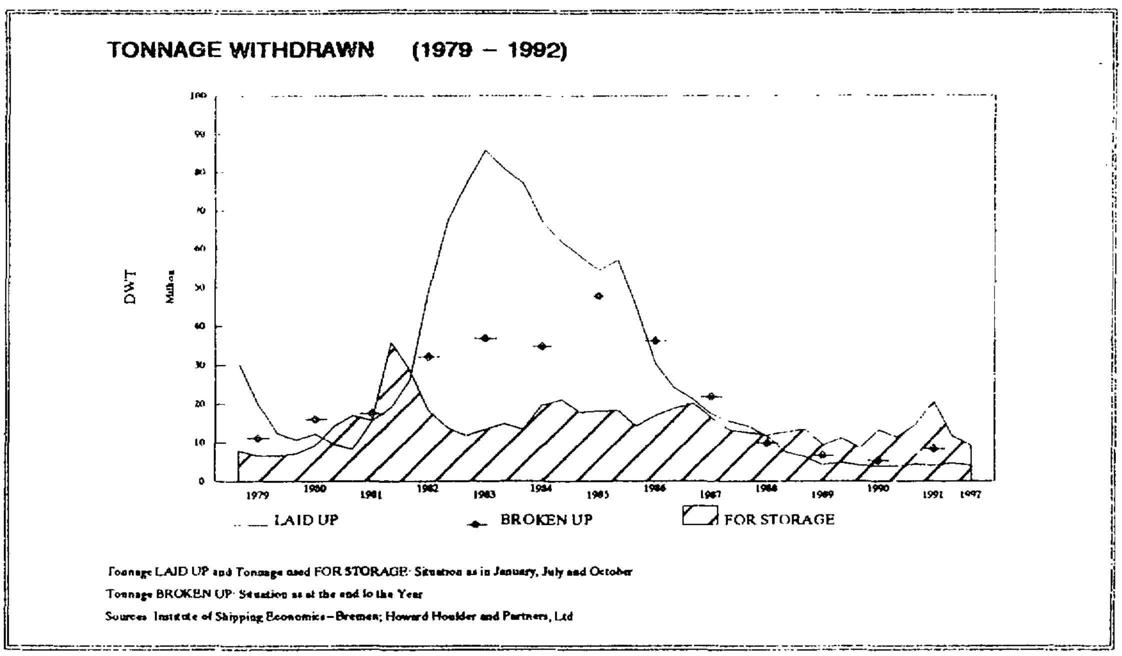
Fig. 3




Deliveries of tanker and combined carriers contributed mainly to this development, whereas the bulk carrier fleet decreased.

Tonnage broken up and lost - though higher than in 1990 - was low for the fourth consecutive year.

Fig. 4




Since 1980 the EC fleets increased for the first time (only partly because of german unification). From a total of 59.1 million gt in 1990 the EC fleets reached 63.9 million gt, representing a world market share of 14,7% in 1991 after 14.0% in 1990.

# V. SITUATION IN THE SHIPBUILDING INDUSTRY

## A. General Overview

### Production and new orders

In 1989 and 1990 new orders and production had increased rather substantially. In 1991, this trend levelled down. World shipbuilding production declined in cgt terms by 1,1% and new orders by 16,7%. With regard to new orders, the EC and Japan experienced a drop of 31% and 27,5% respectively.

### Order-books

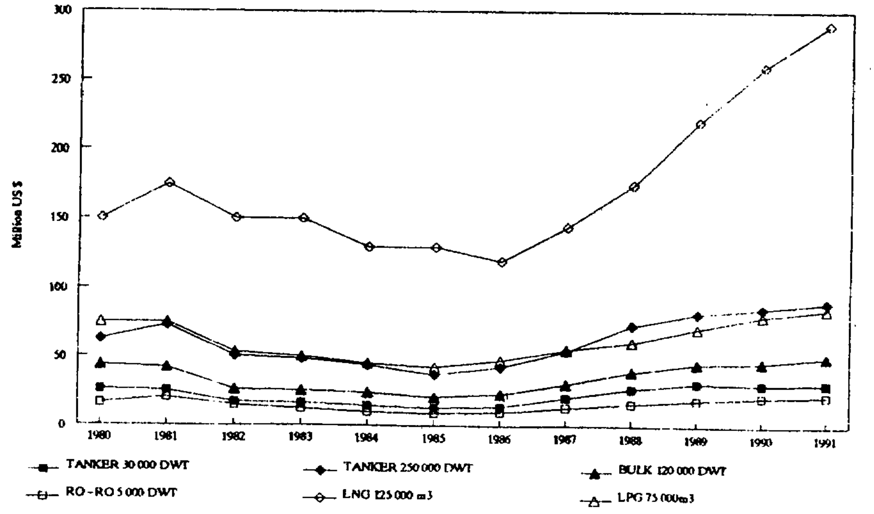
However, as the intake of new orders in 1991 still outweighed production the state of the order-books improved by about 1,1%. The ratio between orders booked and annual production actually showed a twelve year peak.

### Shipbuilding prices

The upward trend in prices, which started in 1985, continued and increases for larger vessels were around 5 to 10%. This reflects the trend that demand for larger ships was relatively strong, whereas demand for smaller ships, especially in Europe, was rather weak.

Fig. 5

**CONTRACT PRICES FOR ORDERS OF NEW VESSELS (1980 – 1991)**




Source: FEARNLEYS REVIEW

Note: Japanese and Korean yards are used as basis

### Supply and demand - an unstable balance

Against this background of recovering shipbuilding prices, filled order books and declining production, it is evident that the very fragile trend towards a longer lasting balance between supply and demand can only sustained if all shipbuilders abstain from substantially increasing their building capacity. Any significant enlargement of capacity - whether through the opening of new or previously mothballed yards or through the conversion of too many military yards to the civil sector - might easily endanger the prospect of a longer lasting equilibrium between supply and demand in the shipbuilding sector.

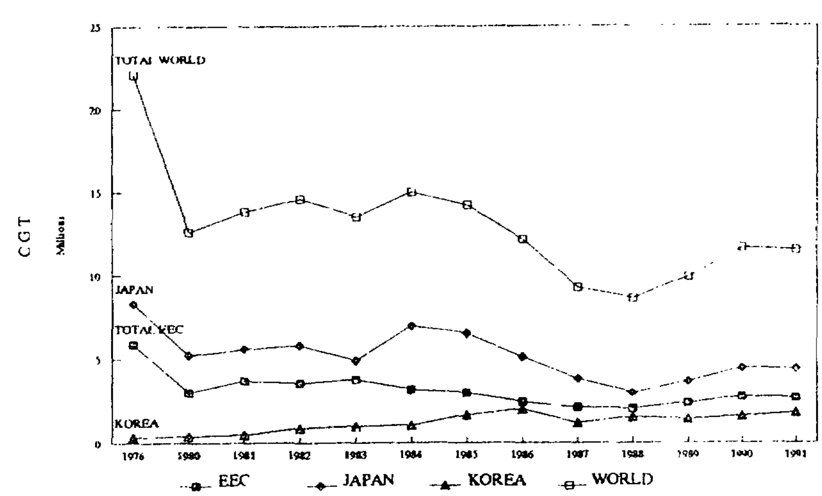
## B. Situation in the Community, Japan and South Korea

### The Community

The EC's production decreased from 2.703.000 cgt in 1990 to 2.651.000 cgt in 1991 and its world market-share from 23.2% to 23%.

Fig. 6

**PRODUCTION - SHIPS COMPLETED (1976 - 1991)**

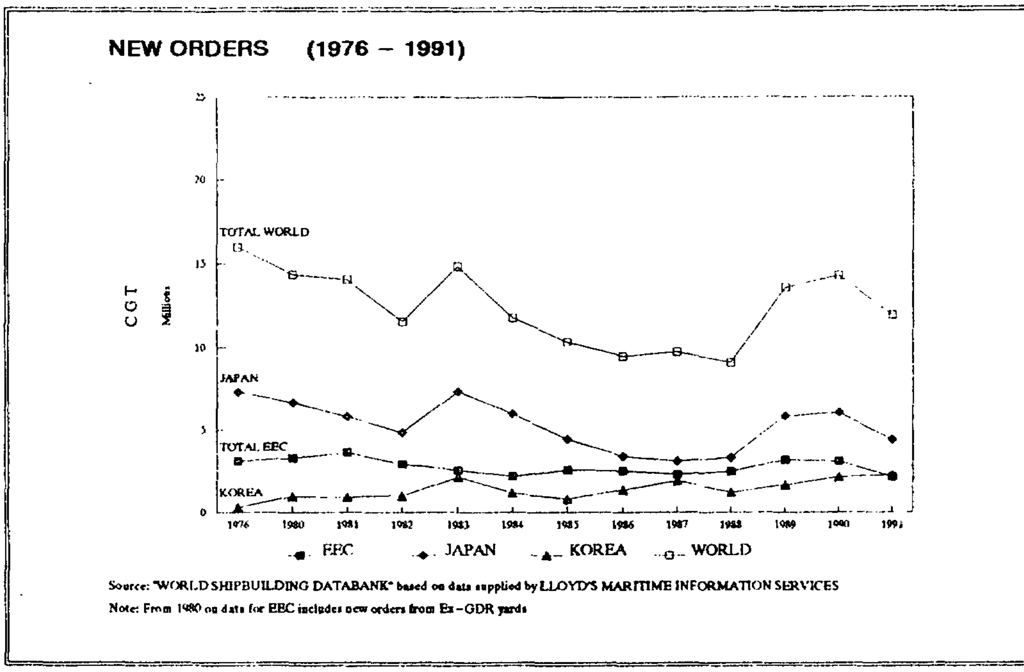



Source: "WORLD SHIPBUILDING DATABANK" based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

Note: From 1980 on data for EEC includes production from Ex-GDR yards

Internationally, the intake of new orders declined by 16.7%. For the EC this decline amounted to 31%. With regard to new orders the Community's world market share shrunk therefore from 22% in 1990 to 18.2% in 1991.

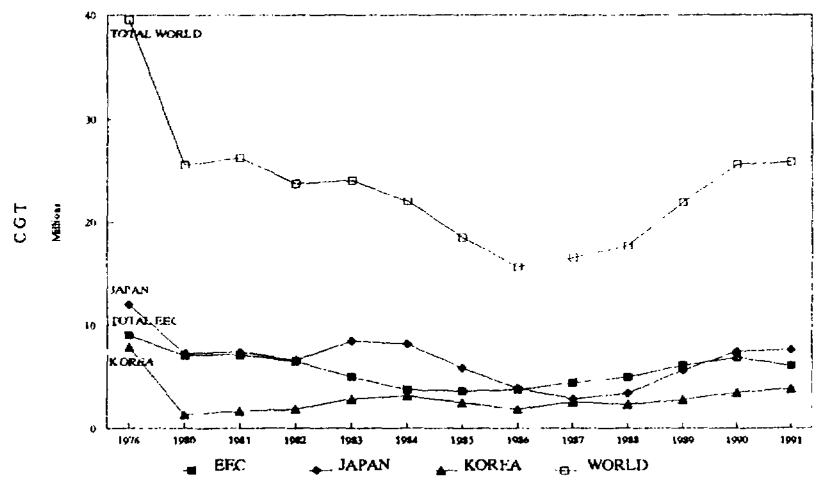
Fig. 7




This development found its counterpart in the order-books with a decline in absolute terms which represents 10% of the volume of the previous year. After a share of 26.7% of all orders on book in 1990, the EC's share declined to 23.7% at the end of 1991.

Fig. 8

**ORDER BOOK (1976 – 1991)**




Source: "WORLD SHIPBUILDING DATABANK" based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

Note: From 1980 on data for EEC includes order book from Ex-GDR yards

## Japan

In 1991, Japan experienced a production decline of -0.94%. However, as most other shipbuilding countries experienced much more pronounced production decreases, Japan's world market share increased nevertheless sligthly from 38.2% in 1990 to 38.3% in 1991.

Like the EC Japan was confronted with a decline of new orders. Whereas new orders declined by 31% in the EC the figure was 27.5% for Japan and Japan's world market share declined from 42.8% in 1990 to 37.2% in 1991. However, in terms of orderbook, Japanese yards succeeded in increasing the backlog of orders placed in their yards.

### South Korea

South Korea's production increased by 10,6% leading to a world market share of 15% in 1991 after 13,4% in 1990. New orders - despite an international decline of 16,7% - grew by 5% and South Korea improved its world market share from 15,2% in 1990 to 19.1%. Order-books grew by 12,1% with a corresponding world market share of 15,1% in 1991 after 13.6% in 1990.

## VI. POLICY FRAMEWORK

### A. External Policy

Since the beginning in 1989, the Community participated actively in the multilateral negotiations on the draft agreement to establish normal competitive conditions in the commercial shipbuilding and repair sector throughout 1991. Unfortunately, the talks which brought together Japan, Korea, Finland, Norway, Sweden, the United States and the Community under the auspices of the OECD Shipbuilding Working Party, were suspended in April 1992.

Nevertheless, the Commission continues to believe that an effective solution to the problems of trade in the sector which arise from both public measures and private practices, can only be achieved multilaterally. Accordingly the Commission hopes that it will be possible to restart discussions on the proposed agreement in a fresh effort to resolve the relatively small number of albeit important differences - notably on an effective injurious pricing mechanism, on shipowners soft loans and on domestic shipbuilding requirements - which separated the parties when the talks were suspended.

### B. Internal Policy

#### 1. Maritime Industries Forum

As foreseen in the communication "New Challenges to Maritime Industries"(1) the Commission created the Maritime Industries Forum. Apart from the maritime industries concerned, trade unions, the research community and Member States, as well as the Nordic EFTA countries participated.

Organised via plenary sessions and working groups, the Forum's work centred around:

(1) COM(91)335 final of 20.09.1991.

- the economic analysis of the maritime sector, covering forecasts for shipping and shipbuilding as well as factors affecting the competitiveness of the industries involved;

- maritime safety and environment;

- maritime transport;

- R&D.

The industry has presented its Forum's report to the final plenary session of the Forum at the end of October 1992 with recommendations for further actions.

**2. Research and Development**

Research and Development has been recognised on an essential element to increase competitivity in the shipbuilding industry. This aspect has been endorsed by the Research and Development Working Group of the Maritime Industries Forum and by a recent study carried out by private consultants on the competitiveness of European Shipbuilding.

European Shipbuilders are participating in a number of Community funded R & D programmes, such as BRITE/EURAM and ESPRIT as well as in the EUREKA programme. Current R&D projects include the application of computational fluid dynamics to ship design and the design of a European tanker as an alternative to the double-hull design (3E tanker).

**3. Technical Harmonisation**

The harmonisation of the requirements of marine equipment, together with the testing procedures, will result in the elimination of barriers to trade. This issue is complicated since the requirements for marine equipment are based on the international conventions of SOLAS and MARPOL and require the approval of Member States Administrations.

A study - carried out by private consultants - on the structure of the marine equipment sector and on possible trade barriers is nearing completion. During the last year, the Commission staff have consulted industrial associations on the preliminary findings of this study which has identified definite barriers to trade for a number of items of equipment.

The Commission Services are now considering a number of specific solutions for various categories of marine equipment to eliminate barriers to trade and these proposals will be discussed with Member States in the near future.

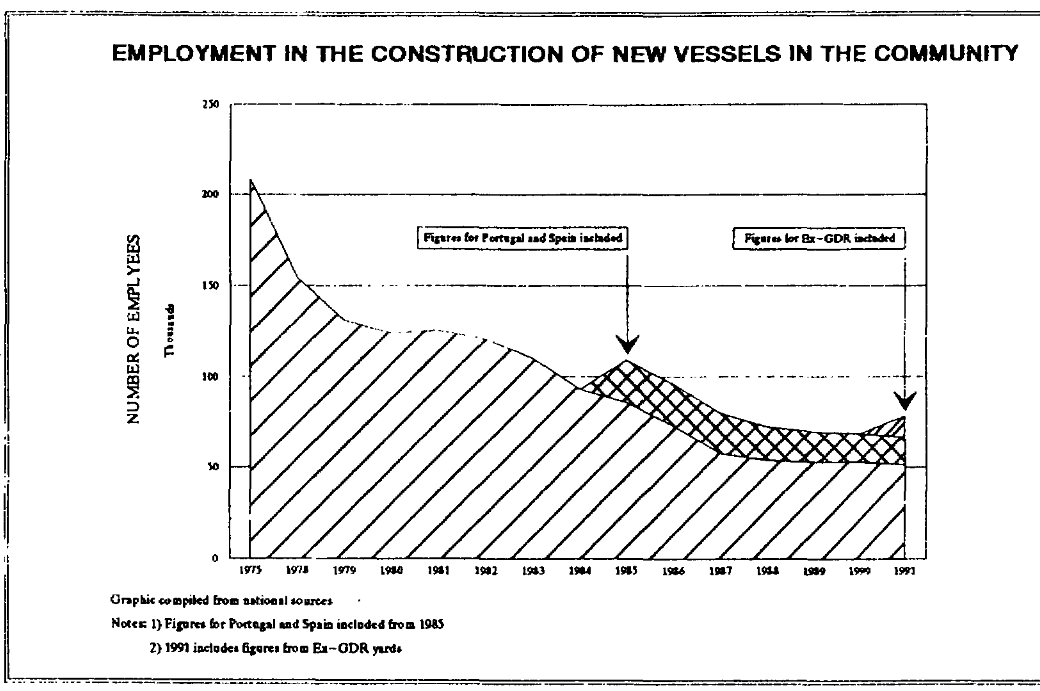
A Draft Directive on the constructional aspects of recreational craft - based on Article 100A of the Treaty - was approved by the Commission on 15 April 1992 and sent to the Council, the European Parliament and the Economic and Social Committee.

## 4. Social Aspects

Due to German unification the employment figures for the EC increased. Without eastern Germany, the result for the EC would have shown that the decline in shipbuilding employment continues (see annex 1, tab. 11).

However, although the results for the EC as a whole confirm a downward trend, some countries - Belgium, Denmark and the Netherlands - saw their shipbuilding employment improving. It is worth mentioning that Denmark has constantly increasing employment figures since 1987 and Belgium and the Netherlands since 1988.

Fig. 9




## 5. Regional Aspects

The objective of RENAVAL Community programme is to support economic activities that generate new jobs outside the sector in regions affected by the restructuring of the shipbuilding industry. Following the terms of this programme, the Commission decided that 26 shipbuilding areas located in 9 Member States qualified for assistance. On the 1st May 1992, the whole series of operational programmes corresponding to these areas had been adopted. The total budgetary commitment under RENAVAL amounts to 300 MECU for the period 1983-93 (see Annex 1 table 12).

# ANNEX 1

## STASTITICAL DATA

TABLE 1 – WORLD SEABORNE TRADE AND CARGO FLEET

| | OIL AND OIL PRODUCTS | | | | OTHER CARGO | | | | TOTAL | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Seaborne trade | | Fleet (*) | | Seaborne trade | | Fleet (*) | | Seaborne trade | | Fleet (*) | |
| | '000 million tonne–miles | index '73=100 | million DWT | index '73=100 | '000 million tonne–miles | index '73=100 | million DWT | index '73=100 | '000 million tonne–miles | index '73=100 | million DWT | index '73=100 |
| 1973 | 10217 | 100 | 234.3 | 100 | 5187 | 100 | 205.6 | 100 | 15404 | 100 | 439.9 | 100 |
| 1974 | 10621 | 104 | 275.4 | 118 | 5766 | 111 | 218.5 | 106 | 16387 | 106 | 493.9 | 112 |
| 1975 | 9730 | 95 | 313.0 | 134 | 5666 | 109 | 230.7 | 112 | 15396 | 100 | 543.7 | 124 |
| 1976 | 11149 | 109 | 343.9 | 147 | 5929 | 114 | 247.4 | 120 | 17078 | 111 | 591.3 | 134 |
| 1977 | 11403 | 112 | 356.1 | 152 | 6086 | 117 | 268.5 | 131 | 17489 | 114 | 624.6 | 142 |
| 1978 | 10546 | 103 | 353.0 | 151 | 6407 | 124 | 279.7 | 136 | 16953 | 110 | 632.7 | 144 |
| 1979 | 10497 | 103 | 350.9 | 150 | 7058 | 136 | 287.0 | 140 | 17555 | 114 | 637.9 | 145 |
| 1980 | 9239 | 90 | 348.4 | 149 | 7415 | 143 | 292.9 | 142 | 16654 | 108 | 641.3 | 146 |
| 1981 | 8193 | 80 | 342.9 | 146 | 7523 | 145 | 305.8 | 149 | 15716 | 102 | 648.7 | 147 |
| 1982 | 6282 | 61 | 322.5 | 138 | 7269 | 140 | 320.5 | 156 | 13551 | 88 | 643.0 | 146 |
| 1983 | 5558 | 54 | 301.4 | 129 | 7078 | 136 | 331.0 | 161 | 12636 | 82 | 632.4 | 144 |
| 1984 | 5648 | 55 | 285.1 | 122 | 7836 | 151 | 341.1 | 166 | 13484 | 88 | 626.2 | 142 |
| 1985 | 5157 | 50 | 257.1 | 110 | 7929 | 153 | 348.2 | 169 | 13086 | 85 | 605.3 | 138 |
| 1986 | 5905 | 58 | 249.7 | 107 | 7951 | 153 | 345.5 | 168 | 13856 | 90 | 595.2 | 135 |
| 1987 | 6016 | 59 | 245.8 | 105 | 8284 | 160 | 342.2 | 166 | 14300 | 93 | 588.0 | 134 |
| 1988 | 6510 | 64 | 248.8 | 106 | 8789 | 169 | 345.0 | 168 | 15299 | 99 | 593.8 | 135 |
| 1989 | 7276 | 71 | 255.6 | 109 | 9109 | 176 | 353.6 | 172 | 16385 | 106 | 609.2 | 138 |
| 1990 | 7821 | 77 | 262.2 | 112 | 9300 | 179 | 365.5 | 178 | 17121 | 111 | 627.7 | 143 |
| 1991 Est. | 8000 | 78 | 270.4 | 115 | 9390 | 181 | 372.4 | 181 | 17390 | 113 | 642.8 | 146 |

Est.: Estimates
(*) As at the end of the year

Source: FEARNLEYS REVIEW

TABLE 2 – TONNAGE WITHDRAWN

| TONNAGE LAID UP | | | | | TONNAGE BROKEN UP | | | | TONNAGE USED FOR STORAGE | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| YEAR | MONTH | NUMBER | '000 GT | '000 DWT | YEAR | NUMBER | '000 GT | '000 DWT | YEAR | MONTH | NUMBER | '000 DWT |
| 1976 | | | | | 1978 | | | | | | | |
| | VII | 765 | 29651 | 55289 | | 1086 | 12840 | 21703 | | | | |
| | X | 737 | 25486 | 47507 | | | | | | | | |
| 1979 | I | 595 | 16678 | 30290 | 1979 | | | | 1979 | I | 40 | 7856 |
| | VII | 417 | 11206 | 20063 | | 904 | 6997 | 11137 | | VII | 37 | 6668 |
| | X | 353 | 7490 | 12518 | | | | | | X | 37 | 6672 |
| 1980 | I | 298 | 6204 | 10803 | 1980 | | | | 1980 | I | 39 | 7112 |
| | VII | 268 | 6767 | 12249 | | 887 | 9184 | 15940 | | VII | 45 | 9199 |
| | X | 233 | 5371 | 9512 | | | | | | X | 67 | 14266 |
| 1981 | I | 229 | 4840 | 8288 | 1981 | | | | 1981 | I | 74 | 16866 |
| | VII | 246 | 8618 | 15562 | | 824 | 9789 | 17517 | | VII | 77 | 15668 |
| | X | 287 | 10399 | 19014 | | | | | | X | 149 | 35950 |
| 1982 | I | 253 | 14111 | 26391 | 1982 | | | | 1982 | I | 120 | 28757 |
| | VII | 624 | 25437 | 49122 | | 1081 | 18086 | 32160 | | VII | 79 | 18295 |
| | X | 1071 | 35293 | 67260 | | | | | | X | 64 | 13860 |
| 1983 | I | 1292 | 40657 | 77168 | 1983 | | | | 1983 | I | 56 | 11812 |
| | VII | 1403 | 45093 | 85755 | | 1323 | 20299 | 36881 | | VII | 70 | 13482 |
| | X | 1429 | 42641 | 80959 | | | | | | X | 78 | 14868 |
| 1984 | I | 1383 | 40805 | 77274 | 1984 | | | | 1984 | I | 73 | 13450 |
| | VII | 1202 | 35629 | 66841 | | 1500 | 19661 | 34757 | | VII | 95 | 19672 |
| | X | 1147 | 33049 | 61693 | | | | | | X | 98 | 21164 |
| 1985 | I | 1015 | 31048 | 58194 | 1985 | | | | 1985 | I | 86 | 17847 |
| | VII | 926 | 28750 | 54510 | | 1722 | 26345 | 47801 | | VII | 87 | 18101 |
| | X | 963 | 30083 | 57086 | | | | | | X | 91 | 18223 |
| 1986 | I | 840 | 24219 | 45262 | 1986 | | | | 1986 | I | 78 | 14169 |
| | VII | 741 | 16639 | 30325 | | 1576 | 20860 | 36164 | | VII | 86 | 16916 |
| | X | 698 | 13781 | 24283 | | | | | | X | 92 | 18807 |
| 1987 | I | 606 | 12073 | 21368 | 1987 | | | | 1987 | I | 96 | 20142 |
| | VII | 484 | 9923 | 17248 | | 1094 | 12936 | 22005 | | VII | 75 | 16499 |
| | X | 423 | 8991 | 15491 | | | | | | X | 63 | 13306 |
| 1988 | I | 379 | 8216 | 14145 | 1988 | | | | 1988 | I | 62 | 12607 |
| | VII | 313 | 6818 | 11771 | | 812 | 6124 | 9908 | | VII | 63 | 11901 |
| | X | 272 | 4835 | 7595 | | | | | | X | 65 | 12803 |
| 1989 | I | 266 | 4213 | 6519 | 1989 | | | | 1989 | I | 68 | 13540 |
| | VII | 198 | 2862 | 4278 | | 512 | 4026 | 6588 | | VII | 53 | 9361 |
| | X | 191 | 3057 | 4809 | | | | | | X | 55 | 11093 |
| 1990 | I | 192 | 2600 | 3982 | 1990 | | | | 1990 | I | 46 | 8505 |
| | VII | 172 | 2513 | 3863 | | 479 | 3255 | 5305 | | VII | 64 | 13265 |
| | X | 168 | 2401 | 3852 | | | | | | X | 57 | 11523 |
| 1991 | I | 164 | 2576 | 4352 | 1991 | | | | 1991 | I | 71 | 14503 |
| | VII | 176 | 2455 | 3992 | | 445 | 4963 | 8389 | | VII | 98 | 20732 |
| | X | 198 | 2940 | 4743 | | | | | | X | 82 | 11850 |
| 1992 | I | 179 | 2583 | 4119 | | | | | 1992 | I | 51 | 9283 |

Source: Institute of Shipping Economics – Bremen; Howard Houlder and Partners, Ltd.

TABLE 3 – WORLD AND COMMUNITY FLEETS

| FLEET AS AT THE 1ST OF JULY | 1960 | 1970 | 1975 | 1977 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | million GT |
| WORLD | 129.8 | 227.5 | 342.2 | 393.7 | 413.0 | 419.9 | 420.8 | 424.7 | 422.6 | 418.7 | 416.3 | 404.9 | 403.5 | 403.4 | 410.5 | 423.6 | 436.0 |
| EEC | 50.5 | : | 103.4 | 114.4 | 119.9 | 120.6 | 119.4 | 114.0 | 104.8 | : | 88.2 | 77.4 | 66.8 | 62.4 | 59.9 | 59.1 | 63.9 |
| % EEC | 38.9 | : | 30.2 | 29.1 | 29.0 | 28.7 | 28.4 | 26.8 | 24.8 | : | 21.2 | 19.1 | 16.6 | 15.5 | 14.6 | 14.0 | 14.7 |

MEMBER STATES' FLEETS BY FLAG ('000 GT)

| | Existing fleet as at the 1st of July | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| BELGIUM | 1917 | 2271 | 2274 | 2407 | 2400 | 2420 | 2268 | 2118 | 2044 | 1955 | 314 |
| DENMARK | 5048 | 5214 | 5115 | 5211 | 4942 | 4651 | 4873 | 4502 | 4963 | 5188 | 5871 |
| FRANCE | 11455 | 10771 | 9888 | 8945 | 8237 | 5936 | 5371 | 4506 | 4413 | 3832 | 3988 |
| GERMANY | 7708 | 7707 | 6897 | 6242 | 6177 | 5565 | 4318 | 3917 | 3967 | 4301 | 5971 |
| GREECE | 42005 | 40035 | 37478 | 35059 | 31032 | 28391 | 23560 | 21979 | 21324 | 20522 | 22753 |
| IRELAND | 268 | 239 | 223 | 221 | 194 | 149 | 154 | 173 | 167 | 181 | 195 |
| ITALY | 10641 | 10375 | 10015 | 9158 | 8843 | 7897 | 7817 | 7794 | 7009 | 7991 | 8122 |
| LUXEMBOURG | – | – | – | – | – | – | – | 2 | 4 | 3 | 1703 |
| NETHERLANDS | 5468 | 5393 | 4040 | 4586 | 4301 | 4324 | 3908 | 3726 | 3655 | 3785 | 3872 |
| PORTUGAL | 1377 | 1402 | 1338 | : | 1437 | 1114 | 1048 | 989 | 726 | 854 | 891 |
| SPAIN | 8134 | 8131 | 7505 | : | 6256 | 5422 | 4949 | 4415 | 3962 | 3607 | 3617 |
| UNITED KINGDOM | 25419 | 22505 | 19122 | 15874 | 14344 | 11567 | 8505 | 8260 | 7646 | 6716 | 6611 |
| TOTAL EEC | 119440 | 114043 | 104795 | : | 88163 | 77436 | 66771 | 62381 | 59880 | 59135 | 63908 |
| TOTAL WORLD | | | | | | | | | | | |

| | Broken up tonnage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| BELGIUM | – | – | 58 | – | – | – | – | – | – | – | : |
| DENMARK | 110 | 144 | – | – | 287 | – | – | – | – | 20 | : |
| FRANCE | 397 | 479 | 658 | 464 | 1451 | 73 | – | – | 22 | – | : |
| GERMANY | 143 | 185 | 250 | 176 | 318 | – | 26 | – | – | 19 | : |
| GREECE | 1691 | 3027 | 2931 | 4061 | 3326 | 2877 | 929 | 581 | 55 | 83 | : |
| IRELAND | – | – | – | – | – | – | – | – | – | – | : |
| ITALY | 210 | 259 | 705 | 348 | 1019 | 397 | 425 | 205 | 41 | 10 | : |
| LUXEMBOURG | – | – | – | – | – | – | – | – | – | – | : |
| NETHERLANDS | 65 | 548 | 391 | 421 | 479 | – | – | – | – | 2 | : |
| PORTUGAL | 11 | 2 | 55 | – | 56 | 19 | – | 9 | 2 | – | : |
| SPAIN | 21 | 215 | 283 | 181 | 302 | 203 | 37 | 158 | 182 | – | : |
| UNITED KINGDOM | 1026 | 1107 | 932 | 501 | 387 | 181 | 138 | 158 | 1 | – | : |
| TOTAL EEC | 3674 | 5966 | 6243 | 6152 | 7625 | 3750 | 1555 | 1111 | 303 | 134 | : |
| TOTAL WORLD | 9754 | 18086 | 20299 | 19656 | 26345 | 20860 | 12936 | 6124 | 4028 | 3255 | 4963 |

| | Laid up tonnage as at the end of the year | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| BELGIUM | – | – | – | – | – | – | – | – | – | – | : |
| DENMARK | 144 | 793 | 843 | 993 | 503 | – | – | – | – | – | : |
| FRANCE | 297 | 519 | 1343 | 1536 | 723 | 499 | 272 | 194 | 53 | – | : |
| GERMANY | 17 | 409 | 501 | 318 | 208 | – | – | 84 | 87 | 58 | : |
| GREECE | 2308 | 10248 | 9937 | 5902 | 3731 | 1646 | 1402 | 404 | 132 | 148 | : |
| IRELAND | – | – | – | – | – | – | – | – | – | – | : |
| ITALY | 206 | 1610 | 1635 | 1136 | 673 | 402 | 194 | – | 63 | 52 | : |
| LUXEMBOURG | – | – | – | – | – | – | – | – | – | – | : |
| NETHERLANDS | – | – | 462 | 290 | – | 148 | – | – | – | – | : |
| PORTUGAL | – | – | – | 365 | 223 | – | – | 48 | – | – | : |
| SPAIN | 206 | 696 | 616 | – | – | – | 63 | 51 | – | – | : |
| UNITED KINGDOM | 770 | 1591 | 2272 | 2084 | 1327 | 190 | 158 | – | – | 64 | : |
| TOTAL EEC | 3948 | 15866 | 17609 | 12624 | 7386 | 2865 | 2087 | 781 | 335 | 322 | |
| TOTAL WORLD | 11348 | 38815 | 40924 | 31876 | 25878 | 12213 | 8495 | 4485 | 2604 | 2388 | 2692 |

Sources: Existing fleet – Lloyd's Register of Shipping; Other data – Institute of Shipping Economics, Bremen
: Unavailable

TABLE 4 – CONTRACT PRICES FOR ORDERS OF NEW VESSELS

| TYPE | SIZE | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TANKER | 30 000 DWT | 26.0 | 25.0 | 17.0 | 16.0 | 14.5 | 13.0 | 14.0 | 20.0 | 27.0 | 31.0 | 30.0 | 30.5 |
| TANKER | 80 000 DWT | 34.5 | 38.0 | 24.0 | 23.0 | 21.0 | 18.5 | 21.0 | 29.0 | 38.0 | 43.0 | 44.0 | 44.5 |
| TANKER | 130 000 DWT | 45.0 | 51.0 | 32.5 | 31.5 | 29.0 | 25.0 | 26.5 | 34.0 | 46.0 | 54.0 | 55.0 | 55.5 |
| TANKER | 250 000 DWT | 63.0 | 72.5 | 50.5 | 48.5 | 44.0 | 37.0 | 42.5 | 54.0 | 73.0 | 82.0 | 86.0 | 90.0 |
| TANKER | 400 000 DWT | 85.0 | 90.0 | 61.0 | 57.0 | 51.0 | 44.0 | 50.5 | 60.0 | 88.0 | 101.0 | 120.0 | 125.0 |
| OBO | 96 000 DWT | 47.0 | 44.0 | 30.0 | 28.0 | 26.0 | 22.5 | 25.5 | 32.0 | 44.0 | 55.0 | 62.0 | 64.5 |
| BULK CARRIER | 27 000 DWT | 20.0 | 19.0 | 13.0 | 12.0 | 11.0 | 10.0 | 11.5 | 14.0 | 20.0 | 22.5 | 21.5 | 22.0 |
| BULK CARRIER | 60 000 DWT | 28.5 | 27.5 | 18.0 | 17.0 | 15.5 | 14.0 | 15.0 | 20.5 | 27.0 | 30.0 | 31.5 | 32.0 |
| BULK CARRIER | 120 000 DWT | 44.0 | 42.0 | 26.0 | 25.0 | 24.0 | 20.5 | 23.0 | 30.0 | 39.0 | 45.0 | 46.0 | 50.0 |
| RO–RO | 5 000 DWT | 16.0 | 20.0 | 15.0 | 12.0 | 10.0 | 9.0 | 10.0 | 13.0 | 16.0 | 19.0 | 21.0 | 22.0 |
| LNG CARRIER | 125 000 m3 | 150.0 | 175.0 | 150.0 | 150.0 | 130.0 | 130.0 | 120.0 | 145.0 | 175.0 | 220.0 | 260.0 | 290.0 |
| LPG CARRIER | 3 000 m3 | 12.5 | 12.0 | 10.0 | 9.0 | 8.5 | 8.5 | 8.5 | 9.0 | 13.0 | 16.0 | 16.0 | 16.0 |
| LPG CARRIER | 12 000 m3 | 28.0 | 30.0 | 27.0 | 27.0 | 21.0 | 21.0 | 21.0 | 25.0 | 30.0 | 37.0 | 43.0 | 45.0 |
| LPG CARRIER | 24 000 m3 | 34.5 | 37.0 | 33.0 | 31.0 | 27.0 | 26.0 | 26.0 | 27.0 | 39.0 | 46.0 | 52.0 | 55.0 |
| LPG CARRIER | 75 000 m3 | 75.0 | 75.0 | 53.0 | 50.0 | 45.0 | 42.5 | 47.5 | 55.0 | 61.0 | 71.0 | 80.0 | 85.0 |

Source: FEARNLEYS REVIEW

Notes: – Prices in million US $ at the end of the year

– Japanese and Korean yards are used as basis

## TABLE 5 A – PRODUCTION – SHIPS COMPLETED

| | | REVISED FIGURES AT THE END OF THE YEAR | | | | | | | | | | | | 1000 CGT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1976 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| EEC | BELGIUM | 139.8 | 129.6 | 95.5 | 83.0 | 173.2 | 102.3 | 124.4 | 45.0 | 25.9 | 46.8 | 35.5 | 71.7 | 21.8 |
| | DENMARK | 560.6 | 382.4 | 343.8 | 329.2 | 338.5 | 355.4 | 444.0 | 350.7 | 194.4 | 277.2 | 287.0 | 305.5 | 350.9 |
| | FRANCE | 672.4 | 267.8 | 443.3 | 353.3 | 356.8 | 357.2 | 164.1 | 145.0 | 207.9 | 63.2 | 198.8 | 114.0 | 171.1 |
| | GERMANY (1) | 1468.0 | 672.8 | 1270.3 | 1181.5 | 1267.8 | 1164.7 | 1143.2 | 1067.0 | 764.7 | 885.0 | 846.5 | 1001.6 | 810.1 |
| | GREECE | N/A | 12.8 | 5.2 | 61.8 | 35.7 | 39.8 | 43.8 | 24.7 | 6.6 | 12.3 | 12.5 | 45.5 | 6.3 |
| | IRELAND | 20.3 | 3.0 | 17.0 | 0.0 | 19.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | ITALY | 353.9 | 345.5 | 359.2 | 156.2 | 217.0 | 182.3 | 123.8 | 60.9 | 224.8 | 119.9 | 284.5 | 327.6 | 423.9 |
| | NETHERLANDS | 940.0 | 249.5 | 341.6 | 390.0 | 415.8 | 259.3 | 310.2 | 262.8 | 146.2 | 153.1 | 171.9 | 263.5 | 357.0 |
| | PORTUGAL | 53.0 | 35.3 | 6.4 | 31.2 | 124.7 | 18.5 | 40.3 | 61.0 | 26.3 | 23.0 | 46.3 | 64.6 | 38.5 |
| | SPAIN | 734.0 | 441.4 | 556.8 | 587.4 | 488.7 | 345.9 | 400.3 | 229.8 | 328.4 | 326.4 | 306.0 | 364.8 | 301.2 |
| | UNITED KINGDOM | 985.1 | 458.6 | 243.2 | 394.0 | 319.3 | 305.3 | 164.4 | 141.5 | 162.3 | 113.2 | 157.3 | 144.6 | 170.5 |
| TOTAL EEC | | 5927.1 | 2998.7 | 3682.3 | 3567.6 | 3756.7 | 3130.7 | 2958.5 | 2388.4 | 2087.5 | 2020.1 | 2346.3 | 2703.4 | 2651.3 |
| OTHER AWES | FINLAND | N/A | 371.9 | 407.5 | 440.6 | 503.3 | 419.1 | 282.9 | 260.4 | 145.3 | 262.7 | 321.2 | 379.0 | 211.6 |
| | NORWAY | N/A | 323.7 | 342.1 | 447.8 | 278.3 | 175.9 | 222.1 | 162.8 | 181.3 | 155.2 | 79.4 | 157.9 | 248.6 |
| | SWEDEN | N/A | 334.5 | 421.0 | 253.2 | 293.8 | 179.8 | 127.4 | 115.5 | 123.0 | 72.1 | 34.4 | 45.1 | 46.3 |
| TOTAL AWES | | 8285.8 | 4028.8 | 4852.9 | 4709.2 | 4832.1 | 3905.5 | 3590.9 | 2927.1 | 2537.1 | 2510.1 | 2781.3 | 3285.4 | 3157.8 |
| JAPAN | | 8348.8 | 5207.2 | 5580.9 | 5811.1 | 4908.2 | 6951.1 | 6498.4 | 5085.4 | 3795.3 | 2952.7 | 3664.1 | 4456.0 | 4417.4 |
| KOREA | | 349.4 | 445.7 | 512.2 | 880.3 | 985.5 | 1014.9 | 1633.3 | 1971.4 | 1193.5 | 1504.7 | 1389.2 | 1564.2 | 1729.5 |
| CHINA | | N/A | N/A | 27.9 | 104.5 | 170.4 | 297.8 | 172.4 | 214.6 | 207.3 | 253.1 | 230.0 | 303.5 | 255.4 |
| POLAND | | N/A | 497.7 | 346.4 | 369.5 | 277.1 | 382.4 | 357.5 | 340.0 | 300.0 | 344.0 | 237.9 | 176.6 | 223.0 |
| ROMANIA | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 126.4 |
| USSR | | N/A | 424.8 | 599.9 | 504.2 | 475.3 | 689.5 | 274.2 | 170.4 | 44.3 | 56.0 | 226.7 | 481.9 | 365.0 |
| YUGOSLAVIA | | N/A | 170.6 | 224.8 | 220.5 | 217.0 | 237.2 | 281.4 | 188.4 | 3.0 | 230.5 | 327.7 | 293.4 | 293.4 |
| REST OF WORLD | | 5094.2 | 1860.4 | 1696.0 | 1988.5 | 1686.7 | 1519.7 | 1360.5 | 1241.8 | 1164.5 | 747.3 | 1024.2 | 1095.3 | 958.2 |
| TOTAL WORLD | | 22078.2 | 12635.2 | 13841.0 | 14587.8 | 13552.3 | 14998.1 | 14168.6 | 12139.1 | 9245.0 | 8598.4 | 9881.1 | 11656.3 | 11526.1 |

Source: 'WORLD SHIPBUILDING DATABANK' based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

(1) From 1980 on data includes production from Ex-GDR yards

## TABLE 5 B – PRODUCTION – SHIPS COMPLETED

| | | REVISED FIGURES AT THE END OF THE YEAR | | | | | | | | | | | | MARKET SHARES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1976 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| EEC | BELGIUM | 0.6% | 1.0% | 0.7% | 0.6% | 1.3% | 0.7% | 0.9% | 0.4% | 0.3% | 0.5% | 0.4% | 0.6% | 0.2% |
| | DENMARK | 2.5% | 3.0% | 2.5% | 2.3% | 2.5% | 2.4% | 3.1% | 2.9% | 2.1% | 3.2% | 2.9% | 2.6% | 3.0% |
| | FRANCE | 3.0% | 2.1% | 3.2% | 2.4% | 2.6% | 2.4% | 1.2% | 1.2% | 2.2% | 0.7% | 2.0% | 1.0% | 1.5% |
| | GERMANY (1) | 6.6% | 5.3% | 9.2% | 8.1% | 9.4% | 7.8% | 8.1% | 8.8% | 8.3% | 10.3% | 8.6% | 8.6% | 7.0% |
| | GREECE | N/A | 0.1% | 0.0% | 0.4% | 0.3% | 0.3% | 0.3% | 0.2% | 0.1% | 0.1% | 0.1% | 0.4% | 0.1% |
| | IRELAND | 0.1% | 0.0% | 0.1% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| | ITALY | 1.6% | 2.7% | 2.6% | 1.1% | 1.6% | 1.2% | 0.9% | 0.5% | 2.4% | 1.4% | 2.9% | 2.8% | 3.7% |
| | NETHERLANDS | 4.3% | 2.0% | 2.5% | 2.7% | 3.1% | 1.7% | 2.2% | 2.2% | 1.6% | 1.8% | 1.7% | 2.3% | 3.1% |
| | PORTUGAL | 0.2% | 0.3% | 0.0% | 0.2% | 0.9% | 0.1% | 0.3% | 0.5% | 0.3% | 0.3% | 0.5% | 0.6% | 0.3% |
| | SPAIN | 3.3% | 3.5% | 4.0% | 4.0% | 3.6% | 2.3% | 2.8% | 1.9% | 3.6% | 3.8% | 3.1% | 3.1% | 2.6% |
| | UNITED KINGDOM | 4.5% | 3.6% | 1.8% | 2.7% | 2.4% | 2.0% | 1.2% | 1.2% | 1.8% | 1.3% | 1.6% | 1.2% | 1.5% |
| TOTAL EEC | | 26.8% | 23.7% | 26.6% | 24.5% | 27.7% | 20.9% | 20.9% | 18.7% | 22.6% | 23.5% | 23.7% | 23.2% | 23.0% |
| OTHER AWES | FINLAND | N/A | 2.9% | 2.9% | 3.0% | 3.7% | 2.8% | 2.0% | 2.1% | 1.6% | 3.1% | 3.3% | 3.3% | 1.8% |
| | NORWAY | N/A | 2.6% | 2.5% | 3.1% | 2.1% | 1.2% | 1.6% | 1.3% | 2.0% | 1.8% | 0.8% | 1.4% | 2.2% |
| | SWEDEN | N/A | 2.6% | 3.0% | 1.7% | 2.2% | 1.2% | 0.9% | 1.0% | 1.3% | 0.8% | 0.3% | 0.4% | 0.4% |
| TOTAL AWES | | 37.5% | 31.9% | 35.1% | 32.3% | 35.7% | 26.0% | 25.3% | 24.1% | 27.4% | 29.2% | 28.1% | 28.2% | 27.4% |
| JAPAN | | 37.8% | 41.2% | 40.3% | 39.8% | 36.2% | 46.3% | 45.9% | 41.9% | 41.1% | 34.3% | 37.1% | 38.2% | 38.3% |
| KOREA | | 1.6% | 3.5% | 3.7% | 6.0% | 7.3% | 6.8% | 11.5% | 16.2% | 12.9% | 17.5% | 14.1% | 13.4% | 15.0% |
| CHINA | | N/A | N/A | 0.2% | 0.7% | 1.3% | 2.0% | 1.2% | 1.8% | 2.2% | 2.9% | 2.3% | 2.6% | 2.2% |
| POLAND | | N/A | 3.9% | 2.5% | 2.5% | 2.0% | 2.5% | 2.5% | 2.8% | 3.2% | 4.0% | 2.4% | 1.5% | 1.9% |
| ROMANIA | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 1.1% |
| USSR | | N/A | 3.4% | 4.3% | 3.5% | 3.5% | 4.6% | 1.9% | 1.4% | 0.5% | 0.7% | 2.3% | 4.1% | 3.2% |
| YUGOSLAVIA | | N/A | 1.4% | 1.6% | 1.5% | 1.6% | 1.6% | 2.0% | 1.6% | 0.0% | 2.7% | 3.3% | 2.5% | 2.5% |
| REST OF WORLD | | 23.1% | 14.7% | 12.3% | 13.6% | 12.4% | 10.1% | 9.6% | 10.2% | 12.6% | 8.7% | 10.4% | 9.4% | 8.3% |
| TOTAL WORLD | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: 'WORLD SHIPBUILDING DATABANK' based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

(1) From 1980 on data includes production from Ex–GDR yards

TABLE 6 A – NEW ORDERS

| | | 1976 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| REVISED FIGURES AT THE END OF THE YEAR | | | | | | | | | | | | | | 1000 CGT |
| EEC | BELGIUM | 75.0 | 53.8 | 81.4 | 43.3 | 58.7 | 69.5 | 26.8 | 43.2 | 34.0 | 52.0 | 101.7 | 71.4 | 75.1 |
| | DENMARK | 317.1 | 284.6 | 296.6 | 250.6 | 428.9 | 405.2 | 86.0 | 305.9 | 219.2 | 205.3 | 192.4 | 596.4 | 265.9 |
| | FRANCE | 63.6 | 556.4 | 333.0 | 175.9 | 136.4 | 106.5 | 262.5 | 132.4 | 60.5 | 204.6 | 165.9 | 136.2 | 327.9 |
| | GERMANY (1) | 726.1 | 613.0 | 1249.9 | 1239.9 | 1236.9 | 1072.9 | 1228.2 | 1297.1 | 872.4 | 877.6 | 1400.6 | 875.6 | 559.1 |
| | GREECE | N/A | 82.4 | 4.5 | 10.3 | 4.6 | 7.4 | 29.4 | 5.1 | 6.5 | 6.1 | 5.0 | 0.8 | 8.9 |
| | IRELAND | 19.2 | 1.3 | 18.2 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | ITALY | 301.5 | 231.2 | 144.7 | 243.2 | 57.1 | 68.2 | 257.4 | 229.0 | 408.7 | 172.3 | 564.8 | 413.1 | 380.5 |
| | NETHERLANDS | 626.4 | 373.3 | 365.2 | 309.0 | 237.3 | 248.4 | 269.8 | 137.0 | 91.9 | 356.2 | 236.3 | 277.1 | 296.7 |
| | PORTUGAL | 73.0 | 30.7 | 55.5 | 27.8 | 36.0 | 30.6 | 1.2 | 29.5 | 78.1 | 33.1 | 69.6 | 79.6 | 8.3 |
| | SPAIN | 297.0 | 737.5 | 675.2 | 323.9 | 222.1 | 92.2 | 197.6 | 258.5 | 421.7 | 453.8 | 274.1 | 487.8 | 74.8 |
| | UNITED KINGDOM | 627.6 | 350.2 | 410.8 | 301.5 | 150.4 | 107.6 | 224.4 | 112.0 | 116.5 | 124.2 | 209.2 | 205.1 | 172.6 |
| TOTAL EEC | | 3126.5 | 3314.4 | 3635.0 | 2926.7 | 2568.4 | 2208.5 | 2583.3 | 2549.7 | 2309.5 | 2485.2 | 3219.6 | 3143.1 | 2169.8 |
| OTHER AWES | FINLAND | N/A | 523.9 | 502.5 | 221.1 | 135.4 | 389.5 | 158.0 | 202.2 | 637.7 | 108.0 | 63.0 | 256.7 | 139.4 |
| | NORWAY | N/A | 381.6 | 408.7 | 156.4 | 108.8 | 208.2 | 129.9 | 136.4 | 139.2 | 112.1 | 398.8 | 190.9 | 118.1 |
| | SWEDEN | N/A | 205.4 | 359.3 | 184.5 | 278.4 | 34.0 | 16.1 | 59.2 | 71.4 | 13.2 | 110.1 | 3.8 | 4.3 |
| TOTAL AWES | | 4659.5 | 4425.3 | 4905.5 | 3488.7 | 3091.0 | 2840.2 | 2887.3 | 2947.5 | 3157.8 | 2718.5 | 3781.5 | 3594.5 | 2431.6 |
| JAPAN | | 7337.5 | 6708.3 | 5823.1 | 4859.4 | 7389.1 | 6040.0 | 4440.0 | 3431.6 | 3120.5 | 3360.7 | 5879.7 | 6116.4 | 4433.0 |
| KOREA | | 325.4 | 939.3 | 893.3 | 1001.5 | 2147.1 | 1180.9 | 806.5 | 1352.4 | 1942.6 | 1203.0 | 1671.4 | 2169.2 | 2278.1 |
| CHINA | | N/A | N/A | 233.0 | 119.6 | 285.9 | 179.9 | 204.0 | 321.5 | 263.8 | 330.6 | 258.5 | 387.4 | 429.7 |
| POLAND | | N/A | 208.4 | 146.0 | 133.3 | 489.8 | 417.1 | 270.3 | 321.4 | 302.6 | 218.4 | 209.5 | 218.4 | 295.9 |
| ROMANIA | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 550.4 |
| USSR | | N/A | 12.1 | 24.0 | 68.4 | N/A | 2.9 | N/A | N/A | N/A | 92.6 | 214.1 | 209.1 | 83.6 |
| YUGOSLAVIA | | N/A | 242.3 | 76.8 | 320.0 | 123.8 | 75.0 | 329.6 | 447.3 | 130.8 | 306.9 | 478.5 | 322.6 | 127.4 |
| REST OF WORLD | | 3659.9 | 1822.0 | 1951.4 | 1542.3 | 1323.4 | 1041.7 | 1383.7 | 660.4 | 822.0 | 895.2 | 1061.1 | 1285.9 | 1285.3 |
| TOTAL WORLD | | 15982.3 | 14357.7 | 14053.1 | 11533.2 | 14850.1 | 11777.7 | 10321.4 | 9482.1 | 9740.1 | 9125.9 | 13564.3 | 14303.5 | 11915.0 |

Source: "WORLD SHIPBUILDING DATABANK" based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

(1) From 1980 on data includes new orders from Ex–GDR yards

## TABLE 6 B – NEW ORDERS

| | | REVISED FIGURES AT THE END OF THE YEAR | | | | | | | | | | | | MARKET SHARES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1976 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| EEC | BELGIUM | 0.5% | 0.4% | 0.6% | 0.4% | 0.4% | 0.6% | 0.3% | 0.5% | 0.3% | 0.6% | 0.7% | 0.5% | 0.6% |
| | DENMARK | 2.0% | 2.0% | 2.1% | 2.2% | 2.9% | 3.4% | 0.8% | 3.2% | 2.3% | 2.2% | 1.4% | 4.2% | 2.2% |
| | FRANCE | 0.4% | 3.9% | 2.4% | 1.5% | 0.9% | 0.9% | 2.5% | 1.4% | 0.6% | 2.2% | 1.2% | 1.0% | 2.8% |
| | GERMANY (1) | 4.5% | 4.3% | 8.9% | 10.8% | 8.3% | 9.1% | 11.9% | 13.7% | 9.0% | 9.6% | 10.3% | 6.1% | 4.7% |
| | GREECE | N/A | 0.6% | 0.0% | 0.1% | 0.0% | 0.1% | 0.3% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.1% |
| | IRELAND | 0.1% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| | ITALY | 1.9% | 1.6% | 1.0% | 2.1% | 0.4% | 0.6% | 2.5% | 2.4% | 4.2% | 1.9% | 4.2% | 2.9% | 3.2% |
| | NETHERLANDS | 3.9% | 2.6% | 2.6% | 2.7% | 1.6% | 2.1% | 2.6% | 1.4% | 0.9% | 3.9% | 1.7% | 1.9% | 2.5% |
| | PORTUGAL | 0.5% | 0.2% | 0.4% | 0.2% | 0.2% | 0.3% | 0.0% | 0.3% | 0.8% | 0.4% | 0.5% | 0.6% | 0.1% |
| | SPAIN | 1.9% | 5.1% | 4.8% | 2.8% | 1.5% | 0.8% | 1.9% | 2.7% | 4.3% | 5.0% | 2.0% | 3.4% | 0.6% |
| | UNITED KINGDOM | 3.9% | 2.4% | 2.9% | 2.6% | 1.0% | 0.9% | 2.2% | 1.2% | 1.2% | 1.4% | 1.5% | 1.4% | 1.4% |
| TOTAL EEC | | 19.6% | 23.1% | 25.9% | 25.4% | 17.3% | 18.8% | 25.0% | 26.9% | 23.7% | 27.2% | 23.7% | 22.0% | 18.2% |
| OTHER AWES | FINLAND | N/A | 3.6% | 3.6% | 1.9% | 0.9% | 3.3% | 1.5% | 2.1% | 6.5% | 1.2% | 0.5% | 1.8% | 1.2% |
| | NORWAY | N/A | 2.7% | 2.9% | 1.4% | 0.7% | 1.8% | 1.3% | 1.4% | 1.4% | 1.2% | 2.9% | 1.3% | 1.0% |
| | SWEDEN | N/A | 1.4% | 2.6% | 1.6% | 1.9% | 0.3% | 0.2% | 0.6% | 0.7% | 0.1% | 0.8% | 0.0% | 0.0% |
| TOTAL AWES | | 29.2% | 30.8% | 34.9% | 30.2% | 20.8% | 24.1% | 28.0% | 31.1% | 32.4% | 29.8% | 28.0% | 25.1% | 20.4% |
| JAPAN | | 45.9% | 46.7% | 41.4% | 42.1% | 49.8% | 51.3% | 43.0% | 36.2% | 32.0% | 36.8% | 43.3% | 42.8% | 37.2% |
| KOREA | | 2.0% | 6.5% | 6.4% | 8.7% | 14.5% | 10.0% | 7.8% | 14.3% | 19.9% | 13.2% | 12.3% | 15.2% | 19.1% |
| CHINA | | N/A | N/A | 1.7% | 1.0% | 1.9% | 1.5% | 2.0% | 3.4% | 2.7% | 3.6% | 1.9% | 2.7% | 3.6% |
| POLAND | | N/A | 1.5% | 1.0% | 1.2% | 3.3% | 3.5% | 2.6% | 3.4% | 3.1% | 2.4% | 1.5% | 1.5% | 2.5% |
| ROMANIA | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 4.6% |
| USSR | | N/A | 0.1% | 0.2% | 0.6% | N/A | 0.0% | N/A | N/A | N/A | 1.0% | 1.6% | 1.5% | 0.7% |
| YUGOSLAVIA | | N/A | 1.7% | 0.5% | 2.8% | 0.8% | 0.6% | 3.2% | 4.7% | 1.3% | 3.4% | 3.5% | 2.3% | 1.1% |
| REST OF WORLD | | 22.9% | 12.7% | 13.9% | 13.4% | 8.9% | 8.8% | 13.4% | 7.0% | 8.4% | 9.8% | 7.8% | 9.0% | 10.8% |
| TOTAL WORLD | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: 'WORLD SHIPBUILDING DATABANK' based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

(1) From 1980 on data includes new orders from Ex-GDR yards

TABLE 7 – BREAKDOWN OF ORDERS BY FLAG

| ORDERS PLACED FOR REGISTRATION UNDER THE FLAG OF A MEMBER STATE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1976 | | | 1982 | | | 1984 | | | 1986 | | | 1987 | | | 1988 | | | 1989 | | | 1990 | | | 1991 | | |
| With shipyard in: A – national<br>B – other EC countries<br>C – third countries | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C |
| % of total | 64 | 5 | 31 | 77 | 1 | 22 | 64 | 4 | 32 | 77 | 7 | 16 | 78 | 3 | 19 | 80 | 6 | 15 | 54 | 4 | 42 | 60 | 9 | 31 | 58 | 12 | 30 |
| TOTAL in '000 CGT | 3027 | | | 1876 | | | 2039 | | | 1297 | | | 1737 | | | 1243 | | | 2073 | | | 2156 | | | 1754 | | |

| ORDERS RECEIVED BY COMMUNITY SHIPYARDS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1976 | | | 1982 | | | 1984 | | | 1986 | | | 1987 | | | 1988 | | | 1989 | | | 1990 | | | 1991 | | |
| From shipowner in: A – national<br>B – other EC countries<br>C – third countries | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C | A | B | C |
| % of total | 70 | 5 | 25 | 73 | 1 | 26 | 79 | 5 | 17 | 63 | 6 | 31 | 68 | 3 | 29 | 44 | 3 | 53 | 41 | 3 | 56 | 41 | 6 | 53 | 47 | 9 | 44 |
| TOTAL in '000 CGT | 2756 | | | 1988 | | | 1657 | | | 1581 | | | 1971 | | | 2260 | | | 2754 | | | 3143 | | | 2170 | | |

Source: WORLD SHIPBUILDING DATABANK based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES
Remarks: 1976 – EEC excluding Greece; from 1986 – EEC including Portugal and Spain; from 1990 EEC including Ex–GDR

TABLE 8 – TREND OF NEW ORDERS BY TYPE OF VESSEL

| | | OIL TANKERS | | BULK CARRIERS | | CARGO SHIPS | | NON CARGO VESSELS | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | '000 CGT | % | '000 CGT | % | '000 CGT | % | '000 CGT | % | '000 CGT | % |
| 1977 | WORLD | 790.6 | | 1783.2 | | 8497.3 | | 2969.8 | | 14040.9 | |
| | EEC | 30.9 | 3.9 | 75.1 | 4.2 | 1764.4 | 20.8 | 670.5 | 22.6 | 2540.9 | 18.1 |
| 1978 | WORLD | 1185.4 | | 534.6 | | 6163.8 | | 1912.7 | | 9796.5 | |
| | EEC | 56.2 | 4.7 | 23.6 | 4.4 | 1341.3 | 21.8 | 591.5 | 30.9 | 2012.6 | 20.5 |
| 1979 | WORLD | 3364.8 | | 2744.9 | | 5148.4 | | 2949.8 | | 14207.9 | |
| | EEC | 168.1 | 5.0 | 466.5 | 17.0 | 1172.6 | 22.8 | 747.6 | 25.3 | 2554.8 | 18.0 |
| 1980 | WORLD | 2960.2 | | 4325.3 | | 4780.1 | | 2291.9 | | 14357.5 | |
| | EEC | 273.7 | 9.2 | 425.9 | 9.8 | 1023.4 | 21.4 | 740.8 | 32.3 | 2463.8 | 17.2 |
| 1981 | WORLD | 1166.7 | | 4934.9 | | 4967.9 | | 2433.0 | | 13502.5 | |
| | EEC | 75.1 | 6.4 | 487.9 | 9.9 | 1342.7 | 27.0 | 606.4 | 24.9 | 2512.1 | 18.6 |
| 1982 | WORLD | 662.6 | | 2335.3 | | 5679.9 | | 2135.4 | | 10813.2 | |
| | EEC | 70.3 | 10.6 | 197.5 | 8.5 | 1093.2 | 19.2 | 628.0 | 29.4 | 1989.0 | 18.4 |
| 1983 | WORLD | 1682.1 | | 5370.3 | | 5910.8 | | 1886.9 | | 14850.1 | |
| | EEC | 92.3 | 5.5 | 110.7 | 2.1 | 1039.9 | 17.6 | 380.9 | 20.2 | 1623.8 | 10.9 |
| 1984 | WORLD | 1176.2 | | 3890.6 | | 4742.2 | | 1956.8 | | 11765.8 | |
| | EEC | 179.3 | 15.2 | 165.6 | 4.3 | 944.2 | 19.9 | 448.8 | 22.9 | 1737.9 | 14.8 |
| 1985 | WORLD | 470.1 | | 3918.4 | | 5299.9 | | 2089.2 | | 11777.6 | |
| | EEC | 15.3 | 3.3 | 152.8 | 3.9 | 1029.7 | 19.4 | 459.3 | 22.0 | 1657.1 | 14.1 |
| 1985 | WORLD | 575.4 | | 2454.5 | | 5138.8 | | 2152.4 | | 10321.1 | |
| | EEC | 18.0 | 3.1 | 154.9 | 6.3 | 1033.5 | 20.1 | 769.6 | 35.8 | 1976.0 | 19.1 |
| 1986 | WORLD | 1199.7 | | 1296.0 | | 4208.4 | | 2778.0 | | 9482.1 | |
| | EEC | 0.0 | 0.0 | 108.0 | 8.3 | 768.6 | 18.3 | 704.7 | 25.4 | 1581.3 | 16.7 |
| 1987 | WORLD | 1404.6 | | 1033.2 | | 4899.7 | | 2402.7 | | 9740.2 | |
| | EEC | 107.5 | 7.7 | 45.3 | 4.4 | 1128.1 | 23.0 | 690.1 | 28.7 | 1971.0 | 20.2 |
| 1988 | WORLD | 781.8 | | 2164.5 | | 3985.6 | | 2194.0 | | 9125.9 | |
| | EEC | 116.7 | 14.9 | 0.0 | 0.0 | 1095.5 | 27.5 | 1048.1 | 47.8 | 2260.3 | 24.8 |
| 1989 | WORLD | 1943.6 | | 2483.1 | | 6798.4 | | 2339.3 | | 13564.4 | |
| | EEC | 219.9 | 11.3 | 70.8 | 2.9 | 1454.3 | 21.4 | 1008.8 | 43.1 | 2753.8 | 20.3 |
| 1990 | WORLD | 4127.9 | | 1639.0 | | 6530.2 | | 2006.5 | | 14303.6 | |
| | EEC | 542.6 | 13.1 | 207.0 | 12.6 | 1541.0 | 23.6 | 852.0 | 42.5 | 3142.6 | 22.0 |
| 1991 | WORLD | 1917.9 | | 2218.0 | | 6507.9 | | 1271.3 | | 11915.0 | |
| | EEC | 215.3 | 11.2 | 207.5 | 9.4 | 1387.4 | 21.3 | 359.8 | 28.3 | 2169.9 | 18.2 |

Source: WORLD SHIPBUILDING DATABANK based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES
Remarks: From 1986 EEC including Spain and Portugal; From 1990 EEC including Ex–GDR.

## TABLE 9 A – ORDER BOOK

| | | REVISED FIGURES AT THE END OF THE YEAR | | | | | | | | | | | | 1000 CGT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1976 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| EEC | BELGIUM | 277.0 | 331.7 | 311.5 | 261.1 | 143.7 | 136.1 | 62.1 | 60.0 | 75.0 | 82.0 | 147.7 | 154.4 | 213.4 |
| | DENMARK | 923.5 | 652.4 | 618.9 | 603.9 | 707.7 | 692.2 | 442.1 | 429.8 | 473.9 | 459.6 | 589.7 | 927.7 | 876.6 |
| | FRANCE | 1770.4 | 1193.7 | 1138.2 | 978.5 | 598.6 | 263.3 | 382.7 | 371.2 | 234.5 | 379.9 | 361.9 | 397.2 | 556.8 |
| | GERMANY (1) | 2113.3 | 950.9 | 1082.0 | 1177.7 | 1178.1 | 959.4 | 1118.9 | 1281.7 | 1426.3 | 1429.2 | 1974.0 | 1955.0 | 1529.9 |
| | GREECE | N/A | 240.6 | 245.4 | 191.4 | 146.1 | 137.4 | 119.9 | 102.8 | 121.5 | 116.8 | 113.6 | 69.1 | 73.0 |
| | IRELAND | 43.9 | 17.8 | 19.3 | 20.0 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| | ITALY | 1036.2 | 639.8 | 427.3 | 480.4 | 356.3 | 195.5 | 345.5 | 465.8 | 864.8 | 904.2 | 1188.6 | 1298.4 | 1190.9 |
| | NETHERLANDS | 917.1 | 493.7 | 551.7 | 498.8 | 308.8 | 331.6 | 300.3 | 195.6 | 141.8 | 365.1 | 414.5 | 443.4 | 387.5 |
| | PORTUGAL | N/A | 191.2 | 240.4 | 258.4 | 124.1 | 138.3 | 94.0 | 67.0 | 108.3 | 114.0 | 155.7 | 181.6 | 153.1 |
| | SPAIN | N/A | 1769.5 | 1754.0 | 1325.3 | 967.4 | 690.5 | 491.5 | 527.7 | 635.6 | 837.7 | 853.7 | 1004.1 | 757.2 |
| | UNITED KINGDOM | 1989.4 | 615.0 | 768.9 | 714.1 | 506.1 | 292.3 | 352.5 | 325.4 | 369.7 | 317.1 | 376.5 | 418.9 | 413.6 |
| TOTAL EEC | | 9070.8 | 7096.3 | 7157.6 | 6509.6 | 5039.0 | 3836.6 | 3709.5 | 3827.0 | 4451.4 | 5005.6 | 6175.9 | 6849.8 | 6152.0 |
| OTHER AWES | FINLAND | N/A | 1144.3 | 1139.5 | 1023.8 | 710.3 | 642.2 | 544.4 | 483.9 | 991.0 | 962.9 | 652.1 | 589.4 | 494.3 |
| | NORWAY | N/A | 589.3 | 670.3 | 371.9 | 185.6 | 229.8 | 148.1 | 146.8 | 136.9 | 114.3 | 422.8 | 463.6 | 381.8 |
| | SWEDEN | N/A | 703.8 | 646.3 | 494.9 | 494.5 | 267.8 | 181.7 | 137.5 | 93.8 | 39.0 | 115.3 | 64.3 | 23.9 |
| TOTAL AWES | | 15839.2 | 9533.7 | 9613.7 | 8400.2 | 6429.4 | 4976.4 | 4583.7 | 4595.2 | 5673.1 | 6121.8 | 7366.1 | 7967.1 | 7052.0 |
| JAPAN | | 12093.8 | 7297.8 | 7457.7 | 6640.2 | 8477.9 | 8221.5 | 5915.2 | 3915.9 | 2918.5 | 3473.9 | 5696.5 | 7494.7 | 7621.8 |
| KOREA | | 7943.2 | 1320.3 | 1711.1 | 1854.9 | 2898.4 | 3223.1 | 2578.7 | 1909.2 | 2639.1 | 2342.7 | 2813.1 | 3500.7 | 3922.7 |
| CHINA | | N/A | N/A | 260.9 | 298.3 | 493.5 | 433.2 | 486.5 | 547.0 | 647.3 | 809.8 | 681.0 | 813.6 | 942.0 |
| POLAND | | N/A | 1634.6 | 1459.0 | 1174.6 | 1143.1 | 1272.1 | 1018.1 | 1041.6 | 1251.6 | 1131.3 | 1080.1 | 1136.6 | 999.7 |
| ROMANIA | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 912.6 |
| USSR | | N/A | N/A | 128.9 | 92.7 | 53.9 | 42.8 | N/A | N/A | N/A | 74.1 | 248.5 | 343.1 | 360.4 |
| YUGOSLAVIA | | N/A | 760.7 | 626.7 | 699.9 | 492.6 | 455.4 | 545.9 | 840.0 | 751.4 | 861.9 | 1011.4 | 1046.9 | 886.3 |
| REST OF WORLD | | 3692.9 | 5045.1 | 5105.6 | 4570.7 | 4129.7 | 3448.0 | 3435.8 | 2796.8 | 2675.0 | 2857.9 | 3071.2 | 3343.5 | 3240.2 |
| TOTAL WORLD | | 39569.2 | 25592.2 | 26363.6 | 23731.5 | 24118.5 | 22072.5 | 18563.9 | 15645.7 | 16556.0 | 17673.4 | 21967.9 | 25646.2 | 25937.7 |

Source: 'WORLD SHIPBUILDING DATABANK' based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

(1) From 1980 on data includes order book from Ex-GDR yards

## TABLE 9 B – ORDER BOOK

| | | REVISED FIGURES AT THE END OF THE YEAR | | | | | | | | | | | | MARKET SHARES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1976 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| EEC | BELGIUM | 0.7% | 1.3% | 1.2% | 1.1% | 0.6% | 0.6% | 0.3% | 0.4% | 0.5% | 0.5% | 0.7% | 0.6% | 0.8% |
| | DENMARK | 2.3% | 2.5% | 2.3% | 2.5% | 2.9% | 3.1% | 2.4% | 2.7% | 2.9% | 2.6% | 2.7% | 3.6% | 3.4% |
| | FRANCE | 4.5% | 4.7% | 4.3% | 4.1% | 2.5% | 1.2% | 2.1% | 2.4% | 1.4% | 2.1% | 1.6% | 1.5% | 2.1% |
| | GERMANY (1) | 5.3% | 3.7% | 4.1% | 5.0% | 4.9% | 4.3% | 6.0% | 8.2% | 8.6% | 8.1% | 9.0% | 7.6% | 5.9% |
| | GREECE | N/A | 0.9% | 0.9% | 0.8% | 0.6% | 0.6% | 0.6% | 0.7% | 0.7% | 0.7% | 0.5% | 0.3% | 0.3% |
| | IRELAND | 0.1% | 0.1% | 0.1% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| | ITALY | 2.6% | 2.5% | 1.6% | 2.0% | 1.5% | 0.9% | 1.9% | 3.0% | 5.2% | 5.1% | 5.4% | 5.1% | 4.6% |
| | NETHERLANDS | 2.3% | 1.9% | 2.1% | 2.1% | 1.3% | 1.5% | 1.6% | 1.3% | 0.9% | 2.1% | 1.9% | 1.7% | 1.5% |
| | PORTUGAL | N/A | 0.7% | 0.9% | 1.1% | 0.5% | 0.6% | 0.5% | 0.4% | 0.7% | 0.6% | 0.7% | 0.7% | 0.6% |
| | SPAIN | N/A | 6.9% | 6.7% | 5.6% | 4.0% | 3.1% | 2.6% | 3.4% | 3.8% | 4.7% | 3.9% | 3.9% | 2.9% |
| | UNITED KINGDOM | 5.0% | 2.4% | 2.9% | 3.0% | 2.1% | 1.3% | 1.9% | 2.1% | 2.2% | 1.8% | 1.7% | 1.6% | 1.6% |
| TOTAL EEC | | 22.9% | 27.7% | 27.1% | 27.4% | 20.9% | 17.4% | 20.0% | 24.5% | 26.9% | 28.3% | 28.1% | 26.7% | 23.7% |
| OTHER AWES | FINLAND | N/A | 4.5% | 4.3% | 4.3% | 2.9% | 2.9% | 2.9% | 3.1% | 6.0% | 5.4% | 3.0% | 2.3% | 1.9% |
| | NORWAY | N/A | 2.3% | 2.5% | 1.6% | 0.8% | 1.0% | 0.8% | 0.9% | 0.8% | 0.6% | 1.9% | 1.8% | 1.5% |
| | SWEDEN | N/A | 2.8% | 2.5% | 2.1% | 2.1% | 1.2% | 1.0% | 0.9% | 0.6% | 0.2% | 0.5% | 0.3% | 0.1% |
| TOTAL AWES | | 40.0% | 37.3% | 36.5% | 35.4% | 26.7% | 22.5% | 24.7% | 29.4% | 34.3% | 34.6% | 33.5% | 31.1% | 27.2% |
| JAPAN | | 30.6% | 28.5% | 28.3% | 28.0% | 35.2% | 37.2% | 31.9% | 25.0% | 17.6% | 19.7% | 25.9% | 29.2% | 29.4% |
| KOREA | | 20.1% | 5.2% | 6.5% | 7.8% | 12.0% | 14.6% | 13.9% | 12.2% | 15.9% | 13.3% | 12.8% | 13.6% | 15.1% |
| CHINA | | N/A | N/A | 1.0% | 1.3% | 2.0% | 2.0% | 2.6% | 3.5% | 3.9% | 4.6% | 3.1% | 3.2% | 3.6% |
| POLAND | | N/A | 6.4% | 5.5% | 4.9% | 4.7% | 5.8% | 5.5% | 6.7% | 7.6% | 6.4% | 4.9% | 4.4% | 3.9% |
| ROMANIA | | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 3.5% |
| USSR | | N/A | N/A | 0.5% | 0.4% | 0.2% | 0.2% | N/A | N/A | N/A | 0.4% | 1.1% | 1.3% | 1.4% |
| YUGOSLAVIA | | N/A | 3.0% | 2.4% | 2.9% | 2.0% | 2.1% | 2.9% | 5.4% | 4.5% | 4.9% | 4.6% | 4.1% | 3.4% |
| REST OF WORLD | | 9.3% | 19.7% | 19.4% | 19.3% | 17.1% | 15.6% | 18.5% | 17.9% | 16.2% | 16.2% | 14.0% | 13.0% | 12.5% |
| TOTAL WORLD | | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |

Source: "WORLD SHIPBUILDING DATABANK" based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

(1) From 1980 on data includes order book from Ex–GDR yards

## TABLE 10 – ORDER BOOKS AND DELIVERY SCHEDULE

| | SHIPS COMPLETED 1991 | ORDER BOOK | | | | | |
|---|---|---|---|---|---|---|---|
| | | AS AT 31/12/91 | FOR DELIVERY IN: | | | | |
| | | | 1992 | 1993 | 1994 | 1995 AND BEYOND |
| BELGIUM | 21.8 | 213.4 | 128.4 | 85.0 | 0.0 | 0.0 |
| DENMARK | 350.9 | 876.6 | 432.8 | 329.6 | 114.2 | 0.0 |
| FRANCE | 171.1 | 556.8 | 182.5 | 59.3 | 63.0 | 252.0 |
| GERMANY | 810.1 | 1529.9 | 892.5 | 557.1 | 70.3 | 10.0 |
| GREECE | 6.3 | 73.0 | 73.0 | 0.0 | 0.0 | 0.0 |
| IRELAND | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| ITALY | 423.9 | 1190.9 | 466.1 | 447.5 | 235.9 | 41.4 |
| NETHERLANDS | 357.0 | 387.5 | 291.6 | 86.3 | 9.6 | 0.0 |
| PORTUGAL | 38.5 | 153.1 | 116.8 | 20.7 | 15.5 | 0.0 |
| SPAIN | 301.2 | 757.2 | 531.3 | 192.3 | 33.6 | 0.0 |
| UNITED KINGDOM | 170.5 | 413.6 | 215.1 | 75.2 | 98.6 | 24.7 |
| TOTAL EEC | 2651.3 | 6152.0 | 3330.1 | 1853.0 | 640.7 | 328.1 |

Source: WORLD SHIPBUILDING DATABANK based on data supplied by LLOYD'S MARITIME INFORMATION SERVICES

Remarks: Data includes order book from Ex–GDR yards

TABLE 11 – EMPLOYMENT IN THE CONSTRUCTION OF NEW VESSELS IN THE COMMUNITY

| | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | Number of employees | |
| | 1975 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
| BELGIUM | 7467 | 6614 | 6258 | 6523 | 6347 | 4680 | 4104 | 4060 | 3923 | 2995 | 2548 | 2270 | 2307 | 2377 | 2418 |
| DENMARK | 16630 | 12000 | 9000 | 11400 | 11350 | 11800 | 11200 | 10300 | 10200 | 7000 | 7000 | 7300 | 7900 | 8400 | 8600 |
| FRANCE (1) | 32500 | 25300 | 23000 | 22200 | 22200 | 21600 | 21000 | 16940 | 15053 | 13700 | 8940 | 6850 | 6800 | 6600 | 6100 |
| GERMANY | 46839 | 31113 | 27369 | 24784 | 26521 | 27600 | 25966 | 22183 | 22260 | 18184 | 12875 | 14845 | 14732 | 15297 (5) | 27763 (8) |
| GREECE | 2316 | N/A | N/A | 2672 | 3393 | 2900 | 2812 | 2000 | 2000 | 1709 | 1621 | 1855 | 1535 (4) | 550 | 0 |
| IRELAND | 869 | 840 | 750 | 750 | 762 | 882 | 550 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ITALY | 25000 | 20000 | 19000 | 18000 | 16500 | 13750 | 12800 | 12800 | 12000 | 11570 | 9500 (3) | 8428 (3) | 9675 (3) | 9840 (6) | 8299 (9) |
| NETHERLANDS (2) | 22662 | 17540 | 14540 | 13100 | 13100 | 12800 | 11250 | 10330 | 6236 | 5400 | 3600 | 3500 | 3500 | 3900 | 4000 |
| PORTUGAL | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 5370 | 5087 | 5020 | 4412 | 4245 | 3845 | 3820 |
| SPAIN | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 18000 | 18000 | 17300 | 14000 | 12550 | 11940 | 11440 |
| UNITED KINGDOM | 54550 | 41050 | 31200 | 24800 | 25345 | 25000 | 20486 | 14655 | 14200 | 12500 | 11500 | 9000 | 6494 | 6126 (7) | 5984 |
| TOTAL EEC | 208833 | 154457 | 131117 | 124229 | 125518 | 121012 | 110168 | 93268 | 109242 | 96145 | 79904 | 72460 | 69738 | 68875 | 78424 |

Table compiled from national sources

(1) From 1986 on the figure covers jobs in new shipbuilding and naval and para-naval building (convertion, naval vessels and off-shore).
Figures for the preceding years using the same method are: 1975 – 32500, 1980 – 23700, 1985 – 17700.
(2) From 1975 to 1984 including naval dockyards estimated to be: 1975 – 1800, 1978 and 1979 – 3200, 1980 – 3400, 1981 and 1982 – 3200, 1983 and 1984 – 2800
(3) 2780 unemployed should be added to 1987's figure, 2850 to 1988's figure and 2581 to 1989's figure.
Of these 2000 represent a structural overcapacity for whom no new jobs can be found
(4) Includes naval building
(5) Excluding jobs in Ex-GDR's yards
(6) Of which 1638 currently inactive
(7) Revised figure
(8) Including 11700 jobs in Ex-GDR's yards
(9) 1321 unemployed should be added to this figure, representing a structural overcapacity, whose elimination is foreseen during 1992

TABLE 12

**RENAVAL ZONES**

B

St Niklaas - Antwerpen

DK

Aalborg
Vest Lolland

ESP

Pais Vasco

D

Bremen
Emden
Lübeck
Hamburg

F

Loire-Atlantique
Dunkerque
Haute Normandie
Basse Normandie
Provence
Charente

I

Genova
Trieste
Venezia

NL

Rhijn-Delta
Amsterdam-Noord

P

Setubal

UK

Plymouth
Strathclyde
Fife
Tyne and Wear
Cleveland
Merseyside

# ANNEX 2

# GLOSSARY

# GLOSSARY

## 1. Tonnage Measurement

The word "tonnage" is a term used to give an indication of a ship's size. It can have widely differing meanings depending upon the purpose of the assessment, e.g. measuring the vessel's volumetric capacity or its weight carrying capacity.

Measurement systems have, therefore, been laid down in tonnage regulations for specific purposes but, due to differences in national criteria used, the outcome is not necessarily the same for similar vessels registered under different flags.

On 18 July 1982, the 1969 IMO Convention on Tonnage Measurement for Ships entered into force, affecting all ships built after that date for registration in signatory countries. Thus, a uniform system for the calculation of two of the most important notions, viz. "gross tonnage" and "net tonnage", is now being applied to an increasing number of ships of the world fleet.

## 2. Types of tonnage

- Displacement tonnage

A ship's displacement is the weight of water displaced by the ship; the displacement tonnage equals the sum of the ship's actual weight (lightweight) and its maximum allowed contents (deadweight).

- Lightweight tonnage

The lightweight is the weight of the ship as built (hull, outfit and machinery) including boiler water, lubricating oil and the cooling water system's contents.
(Commercially it is almost only employed when considering the scrapping value of a ship).

- Deadweight tonnage (dwt)

Deadweight is the total sum of the weight of the cargo which a ship can carry and the weights of its fuel, stores, water ballast, fresh water, crew and passengers plus baggage. It represents the difference between the loaded ship displacement and the lightweight.
(Commercially it is the notion most commonly used by shipowners in order to assess the transport capacity of a vessel in relation to heavy and/or bulk cargoes).

- Gross register tonnage (grt)

grt is a value calculated according to various national regulations in order to indicate the volumetric internal capacity of the ship, certain spaces being, however, exempted; it is expressed in gross register tons of 100 cubic feet or 2.83 $m^3$.
(Before the coming into force of gt regulations it was widely used for registration purposes, levying of harbour fees and duties, etc).

- Net register tonnage (nrt)

nrt is equally a calculated value supposed to represent the earning capacity of the ship; it is obtained by deducting certain non revenue-earning spaces form the grt and it is accordingly expressed in 100 cubic feet units or 2.83$m^2$.
(Its use is similar to that of grt but less frequent and mainly as the basis for port charges).

- Gross tonnage (gt)

gt is the tonnage calculated according to the 1969 Tonnage Measurement Convention. It is a dimensionless value now gradually replacing grt for all official purposes concerning vessels under flags of signatory countries.
(The commercial and legal applications of gt will make it the most widely used parameter).

- Net tonnage (nt)

Net tonnage is likewise calculated according to a formula laid down by the 1969 Tonnage Measurement Convention. It is also a dimensionless value and not be taken as less than 0.30 gt.
(It replaces nrt in many of its former applications but there is a tendency towards a more universal use of gt for harbour and canal duties.)

3. <u>Compensated gross register tonnes (cgrt)</u>
   <u>Compensated gross tonnes (cgt)</u>

The volume of work that goes into building a vessel is not directly related to its size but also depends on its type, degree of technical sophistication etc. For statistical purposes, regarding the output and order intake of the shipbuilding industry, the AWES as well as the OECD developed in the late sixties a series of special coefficients, for different ship types and sizes, by means of which the work content involved in the building of homogeneous groups of vehicles could be assessed from their grt values (grt x coefficient = cgrt).

Initially the AWES and the OECD coefficients diverged markedly, but in 1977 new coefficients for cgrt calculations were developed by the AWES, which were subsequently also agreed upon by the OECD. This explains why certain 1976 (or earlier) OECD statistics in cgrt are not, or not always, comparable with other series.

With the coming into force, in 1982, of the IMO Convention it became again necessary to modify the compensated tonnage calculation system, in order to take into account that for certain ship types (in particular RoRo-vessels, car ferries and vehicle carriers) gt values have increased considerably as compared with grt values. Moreover, recent ships of these types tend to be of more complex build and new coefficients have, therefore, been adopted. They are applicable as from 1 January 1984.

4. Compatibility of OECD and LMIS statistics

The data for the OECD statistics are supplied by the OECD member governments. Where the Member States are concerned they constitute, therefore, an official source, but since the data only refer to the situation in the OECD member countries they cannot be used for making worldwide comparisons. Moreover, the calculation of cgt (or cgrt) values is carried out by the respective administrations so that discrepancies may sometime arise as to when an order is regarded as being definite, in the classification of vessels and as to what coefficient should be used for establishing cgt for certain vessels of a hybrid type.

The data produced by Lloyd's Maritime Information Services (LMIS) are not infallible either, but because they are gathered worldwide by LMIS own outposts according to uniform criteria, they constitute a more homogeneous source of information allowing comparisons on a global level to be made.

LMIS supplies information to the Commission under a contract and the basic data only contain gt (or grt) and dwt references. The cgt (or cgrt) values are calculated at the Commission's Joint Research Centre in Ispra by computer processing of the LMIS input, using the OECD calculation coefficients.

Despite certain differences which can sometimes arise from the different procedures for establishing the OECD and the LMIS/Commission series of statistics, the two sets of data show trends which generally point in the same direction. Since the divergence between the two sources is only random, and the present report is essentially concerned with indicating the main trends, the reference to only one source is generally of no consequence.

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