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# COMMISSION OF THE EUROPEAN COMMUNITIES

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# SIXTH REPORT FROM THE COMMISSION TO THE COUNCIL

# ON THE SITUATION IN WORLD SHIPBUILDING

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#### 1. Introduction

This sixth report from the Commission to the Council on the situation in world shipbuilding follows the Commission's obligation to report on the situation in the world shipbuilding market, laid down in Article 12 of Council Regulation (EC) No. 1540/98<sup>1</sup> and is in line with the previous five reports<sup>2</sup>. Moreover, it responds to the request expressed by the Council during its meeting on 6 June 2002, namely to report on latest developments in the shipbuilding sector in time for the Industry Council in November<sup>3</sup>.

The Council decided on 27 June 2002 that the Commission should make a final effort to solve the problems stemming from certain business practices by Korean yards and achieve an amicable agreement with South Korea by 30 September 2002 at the latest. Should the Commission report the failure of these talks, it would be authorised to request a dispute settlement at the WTO. At the same time a temporary defensive mechanism<sup>4</sup> should be authorised for certain market segments and for a limited period only.

Two rounds of talks with the Government of Korea and shipyard representatives were conducted by the Commission (26-27 August 2002 in Seoul and 24-27 September 2002 in Brussels), but positions could not be reconciled and the talks therefore failed.

In the absence of a negotiated solution, the Commission has initiated WTO action. The Commission's Decision on WTO action has been published in the Official Journal of 19 October and the request for bilateral consultations with the Republic of Korea has been introduced on 21 October. A first consultation meeting will take place before the end of November.

Given that fully consolidated market data for the year 2002 will only be available towards the end of the first quarter of 2003, this report is limited to the key market developments in the first half of 2002.

In addition it provides an update of the previously undertaken cost investigations and summarises the new cost investigations made since the presentation of the fifth report.

As with previous reports, certain underlying key elements, e.g. concerning scope and methodology of the market monitoring undertaken by the Commission, are not repeated here. Those elements are covered in the previous reports and are listed in the introduction to the fifth shipbuilding report.

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OJ L 202, 18.07.1998, p1

<sup>&</sup>lt;sup>2</sup> COM(1999) 474 final; COM(2000) 263 final; COM(2000) 730 final; COM(2001) 219 final; COM(2002) 205 final

Following the reorganisation agreed by the European Council in Seville, the relevant Council is now the Competitiveness Council.

<sup>&</sup>lt;sup>4</sup> Council Regulation 1177/02, OJ L 172, 02.07.2002, p1

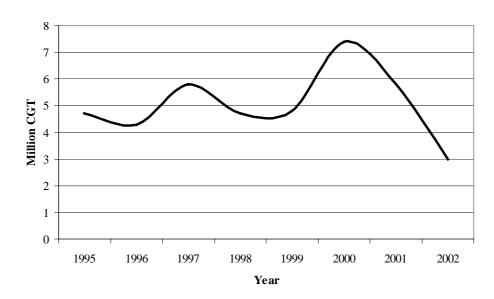
# 2. MARKET ANALYSIS

# 2.1. Key market developments

# 2.1.1. Ordering activity and market shares

The global shipbuilding market increasingly feels the impact of the past over-ordering, the US recession, the uncertainties in the world economy and the effects of 11 September. Order intake in 2002 has so far been very slow and selective. Following a decade of almost continuous growth and a boom year in 2000, the rate of generation of new orders has declined sharply (see graph). This change has affected EU shipbuilding in particular. In the absence of any significant cruise-ship ordering activity, the volume of the order-book (i.e. the existing workload) within the EU is shrinking quickly.

# Quarterly rate of generation of new shipbuilding orders



The rate of generation of new orders in the first half of 2002 was around 60 % below the peak year 2000 (comparing quarterly figures) and has reached the lowest point since 1992. Ordering at EU yards was 77 % below the level in 2000. The downturn in ordering has been accompanied by a fall in prices of more than 15 % on average as compared to the 2001 level, in general returning to levels last seen in 1999.

Most affected by the deteriorating market conditions are container ships and cruise ships. Only product tankers see a comparatively stable demand, due to the replacement of old tonnage following new EU maritime safety regulations (« Erika »).

The following table shows the total of orders placed in compensated gross tonnes – cgt (Source: World Shipbuilding Statistics, LR).

NEW ORDERS IN 2000	NEW ORDERS IN 2001	NEW ORDERS IN 1 <sup>ST</sup> HALF OF 2002	
29 500 000	23 648 000	6 004 280	

Looking at particular shiptypes, the impact of the developments described above becomes even clearer (all figures in cgt; source: World Shipbuilding Statistics, LR).

SHIРТҮРЕ	NEW ORDERS IN 2000	NEW ORDERS IN 2001	NEW ORDERS IN 1 <sup>st</sup> HALF OF 2002
Container ships	7 369 000	4 970 500	519 000
Cruise ships	2 581 000	0	135 000
LNG carriers	1 238 000	2 196 600	517 600
Product/chemical tankers	2 767 900	3 558 100	1 364 900

The market shares developed as follows (based on cgt):

	2000	2001	1 <sup>st</sup> half of 2002
South Korea	36 %	33 %	30 %
EU	19 %	12 %	10 %
Japan	26 %	34 %	37 %
China	7 %	8 %	9 %

Regarding container ships even more tonnage will enter the market in the coming months (reflecting the massive ordering for this shiptype in 2000 and 2001), probably leading to lower freight rates and thus a disincentive to place new orders. The expected economies of scale from ever bigger container ships are now seen to be limited, due to restrictions in ports and the imbalances in cargo volumes on the major trading routes.

Concerning cruise ships the market sentiment is still to some extent suffering from the events of 11 September. Cruise ship operators have responded by shifting cruises to areas closer to the USA (from which most cruise customers still originate), and reducing prices for cruises. Priority clearly lies with filling existing capacity, rather than striving for further fleet expansion. The resulting reduced revenue provides a disincentive for new investments. The on-going discussions about merging some of the biggest cruise operators have also contributed to a reluctance to pursue new investment in this market segment.

Another of the mainstays of world shipbuilding, oil tankers, is suffering from low freight rates. In addition there are now fears regarding military action and terrorist threats to oil tankers in the Middle East, which could have various effects: Increasing oil prices, leading to lower demand for oil shipments (through decreased demand and procurement from sources closer to the main markets, thus lowering the total tonnage-miles) and increased use of other sources (oil by pipelines, alternative forms of energy). Moreover, insurance premiums would sharply increase and drive

operational costs up. This volatile situation makes shipowners reluctant to pursue investment in new ships.

On the other hand, the demand for dry bulk ships in a certain size range has been quite strong, due to increased need for imports of coal and iron ore to China and Japan.

In the segment of product tankers, where recent maritime safety legislation in Europe has triggered the need for replacement of old ships, demand has also remained comparatively stable.

The LNG market has not lived up to some of the optimistic forecasts made in 2000 and 2001 and ordering is well below the projections made then. The Commission, in its fifth shipbuilding report, expressed caution regarding this segment, and although there is a general trend towards cleaner energy and ordering for new ships is still well above the average of previous years, market forecasts are now more conservative.

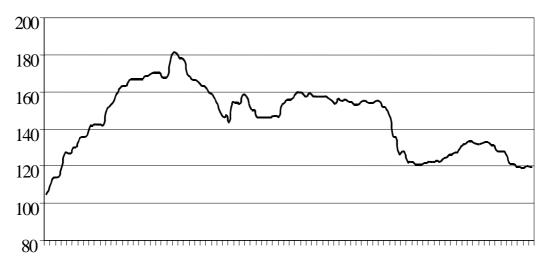
There remains a significant production over-capacity in the shipbuilding sector, estimated to be at least 20 to 30 % above the levels required for the necessary replacement of old tonnage and the accommodation of additional demand stemming from increased sea-borne trade. This over-capacity continues to have a negative effect on prices.

# 2.1.2. Price developments

Ship prices have declined by about 15 % since mid-2001, affecting almost all shiptypes. The biggest drops were seen for container ships in the 3500 TEU range (minus 20 %, comparing June 2001 to June 2002), large bulk carriers (minus 17 %) and large oil tankers (minus 15 %). But also higher value ships saw prices receding across the board (LNG carriers: minus 9 %, small container ships: minus 9 %). It is notable that the market segments most affected were those where Korean yards have their traditional product focus, indicating that the need to fill the large building facilities in Korea leads to fierce competition between the major Korean yards for the few remaining orders, keeping prices locked at a very low level or even indicating a further decline.

The ship price index maintained by the Commission reflects these developments (see graph). It shows that the price recovery in 2001, when ordering was strong, was not sustained and price levels are the lowest for more than a decade.

# Price index for ship newbuildings (1987 = 100)



1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002

# 2.2. Responses to market developments

Shipbuilding is still considered by many nations a strategic industry, which, in their view, they cannot afford to lose, because of trade and defence interests. Therefore, the issue of over-capacities is hardly addressed and various measures are taken in order to maintain shipbuilding capacity despite lower market requirements. In a generalised manner it can be said that market mechanisms only selectively apply to the world shipbuilding industry. The next paragraphs give some indications on the policies pursued in the key shipbuilding regions, in response to the current problematic market situation.

# 2.2.1. *Europe*

EU shipyards have already been forced for a longer time to focus primarily on market segments with a higher value added, where Asian shipbuilders have been less active (passenger ships, specialised and smaller vessels), as they could not match the very low offer prices from Korean yards for standard ships. EU yards face a very difficult situation as the passenger ship market has significantly slowed down and an alternative market segment of similar importance is not in sight. A number of European yards (in Germany, Italy, the Netherlands, Sweden, Norway and Poland) went bankrupt or had to lay off workers (in Denmark, Germany, Finland, the Netherlands, the United Kingdom and Poland) since the date of the Commission's last report. Very few yards have orderbooks stretching beyond 2003/2004.

EU yards are undertaking various measures to improve their competitiveness (increased R&D, product and process innovation, outsourcing and downsizing of their workforce, procurement of hulls for outfitting etc.), but may be running out of time in the face of an almost flat market.

#### 2.2.2. South Korea

Korean yards seem to repeat past practices when facing a declining demand. On the one hand they try to enter new market segments (gas tankers, offshore structures and cruise ships), on the other hand they try to trigger more demand in their traditional market segments (tankers and container ships). Both are done through lowering offer prices, despite significant cost increases in Korean production over the past 12 months. Wages in Korean yards have increased by ca. 6 %, material costs have increased by ca. 5 % (steel, however, is up 10 %), inflation is ca. 8 % and the WON has appreciated by ca. 8 % vis-à-vis the USD. Labour and material costs together account for ca. 90% of total production costs in shipbuilding and the related cost increases are therefore significant.

Due to this a number of Korean yards could be heading for insolvency. Unfortunately, neither the Korean Government nor the shippards themselves seem to consider reducing capacity, e.g. through the closure of non-profitable shipbuilding facilities.

# 2.2.3. *Japan*

Japanese shipbuilding is currently undergoing massive restructuring, bringing together a number of shipyards under the umbrella of a few large groups. The resulting synergies have helped Japanese yards to stay competitive (in particular regarding the series production of bulk carriers), although this is significantly assisted by the fact that ca. 50 % of the order intake comes from domestic demand (currently mainly for bulk carriers). These orders by Japanese shipowners are almost inaccessible to other shipbuilding countries and therefore provide a captive market for Japanese yards.

### 2.2.4. China

Chinese yards enjoy a much lower labour cost base than the other main shipbuilding countries, but still suffer from organisational problems, limited access to technology and delivery delays. Market share of Chinese shipbuilders has continuously increased over the past years (mainly resulting from competitive offers for simple shiptypes) and once the above problems can be overcome, China could become a major player in world shipbuilding. However, there are concerns that shippards are expanded beyond the market requirements and the need to upgrade existing facilities. The Commission will carefully watch these developments and try to engage China in a constructive dialogue on these issues, in the framework of the OECD and bilaterally.

# 2.3. Cost investigations

# 2.3.1. Update of previous cost investigations

In line with previous reports, this report contains an update of all previous cost investigations undertaken by the Commission within its market monitoring exercise. The methodology of these cost investigations has been described in the first two shipbuilding reports and is not repeated here. The approach is continuously refined and results appear to be very close to the real situation.

As shipbuilding projects take significant time to be completed, and actual costs may change until delivery of the vessel, the cost investigations have to be based on forward assumptions. These assumptions are continuously reviewed and results are updated whenever new or better information is received. This is reflected in the table below. The reference to the shipbuilding report in which the particular order is covered should be used to see the details of the order investigated. As the Commission's market monitoring progresses, ship orders previously investigated and now completed can serve to verify the cost modelling. So far, none of the cost investigations has been found to deviate significantly from the factual costs of production.

The abbreviations used refer to the following Korean shipyards:

DHI: Daewoo Heavy Industries

DSME: Daewoo Shipbuilding and Marine Engineering

HHI: Hyundai Heavy Industries

HMD: Hyundai Mipo Dockyard

HHIC: Hanjin Heavy Industries and Construction

SHI: Samsung Heavy Industries

The shiptypes appear as listed by Lloyd's Register.

For container ships the container carrying capacity in TEU (Twenty-Foot-Equivalent-Unit) is indicated, with ships above 5000 TEU falling into the category of the so-called Post-Panamax container ships.

LNG carrier stands for Liquefied Natural Gas carrier.

ULCC stands for Ultra Large Crude oil Carrier, VLCC for Very Large Crude oil Carrier.

The terms Aframax, Suezmax, Panamax and Capesize indicate certain standard dimensions and specifications for tankers and bulk carriers, respectively.

# Comparison of reported order prices and calculated construction prices for selected new shipbuilding contracts (update August 2002)

SHIPYARD	Sніртуре	Owner	CONTRACT PRICE (MIO. USD)	NORMAL PRICE (MIO. USD)	LOSS/GAIN AS % OF NORMAL PRICE	REF. TO SHIP- BUILDING REPORT NO.
Daedong	Product tanker	Seaarland	21,5	25,7	-16 %	1
Daedong	Panamax bulk carrier	Sanama	18,5	26,0	- 29 %	1
Daedong	Chemical tanker	Cogema	24,5	30,2	-19 %	2
Daedong	2500 TEU	EF Shipping	30,0	31,2	-4 %	4
DHI	VLCC	Anangel	68,5	74,2	-8 %	1
DHI	Ferry	Moby	74,3	88,4	-16 %	2
DHI	Panamax bulk carrier	Chandris	22,5	22,8	-1 %	2
DHI	LNG carrier	Bergesen	151,1	164,2	-8 %	3
DHI	ULCC	Hellespont	85,0	93,7	<b>-9</b> %	4
DSME (ex-DHI)	LNG carrier	Exmar	162,0	169,2	-4 %	5
Halla	Panamax bulk carrier	Diana	18,9	31,1	-39 %	1
Halla	3500 TEU	Detjen	38,0	53,0	-28 %	1
Halla	Capesize bulk carrier	Cargocean	32,0	46,2	-31 %	2
Samho (ex-Halla)	Aframax oil tanker	Chartworld Shipping	33,5	41,5	-19 %	4
Samho (ex-Halla)	VLCC	Oldendorff	69,5	90,9	-14 %	5
Samho (ex-Halla)	Suezmax oil tanker	Thenmaris	43,0	55,4	-19 %	5
нні	6800 TEU	P&O Nedlloyd	73,5	81,6	-10 %	1
нні	5600 TEU	K Line	54,3	59,1	-8 %	2
ННІ	LNG carrier	Bonny Gas	165,0	176,8	<b>-7</b> %	2

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нні	5500 TEU	Yang Ming	56,0	63,7	-13 %	2
нні	Ferry	Stena	70,0	88,2	-21 %	4
нні	Suezmax oil tanker	Jebsen	43,0	51,2	-16 %	4
нні	7200 TEU	Hapag-Lloyd	72,0	79,5	<b>-9</b> %	3
нні	Suezmax oil tanker	Athenian Sea Carriers	43,0	49,9	-14 %	3
нні	LNG carrier	Golar	162,6	178,4	<b>-9</b> %	5
HMD	Cable layer	Ozone	37,3	46,8	-20 %	1
HMD	Chemical tanker	Bottiglieri	24,5	26,3	<b>-7</b> %	4
ННІС	6250 TEU	Niederelbe	62,0	66,2	-6 %	3
ННІС	5608 TEU	Conti	58,0	61,0	-5 %	3
ННІС	1200 TEU	Rickmers	19,5	21,3	-8 %	3
Il Heung	Chemical tanker	Naviera Quimica	10,5	13,0	-19 %	2
SHI	5500 TEU	Nordcapital	55,0	68,0	-19 %	2
SHI	3400 TEU	CP Offen	36,0	52,4	-31 %	1
SHI	Ferry	Minoan	69,5	87,9	-21 %	1
SHI	7400 TEU	OOCL	79,7	91,5	-13 %	4
SHI	LNG carrier	British Gas	162,5	176,5	-8 %	5
SHI	5762 TEU	CP Offen	55,0	66,7	-18 %	5
Shina	Product tanker	Fratelli D'Amato	21,7	24,1	-10 %	3

# 2.3.2. New cost investigations

Since the fifth shipbuilding report seven new cost investigations have been undertaken.

These concern the following orders placed in South Korean yards:

- Capesize bulk carrier (series of 3 plus 1 option), 26 250 cgt, to be built by HHI
- Product tanker (series of 6), 19 200 cgt, to be built by HMD

- Product tanker (series of 3 plus 4 options), 24 880 cgt, to be built by STX Shipbuilding Co. (ex-Daedong)
- Product tanker (series of 2 plus 2 options), 24 879 cgt, to be built by STX
- Capesize bulk carrier (series of 2), 26 250 cgt, to be built by Samho Heavy Industries (ex-Halla)
- 2 500 TEU container ship (series of 5 plus 5 options), 18 972 cgt, to be built by HHI
- Liquefied Product Gas carrier (LPG) (plus 1 option), 14 521 cgt, to be built by STX

The results of these cost investigations are summarised below.

Comparison of reported order prices and calculated construction prices for selected new ships (new investigations)

SHIPYARD	SHIРТҮРЕ	Owner	CONTRACT PRICE (MIO. USD)	NORMAL PRICE (MIO. USD)	LOSS/GAIN AS % OF NORMAL PRICE
ННІ	Capesize bulk carrier	Golden Union	36,0	45,2	<b>-20</b> %
HMD	Product tanker	Schoeller	26,0	27,1	<b>-4</b> %
STX	Product tanker	Target Marine	25,5	28,7	-11 %
STX	Product tanker	Byzantine Marine	29,5	36,0	−18 %
Samho	Capesize bulk carrier	Marmaras	36,0	53,6	-33 %
ННІ	2 500 TEU container ship	P&O Nedlloyd	27,5	32,7	−16 %
STX	LPG carrier	Qatar Shipping	30,0	40,1	-25 %

These results confirm the findings from previous reports. Korean yards continue to sell ships at prices below full costs of production. As prices for ships from Korean yards have been lowered further in the reporting period, while costs of production have increased, the gap between contract price and normal price is widening. For the latest investigations this gap is 18 % on average (not weighted), while it was 8 % for the new cost investigations summarised in the fifth report.

The results also confirm that certain yards, such as HMD, operate more carefully than others. It should be noted that Samho (ex-Halla) and STX (ex-Daedong) were among those yards going into receivership after the Asian crisis of 1997/98.

#### 3. CONCLUSIONS

The crisis in world shipbuilding is deepening, with very slow order intake in the major shipbuilding regions in the first six months of 2002. The main reasons are past over-supply, slowing economies around the world and the effects of 11 September. Only Japanese yards currently still manage to fill building slots. However, this is very much helped by domestic demand, in particular for bulk carriers, as has been long-standing practice in this region.

World-wide ordering for new ships in the first half of 2002 was down by almost 2/3, compared to average quarterly figures in 2000, which on the other hand was the best year ever for shipbuilding. In the EU, the situation is even worse, with ordering being down by almost 4/5 compared to the year 2000.

Most affected are container ships and cruise ships, but crude oil tankers and LNG carriers have also seen lower demand. Demand has remained comparatively stable only in the segment of product tankers, due to replacement needs stemming from new EU maritime safety legislation, and in the segment of bulk carriers.

As a result shipyards are running out of work and a number of bankruptcies and layoffs, mainly in Europe, have already occurred.

Prices for new ships have declined further and are now at the lowest level for more than a decade.

Yards in South Korea have further lowered offer prices, despite increases in all major cost factors and a number of Korean yards may find it difficult to meet their financial obligations if order intake is not increased soon.

The Commission's detailed cost investigations for orders placed in South Korean yards confirm the findings from previous reports, namely that ships are offered at prices which do not cover the full costs of production. The investigations show that the gap between offer prices and calculated normal price is again widening.