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**THIRD REPORT FROM THE COMMISSION TO THE COUNCIL
ON THE SITUATION IN WORLD SHIPBUILDING**

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EXECUTIVE SUMMARY

Under Council Regulation 1540/98 establishing new rules on aid to shipbuilding the Commission is required to report on the situation of the world shipbuilding market. The first report (COM(1999) 474 final) was presented to the Council on 9 November 1999. The second such report (COM(2000) 263 final) was presented to the Council on 18 May 2000. Both times the Council requested the Commission to follow certain lines of action to address the situation. This is the third such report. It analyses the latest developments in the world shipbuilding market and assesses the results from the actions undertaken in response to the Council's requests.

The world shipbuilding market continues to face serious difficulties. Supply still outstrips demand and there are few indications that this situation may improve. Despite increased ordering activity in the first 8 months of this year due to favourable market conditions in liquid bulk shipping (crude oil and oil products), and to the development of new innovative ship concepts (very large container ships), ship prices have not recovered from the massive drop since 1997, although there are some signs of improvement compared with the low levels at the end of 1999. Prices for non-tanker shiptypes have (with some limited exceptions) continued to decline over the past 12 months whereas tankers have seen slight price increases of 5-10%. The on-going depression in prices is caused by low offer prices from Korean yards.

South Korea is now the biggest shipbuilder in the world. Its shipyards took more than 40% of all new orders in the first 8 months of the year 2000 (Japan: 25%, EU + Norway: 16%, Rest of the World: 19%) in terms of cgt (compensated gross tonnes). In the important segment of containerships Korean yards took 60% of all new orders in this period (Japan: 4%, EU + Norway: 8%, Rest of the World: 25%). For the very large containerships ("Post-Panamax") which are starting to dominate the liner shipping industry, Korean yards took 82% of the market (Japan: 4%, EU + Norway: 0%, Rest of the World: 14%). On the other hand EU yards have continued to dominate the high value cruise ship market.

The detailed cost investigations for shipbuilding orders reported in the two previous reports have been updated in order to factor in assumptions on inflation and to reflect new information received from Korea on the financial situation of shipyards. Under these assumptions the calculated losses taken by Korean yards are between 4% and 39% of the actual building costs (with the lower figure relating to a shipyard which has massively reduced its debts through write-offs). The average loss for all investigated orders is estimated at ca. 20%. In addition seven more orders were investigated since the last Commission report, mainly concerning shiptypes which are typical for the portfolio of EU yards. The results of these investigations indicate that Korean yards (with some exceptions) continue to take orders at prices which are not covering all costs. Nearly all market segments are targeted by Korean yards, leaving mainly smaller domestic orders and highly specialised tonnage to EU yards. Therefore, this third report by the European Commission on the situation in the world shipbuilding market confirms the findings from the Commission's first and second reports.

All lines of action to address the problem (as requested by the European Council of Ministers in its meetings of 9 November 1999 and 18 May 2000) are currently being pursued (see chapter 4). In particular, strenuous efforts have been made by the Commission to secure binding commitments from Korea in relation to its non-intervention in the financing of shipbuilding activities. After several rounds of consultations, the European Commission and the Korean Government came to an agreement in the form of "Agreed Minutes relating to the World Shipbuilding Market" which was signed on 22 June 2000. More talks were held after the

signing of the agreement in order to implement the principles laid down in the agreement. However, no common approach to the problems could be found and the bilateral talks with Korea have therefore ended without results.

The evidence gathered within the framework of the market monitoring undertaken by the European Commission has helped the EU industry to compile sufficient elements for a complaint under Council Regulation (EC) No 3286/94 (the Trade Barriers Regulation - TBR). Industry has filed such a complaint with the Commission on 24 October 2000. The Commission will continue with its market monitoring exercise.

As the Commission sees a certain role for the IMF with regard to the industrial restructuring in Korea, contacts to the IMF were established in order to point out the effects that the non-market behaviour of Korean shipyards could have. The IMF has looked into the matter, but states that it has no mandate to deal with sectoral aspects. The Commission continues to inform the IMF about the developments in order to ensure that the accumulated losses of Korean shipyards are neither directly nor indirectly cleared by the Korean Government and market principles are fully applied.

The Commission has also examined the current aid arrangements under Council Regulation 1540/98 for EU yards concluding that operating aid has not provided a solution to the Korean problem.

In the light of the foregoing, it is proposed that the following actions be pursued:

- the Commission to continue with its monitoring of the market situation;
- the Commission to examine industry's complaint under the TBR as rapidly as possible, and, if accepted, to pursue this rigorously with a view to a possible WTO action;
- in parallel, the Commission to remain open to eventual proposals from Korea that would meet the EU's concerns;
- the Commission and the Member States to pursue efforts to establish a level international playing field for the shipbuilding industry in the OECD;
- the Commission and the Member States to continue to encourage the IMF to ensure that the restructuring of Korean shipyards is closely monitored and assessed;
- the Commission to continue to work closely with the industry on competitiveness issues;
- in accordance with the provisions of article 12 of Council Regulation (EC) 1540/98 and without prejudice to the actions outlined above, the Commission shall as soon as possible examine the possibilities to propose measures to address the problem.

1. INTRODUCTION

This report by the Commission on the situation in the world shipbuilding market is the third in a series, being a follow-up and extension of the first and the second reports presented to the Council of Ministers on 9 November 1999 as COM(1999) 474 final and on 18 May 2000 as COM(2000) 263 final, respectively. Shipbuilding, in the terms of this report, covers the production of merchant vessels only; naval vessels, offshore installations or small crafts are not considered here.

The third report is in continuity with the approach and the findings of the first two reports. Therefore certain elements of the earlier reports are not repeated. Such elements refer to the longer term supply and demand analysis, general remarks on the nature of shipbuilding contracts and on the underlying study works, the analysis of the financial sector in South Korea, details of certain investigated shipyards and the description of the applied methodology. However, the information contained in the first two reports is updated where appropriate and essential elements are repeated where necessary. This concerns in particular the detailed cost investigations for shipbuilding orders awarded to Asian yards as the underlying cost model is re-run each time new or better information is obtained.

This third report from the Commission updates information on market shares and price developments. Moreover, new cost investigations for orders placed in South Korean yards were undertaken since the last report and the results are presented here. The report also gives an assessment of the outcome of the various actions requested by the Council.

2. GENERAL MARKET ANALYSIS

As regards the analysis of the existing gap between supply and demand in shipbuilding capacities little progress has been made since the first two reports. The three major shipbuilders' associations AWES (Association of European Shipbuilders and Shiprepairers) and SAJ (Shipbuilders' Association of Japan) on the one hand, and KSA (Korean Shipbuilders' Association) on the other, do not agree on the extent of this gap, and predict future demand and supply at different levels. However, both sides agree that the gap between supply and demand will widen in the coming years due to increased yard productivity, the conversion of some repair yards to newbuilding, and the entrance into the market by new competitors such as the People's Republic of China.

The timing of the impact on demand of the forthcoming new EU legislation and IMO rules on tankers and whether the additional demand will benefit EU yards remains to be seen.

The total new building capacity world-wide currently amounts to ca. 21 Mio. cgt (compensated gross tonnes, a measurement combining ship size and shiptype-specific building effort; source: OECD and AWES) and is expected to grow to ca. 24 Mio. cgt by 2005. Total new shipbuilding production was 17,5 Mio. cgt in 1999 after 18,0 Mio. cgt in 1998 and 17,1 Mio. cgt in 1997 (source: Lloyd's Register of Shipping) which indicates that demand is significantly lower than supply and a significant increase in newbuilding prices due to higher demand cannot be expected, at least in the short term.

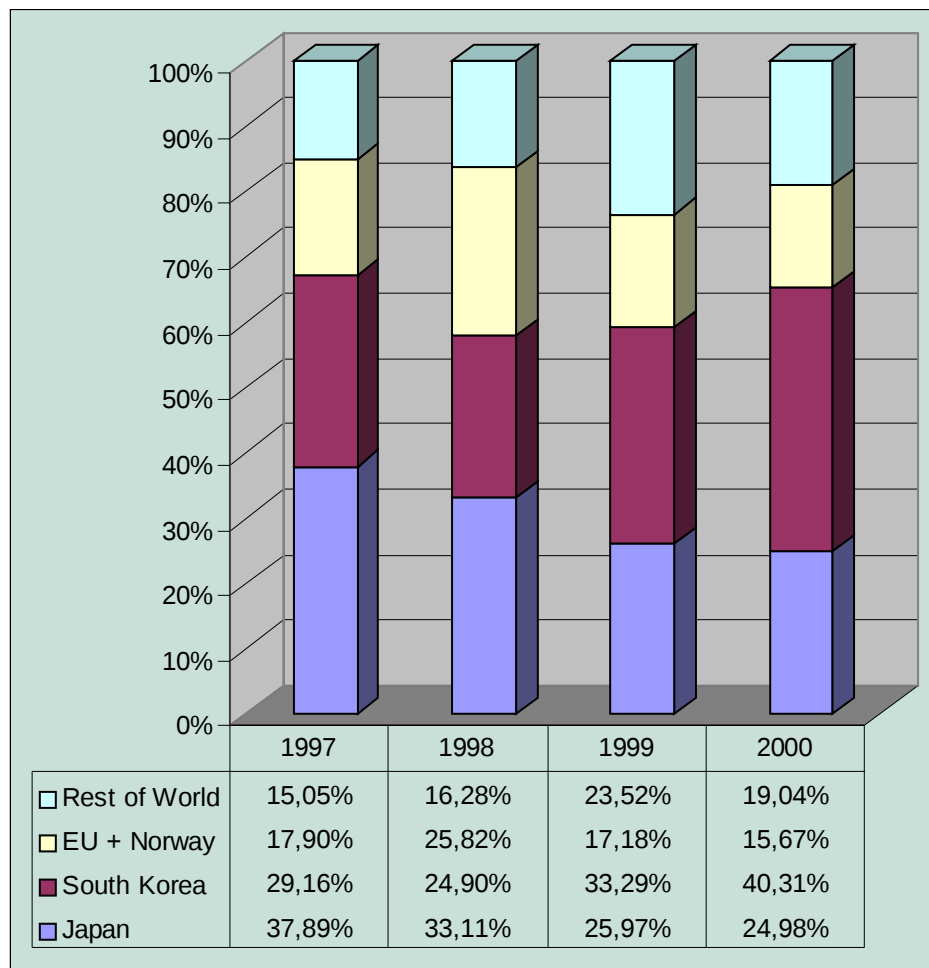
2.1. Market shares

To assess current market movements, figures on new orders are most appropriate to reflect the actual situation in the market. Figures on orderbooks and completions are useful to analyse the longer-term developments in the industry, but these figures are based on orders placed in the past. It should be kept in mind that shipbuilding has long lead times of up to three years. In particular figures on current completions can be misleading as these deliveries reflect orders placed in 1998 when Korean shipyards were struggling due to non-availability of ship financing from domestic financial institutions. Orderbooks and completions in the years 1997 to 1999 were analysed in the Commission's second report and, as the figures for the full year 2000 are not available yet, this particular analysis is not updated here.

Shipbuilding statistics often refer to gross tonnes or production value. Both figures contain a certain bias, although in opposite directions. While gross tonnes describe shipbuilding in terms of physical volume and therefore indicate a larger share for those regions that focus on the production of tankers and bulk carriers, production value would tilt the balance in favour of shipbuilding regions that produce sophisticated ships such as cruise vessels, ferries and specialised tonnage. In order to avoid bias in either direction the analysis contained in this report is based on cgt as a measurement that most appropriately reflects shipbuilding contents.

The following graph provides information on the development of new orders since 1997, based on cgt and per major shipbuilding region. It is followed by a short analysis.

Fig. 1 - Market shares in new orders in percent and based on cgt, 1997-2000 (*)



Source: Lloyd's Register of Shipping

(*) Figures for the year 2000 cover the first 8 months.

The graph shows the sharp expansion of Korean market share in new orders since the Asian economic crisis in 1997. The year 1998 is an exceptional one as Korean yards had problems to compete for orders due to the non-availability of ship financing from domestic financial institutes. World ordering activity has been strong in the first six months of the year 2000, with almost double the average monthly intake as compared to 1999, totalling 10.895.762 cgt. In terms of cgt, 74% of these "additional" orders were placed in Korea. As a result, order books are full in Korea (partly up to 2004) which allows yards to target higher price levels (at which speculative ordering ceases). Moreover, demand appears now partly satisfied. Korea achieved a global market share of ca. 40% in the first 8 months of 2000, up from ca. 33% in 1999. Japan stood at 24% and the EU at 16%. This expansion in market share has mainly been at the expense of Japan, though the EU also lost market share also. EU yards have almost completely abandoned the construction of low value standard tankers and bulk carriers and they have lost a large amount of their share of the containership sector. They have become increasingly reliant on passenger ships and specialised tonnage.

Booming production of cruise vessels with their comparatively high cgt values has stabilised the overall situation of the EU shipbuilding industry. However, currently only 10 EU yards are active in this field and the number of yards which could easily turn to cruise ship construction is limited by technical and commercial constraints. Moreover, Korean and Japanese yards are actively pursuing cruise ship orders (with Japan having already taken two orders for large cruise ships). Recent orders for passenger ferries placed in Korea indicate that Korean yards are already building up the know-how required for the construction of large passenger ships, and the step from sophisticated ferries to cruise ships should become possible in the medium term. The above analysis seems to indicate that EU yards overall still operate in a comparatively stable business environment with relatively good orderbooks, although the situation in particular Member States and for particular shipyards may be very different, depending on their product portfolio. Most threatened are small and medium sized yards that have a focus on the production of merchant cargo ships such as container ships, product tankers or gas carriers. These yards typically do not have the option to compensate a loss in market share through the construction of large cruise ships or navy contracts, even if their general competitiveness in terms of productivity may be good. Recent developments indicate that bigger shipyards are starting to face similar problems, especially when certain strategic orders cannot be secured and other market segments have become inaccessible due to Korean competition.

2.2. Price developments

Consistent monitoring of all newbuilding prices is rarely undertaken in this industry. This is due to the nature of shipbuilding contracts which have to be seen as large one-off engineering projects where many parameters determine the costs and the price. These parameters include vessel specification, delivery times, length of series (if any), terms of financing etc. Therefore prices are often reported with reference to certain standard shiptypes as given below. This information is mainly based on input from ship brokers who may not always see the entire market and who may have an interest in sending positive (or negative) signals to the market. Thus this kind of price information needs to be used with care. The Korean Government, in its negotiations with the Commission under the “Agreed Minutes”, based its assessment of the situation in world shipbuilding on these figures, but these results give an incomplete picture as explained below.

Table 1 - Evolution of prices for newly built ships (end-year prices in Millions of US Dollars)

	1997	1998	1999	08/2000
Panamax Container Carrier	53,0	42,0	38,0	41,0
1.100 TEU Container Carrier	20,0	18,0	17,5	18,0
Very Large Crude Oil Carrier (VLCC)	83,0	72,5	69,0	75,5
Suezmax Tanker	52,0	44,0	42,5	51,0
Capesize Bulk Carrier	40,5	33,0	35,0	39,0
Panamax Bulk Carrier	27,0	20,0	22,0	23,0
Liquid Natural Gas Carrier	230,0	190,0	165,0	175,0
Twendecker 15.000 dwt	16,5	14,0	13,0	13,8

Source: Clarkson World Shipyard Monitor

Table 2 - Evolution of prices for newly built ships (annual changes in percent)

	1997/1998	1998/1999	1999/2000	1997/2000
Panamax Container Carrier	-20,75%	-9,52%	7,89%	-22,64%
1.100 TEU Container Carrier	-10,00%	-2,78%	2,86%	-10,00%
Very Large Crude Oil Carrier (VLCC)	-12,65%	-4,83%	9,42%	-9,04%
Suezmax Tanker	-15,38%	-3,41%	20,00%	-1,92%
Capesize Bulk Carrier	-18,52%	6,06%	11,43%	-3,70%
Panamax Bulk Carrier	-25,93%	10,00%	4,55%	-14,81%
Liquid Natural Gas Carrier	-17,39%	-13,16%	6,06%	-23,91%
Twendecker 15.000 dwt	-15,15%	-7,14%	6,15%	-16,36%

Looking at the prices for these important shiptypes in the years 1997 to 2000 it is clear that the increased demand from 1998 to 1999 and the comparatively high number of orders in early 2000 had only a limited positive impact on prices. On (numerical) average, prices for new ships are still ca. 13% below 1997 levels and now are only heading back to 1998 levels. Oil tankers and certain types of bulk carriers have seen a strong upward trend in prices. The reasons for this movement in prices lie in the strong demand for transport capacity allowing higher freight rates and thus triggering orders for newbuildings. With limited availability of building slots for early delivery in Korean yards and EU yards not competing at these still very low price levels, owners need to pay a premium compared to 1998 and 1999. Moreover the market has started to anticipate the impact of the forthcoming new EU legislation and IMO rules on tankers which will limit the use of older tonnage. A currently good market for smaller tankers and the fear that, when the legislation has come into force, prices will be significantly higher, has triggered demand with the result that yards have been able to ask higher prices for these shiptypes. Where Korean yards are still trying to conquer market share and where intra-Korean competition is fierce, e.g. in the segments of large container ships and gas carriers, prices show, according to Clarkson World

Shipyard Monitor, only a limited upward trend and are still more than 20% lower than before the Asian economic crisis. It should be noted that the price for LNG carriers given by Clarkson (175 Mio. USD by the end of August 2000) is not supported by the Commission's own investigations: recent orders for this shiptype placed in Korea were priced at 152 and 165 Mio. USD, respectively. As only a limited number of LNG carriers are produced each year (with some years seeing no construction at all) the actual price level needs to be seen closer to the 1999 figure given by Clarkson.

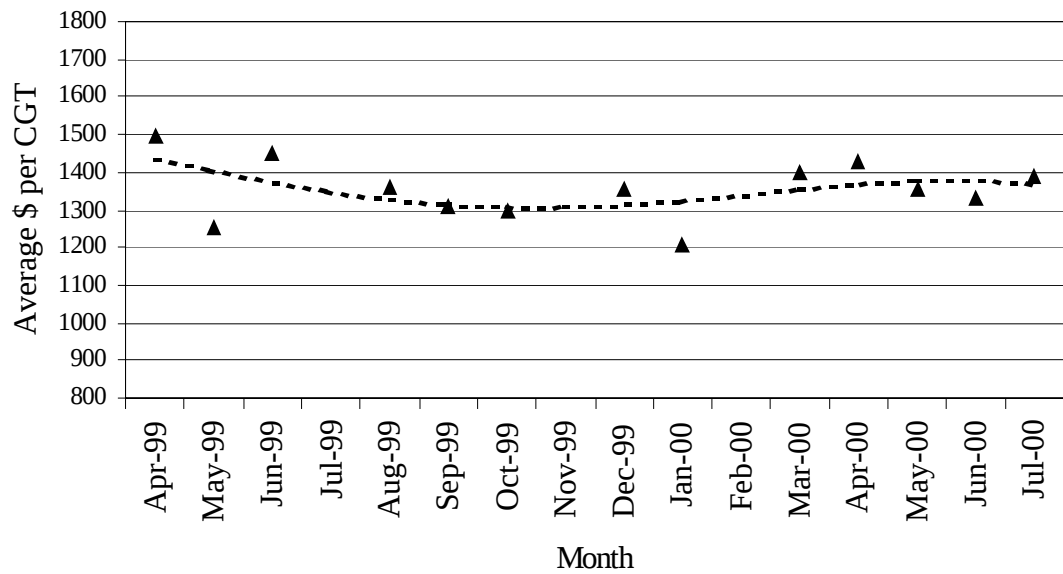
The Commission has doubts about the validity of the above approach as suggested by the Korean Government. Three key reasons make the above information unsuited for a proper assessment of price developments.

- Very often prices for individual contracts, even for the same shiptype, are not directly comparable. Series construction, different technical specifications or financing arrangements have a strong influence on prices and price indications per shiptype will not give a complete picture of actual price levels.
- The list of shiptypes used by Clarkson as a reference is restricted and does not include information on certain important shiptypes such as Post-Panamax containerships.
- The current reporting of prices for selected shiptypes provides only a snapshot picture. Long term analysis of price trends or the assessment of the pricing practices of individual yards is not possible with this method.

In order to deal with these shortcomings a separate analysis of price developments is being undertaken by the Commission, comparing price levels in Korea per shiptype and per shipyard. The methodology used is to establish a "base price" which is the average price level for contracts taken over the period April 1999 to April 2000 and compare it to the average of contract prices since April 2000 (when the "Agreed Minutes" with Korea was initialled). The underlying data set currently contains prices for ca. 250 orders placed in Korean yards. Prices are measured in USD/cgt. This analysis should indicate how far individual Korean yards have raised prices and, if they did, to which shiptypes this applies.

The overall price trend for all Korean yards is given below.

Fig. 2 - Price trend for all South Korean shipyards combined



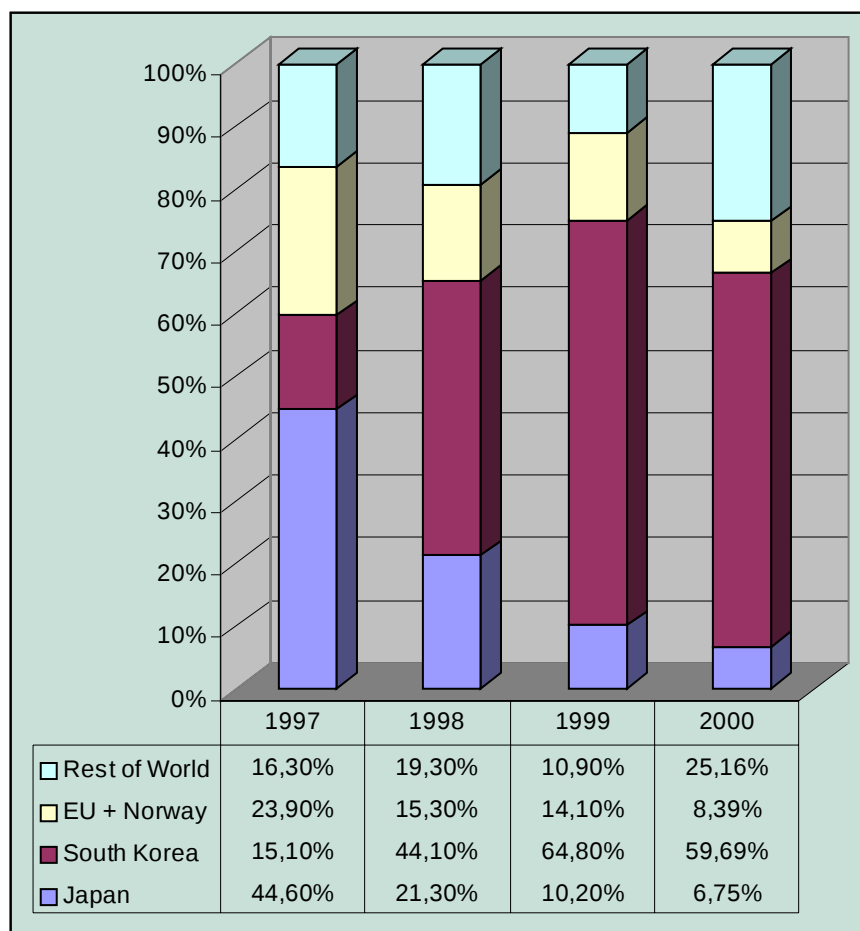
It can be seen that prices are recovering from the low point in late 1999, having increased by around 6% on average, but progress is very slow and current prices do not reach the level of spring 1999.

Looking at prices per shiptype the statements made further above are confirmed: Tankers and bulk carriers benefit from a healthy transport market, and the subsequent demand for new ships has driven up prices (although this effect is more pronounced in the case of tankers). Prices for container ships, on the other hand, increased in the first half of 2000, but have since fallen back somewhat, partly because freight rates have not rebounded as is the case with liquid bulk cargo, and the growth in vessel size provides a new economy of scale which allows companies to operate at comparatively low freight rates. All major Korean yards are targeting this market segment as they see it as more profitable than the construction of tankers and bulk carriers. This intra-Korean competition has blocked any sustained upward trend in prices for container ships. The general pricing behaviour of the major Korean yards is heterogeneous as they find themselves in different financial situations. The continuous need to attract orders may be more urgent for some, leading to lower prices for specific important orders.

2.3. The market segment of containerships

As discussed in the first two reports, container vessels represent the largest market segment in commercial shipbuilding in terms of cgt and container ships have been a major product of Japanese and EU yards in the past. The first report also stated that Korean yards have made significant inroads into the market for container vessels since 1997. Currently the situation in this particular market segment presents itself as follows:

Fig. 3 - Market shares in new orders for containerships in percent and based on cgt, 1997-2000 (*)



Source: Lloyd's Register of Shipping

(*) Figures for the year 2000 cover the first 8 months.

South Korea has consolidated its dominant position in the building of containerships. The group of "others" which in this segment is represented by countries such as China, Taiwan and Poland has come back to some extent, mainly with the construction of smaller "feeder" containerships. The EU position seems to weaken constantly in this market segment, even with the significant decrease in the value of the euro against the dollar since January 1999. As the Yen has seen a significant appreciation in the past year this has added to the problems encountered by Japanese yards.

Korea dominates the segment of the very large containerships (Post-Panamax) which are rapidly becoming the standard vessel for inter-continental liner shipping. Post-Panamax containerships represented 65,5% (in cgt) of all containership orders placed in the first 8 months of 2000. This shiptype was invented in Europe in 1988 but the complex global logistics required to build transport services based on these large vessels (e.g. extension of port facilities, waterways and hinterland connections) have only made it possible now to bring a great number of vessels into operation. Consequently ordering for this new shiptype has been very dynamic in 2000 with new orders for 85 vessels of which 70 orders, i.e. the equivalent of 82% of the total, went to Korean yards. Japan took 4% of orders for Post-Panamax containerships while EU

yards did not attract any orders, although some EU yards claim to have specialised in this shiptype. The rest of the world share was 14%.

Operating very large containerships with a capacity of up to 8.000 TEU (Twenty Feet Equivalent Unit, i.e. a standard container) between major hubs requires supporting “feeder” services which use smaller containerships with a capacity between 200 and 2.500 TEU to connect minor ports. As Korean yards are neither specialised in these smaller ships nor do they currently have short or mid-term building capacity available, orders for these vessels have recently gone to some EU and Polish yards. Although this is a positive development for the shipyards involved, it needs to be kept in mind that these orders are a “spill-over” from the construction of the very large vessels and they do not match the volume and the value of the Post-Panamax orders.

3. DETAILED MARKET MONITORING AND ANALYSIS

In order to collect the necessary data, the Commission has recourse to consultants whose ongoing study has defined a cost breakdown model, including all relevant cost components both of the direct ship production and the shipyard in general. The model is based on cost elements covering direct costs (materials, labour, equipment, etc.) and indirect costs (financing of the ship and of the production equipment, overhead, insurance, etc.). The calculated building price also includes a 5% profit margin. More details of the cost model can be found in Annex I of the first report.

As the study develops, additional information is gathered and used to validate previous cost investigations. Consequently, the 18 orders placed in Korea covered in the first two reports have been recalculated and the updated findings are given below. As already stated in the first report all parameters are based on a prudent approach to ensure that calculated minimum costs for particular projects cannot be challenged. The updated analysis now includes assumptions on inflation. With orders taken now but executed in the coming two to three years it is considered normal business practice to assess future costs at the time of building up to delivery.

3.1. Update of previous investigations

In the context of report COM(1999) 474 final nine orders placed at South Korean shipyards were investigated. In addition to these orders, 13 more orders have been analysed for the second report COM(2000) 263 final. Nine of these orders were placed at six different South Korean yards, four orders were placed at four yards in the People's Republic of China. The Commission ensured a balanced selection of cases while taking into account the overall objective of the exercise, the relative urgency of the matter, and the availability of meaningful data for comparison. Not all of the selected projects are confirmed orders and in some cases the financing may not yet be in place. This could lead to higher or lower order prices, depending on the particular situation. The Commission is, however, convinced that the information entered into the analysis is at present the best available.

The following table summarises the updated findings for the above 18 orders placed in Korea:

Table 3 - Comparison of order prices and calculated construction prices for selected new ships (update)

Shipyard	Shiptype	Owner	Contract price (Mio. USD)	Current costs		Inflated costs	
				Normal price (Mio. USD)	Loss/gain as % of normal price	Normal price (Mio. USD)	Loss/gain as % of normal price
Daedong	35.000 dwt tanker	Seaarland	21,5	24,6	-13%	25,8	-17%
Daedong	Panamax bulker	Sanama	18,5	24,9	-26%	26,1	-29%
Daedong	46.000 dwt chemical tanker	Cogema	24,5	28,9	-15%	30,1	-19%
*Daewoo	VLCC	Anangel	68,5	71,5	-4%	73,6	-7%
*Daewoo	Ferry	Moby	80,0	85,8	-7%	89,9	-11%
*Daewoo	Panamax bulker	Chandris	22,5	22,1	+2%	23,5	-4%
*Halla	Panamax bulker	Diana	18,9	29,6	-36%	31,0	-39%
*Halla	3.500 TEU	Detjen	38,0	50,4	-25%	52,8	-28%
*Halla	Capesize bulker	Cargocean	32,0	44,7	-28%	45,8	-30%
*HHI	6.800 TEU	P & O Nedlloyd	73,5	80,2	-8%	81,0	-9%
*HHI	5.600 TEU	K Line	54,3	57,2	-5%	59,3	-8%
*HHI	LNG carrier	Bonny Gas	165,0	171,4	-4%	182,5	-10%
*HHI	5.500 TEU	Yang Ming	56,0	62,4	-10%	64,6	-13%
Mipo	Cable layer	Ozone	37,3	45,3	-18%	46,8	-20%
Il Heung	3.700 dwt chemical tanker	Naviera Quimica	10,5	12,3	-15%	13,0	-19%
Samsung	5.500 TEU	Nordcapital	55,0	69,2	-21%	71,5	-23%
Samsung	3.400 TEU	CP Offen	36,0	56,2	-36%	59,2	-39%
Samsung	Ferry	Minoan	69,5	90,7	-23%	94,9	-27%

(*) These orders were also recalculated after new information on the debt situation of the companies was received.

It should be noted that in no case has the model concluded that any of the contracts examined has been priced at an economic level, that is to say covering direct costs, plus an appropriate contribution to overhead costs, plus an appropriate contribution to debt servicing (i.e. repayment of principal plus interest), plus an element of profit.

In a number of cases, prices have also failed to reach the break-even level (i.e. the normal price excluding profit). On average the losses taken by Korean yards with regard to these orders are ca. 20% of the actual building costs, when inflation is factored in. Some orders may be close to profitability, but these concern shipyards that have been able to reduce their debts, either through the issuing of new shares (HHI) or through debt restructuring (deferred repayments, moratoria on interest, write-offs, debt-equity swaps) as it is the case with Daewoo and Halla/Samho. The update of the cost investigations does not mean that the Commission accepts the new debt situation as such, in terms of its compatibility with WTO provisions, as creditors to Korean yards are mainly government-controlled financial institutes and the public authorities in South Korea also played a significant role (and continues to do so) in the workout programmes for ailing yards. However, in line with the methodology of

the cost model changes in the debt situation of yards are recognised and factored in, e.g. debts written-off are not included in the cost calculations.

3.2. New investigations

Since the Commission's last report more detailed cost investigations for orders placed in Korean yards were undertaken. The aim of these investigations was to cover as much of the Korean shipbuilding industry as possible, looking at more companies and specific orders that would have been of interest to EU yards. The following orders were investigated:

- 6.250 TEU containership (series of 4), 45.500 cgt, to be built at Hanjin Heavy Industries & Construction Co. Ltd. (HHIC);
- 5.608 TEU containership (series of 2), 43.225 cgt, to be built at Hanjin Heavy Industries & Construction Co. Ltd. (HHIC);
- 1.200 TEU containership (series of 8), 11.250 cgt, to be built at Hanjin Heavy Industries & Construction Co. Ltd. (HHIC);
- 7.200 TEU containership (series of 7), ca. 55.000 cgt, to be built at Hyundai Heavy Industries;
- Liquefied Natural Gas (LNG) carrier, 71.250 cgt, to be built at Daewoo Heavy Industries;
- Suezmax tanker (series of 2), 36.000 cgt, to be built at Hyundai Heavy Industries;
- Product tanker (series of 2), 20.800 cgt, to be built at Shina Shipbuilding.

The following table summarises the findings for the above seven orders.

Table 4 - Comparison of order prices and calculated construction prices for selected new ships (new investigations)

Shipyard	Shiptype	Owner	Contract price (Mio. USD)	Normal price (Mio. USD)	Loss/gain as % of normal price
HHIC	6.250 TEU	Conti	62,0	62,7	-1%
HHIC	5.608 TEU	Conti	58,0	59,1	-2%
HHIC	1.200 TEU	Rickmers	19,5	20,4	-4%
HHI	7.200 TEU	Hapag-Lloyd	75,0	81,0	-7%
HHI	Suezmax tanker	Athenian Sea Carriers	43,0	50,8	-7%
Daewoo	LNG carrier	Bergesen	151,1	148,3	+2%
Shina	Product tanker	Fratelli D'Amato	21,7	24,1	-10%

The above investigations for orders placed at HHIC are the first undertaken for this particular yard. HHIC is a public company and has been quoted on the Korean Stock Exchange since 1956. It is an integral member of the Hanjin Group and is active in

shipbuilding, ship repair, construction, plant engineering and logistics engineering. In general HHIC is considered a reasonable operator who has not followed other yards' strategy of massive expansion without regard to the market situation. Therefore it does not come as a surprise that this yard offers prices which appear to be in line with actual construction costs (also when inflation is factored in). According to the cost model the orders taken by HHIC would not allow for a profit but the break-even level is reached.

The Hapag-Lloyd order at Hyundai and the LNG carrier order at Daewoo were chosen for detailed cost investigations because orders for vessels of these types should be within reach of EU yards and there were some initial indications that injury to EU yards may have occurred. Both orders had to be re-calculated after new information on the companies' debt situation was received. The massive decrease in debts has changed the picture: Before the debt restructuring the normal price was calculated as 92,4 Mio. USD for the containership order at HHI and as 171,0 Mio. USD for the gas carrier order at Daewoo. This would have meant a calculated loss of 19% and 12%, respectively. As already stated above, the update of the cost investigations does not mean that the Commission accepts the new debt situation as such.

The cost investigation for the product tanker order at Shina is the first undertaken for this particular yard. Shina is one of the smaller Korean yards with employment of 350 people. However, the yard has become very active in the production of handysize product tankers for European customers while in the past 75% of all deliveries from Shina were for Korean customers. Shina did not reach the same level of indebtedness as other yards in Korea and financial costs to be borne by this project are therefore lower. Still the offer price does not fully cover all costs when reasonable assumptions for inflation are factored in and it is concluded that the order will generate an operating loss.

3.3. Impact on EU yards

As in the case of the first two reports on the situation in world shipbuilding, a negative impact on EU yards may be assumed when the order to the Korean yard is made at a price which does not cover costs and which is low enough to keep the order out of reach of bids from EU yards that would otherwise have been competitive. This can be particularly true if the owner has traditionally placed orders with EU yards. However, even where Asian competitors had significant market shares in the past the depressing effects of this pricing policy could have a negative effect on the market in general and, on this basis, the price may be perceived to be injurious.

Of the newly investigated orders placed in Korea, four can be seen to have an impact on EU yards. The three orders at HHIC appear to be priced at an economic level and thus injury to EU yards cannot be assumed. The key elements for the four cases that could involve injury to EU yards are as follows.

- The 7.200 TEU container ship order at Hyundai Heavy Industries has been placed by a major European container line which will also operate the ship later. It is one of the Post-Panamax container ships for which Korean yards actively tender because these orders are seen as more profitable than orders for bulk carriers or tankers. As this particular investigation shows it is difficult to see this order being profitable.

- LNG carriers are highly specialised and expensive vessels. Considerable know-how is required for the construction of the cargo tanks and the ship's machinery, and EU yards have been a key player in this market segment in the past. Looking at the period 1990 to 1998, 63% of all LNG carrier orders were placed in Japan, with the EU holding 27% of the market and Korea standing at 10%. In 1999 the LNG carrier orderbooks showed 43% for Japan and 57% for Korea. No orders were placed in the EU. This is another example of Korea making inroads into a high-value market segment previously held by Japan and the EU and, although the order could be marginally profitable when the changed debt situation at Daewoo is taken into account, the net result is the erosion of another EU market niche.
- The Suezmax tanker from HHI has an offer price that is below what should be regarded as an economic price. Although EU yards have basically stopped to tender for tanker contracts, this order contributes to the continued price erosion in the market and it indicates that the reported price increases for this type of tankers are not consistent.
- The order for two product tankers at Shina can be seen as injurious to EU yards for three reasons: (a) the owner has in the past placed orders in EU yards and has now completely shifted to Asian yards in China and Korea; (b) the low offer price contributes to the overall price erosion; (c) the potential demand for this type of tanker has significantly increased due to the forthcoming legislation in the EU on maritime safety. The additional demand shown already today has so far not benefited EU yards as orders are almost entirely placed in Asian yards.

4. FOLLOW-UP TO THE COUNCIL CONCLUSIONS OF 9 NOVEMBER 1999 AND 18 MAY 2000

The Industry Council took note of the Commission's reports during its meetings on 9 November 1999 and 18 May 2000. It called on the Commission, Member States and industry to pursue a number of lines of action for which the intermediate results are reported below.

- After the coming into force of the “Agreed Minutes” with Korea on 22 June 2000, a first round of consultations was held in Korea on 18 and 19 July 2000. The Korean Government was well prepared to answer the Commission's questions and showed a constructive attitude. The documents provided (shipyard accounts, accounts of financial institutions, legal decisions affecting the shipbuilding sector) are currently being studied by the Commission. A key element appears to be that Korean yards have been able to shed or restructure their debts, a development which eases their current financial burden and allows them to maintain very low offer price levels. The Government has played an important role in this development, but details are difficult to establish. In addition and in line with its commitments on transparency, laid down in the “Agreed Minutes”, the Korean Government was able to convince two Korean yards (Hyundai and Daewoo) to allow a visit of Commission anti-dumping experts in order to look closer into two newbuilding orders selected by the Commission and by industry. The visit took place in late September but results were inconclusive. Whereas Hyundai did not fully co-operate in the investigation, claiming business confidentiality, Daewoo showed a constructive attitude. The Commission has expressed its dissatisfaction about this lack of transparency to the Korean Government.
- A second round of consultations under the “Agreed Minutes” took place on 28 and 29 September in Brussels, focussing, among others, on the issue of pricing. The Korean side indicated that the authorities would establish a price screening mechanism in Korea. If individual prices were found to be too low, financing for the shipbuilding projects in question would be denied. The Korean Government explained that they would ask Government-controlled banks to compare offer price and “international price” to assess the economic viability of shipbuilding projects. The Commission made clear that this approach was a nonsense in that it would basically mean a comparison between Korean price levels as Korea is the price leader internationally. Such a concept would not be acceptable to the EU. Instead, comparison would have to be made between offer price and “normal value” as defined by WTO and accepted by Korea within the “Agreed Minutes”. Only through this approach, could price levels recover and a level playing field could be brought back. Moreover, improvements in the market concerning prices would have to materialise quickly. The Korean Government declared that such a bottom-up cost analysis per project was impossible, not least due to a lack of human resources in the KEXIM Bank. As the Commission did not see any further room for manoeuvre, the talks ended without result. Following an encounter of the Trade Commissioner with the Korean Trade Minister, the Commission again sent a delegation to Korea for meetings on 19 and 20 October 2000 in order to clarify a new Korean proposal, but neither the Korean Government nor representatives

from the major Korean yards offered a suitable approach. On 27 October, the Korean Government informed the Commission that the efforts undertaken by the Government to convince shipyards to accept the EU approach failed. No solution has been offered to resolve the bilateral dispute.

- As a result of this failure the EU industry has now officially filed a complaint under the Trade Barrier Regulation. A TBR complaint takes up to 45 days to examine and 5 to 7 months for investigations under the regulation, with another 18 to 24 months for a WTO panel to come to a ruling (if the complaint is accepted by the WTO). Japan and the US shipbuilders have indicated that they may support a complaint to the WTO. In the case of the most positive outcome, i.e. a WTO ruling allowing countermeasures, discussions would have to follow on the question to which products countermeasures should be applied as ships are not subject to any tariff. This gives a long timeframe.
- Concerning the contacts with the IMF, in a letter of 27 July 2000 to the Commission the IMF gave a positive assessment of the situation in Korea, in line with the self-assessment by the Korean Government. The IMF restates that it has no insight into sectoral activities. It admits that, in the case of Halla yard, “there was no alternative but to accept orders for minimum prices which covered labour and other operating costs of its shipyard facilities. This was deemed necessary to keep the company in operation as Halla’s customers were otherwise reluctant to honour existing contracts with a company under court receivership”. The IMF does not give an opinion on this non-market behaviour. The Commission has sent a reply to this letter, reiterating its concerns and recalling that shipbuilding is a key exporting industry of Korea and the continued acquisition of loss-making orders endangers the recovery of the Korean economy as a whole. The Commission insists that the accumulated losses of Korean shipyards should be neither directly nor indirectly cleared by the Korean Government and market principles should be fully applied.
- The OECD agreement on normal competitive conditions in world shipbuilding has currently no chance to come into force as it stands as the USA sees no possibility to ratify the agreement. Two proposals have been made by Japan and Korea, respectively: Japan would propose bringing the agreement into force taking into account the US reservations; Korea which always opposed such a move now appears to be willing to bring the agreement into force without the USA. Discussions in the OECD Working Party 6, which has accorded the matter high priority, have resumed and will be continued in the next working session on 18-20 December 2000. While the Commission would welcome a solution to the current problems on OECD level, there are doubts that the agreement in its current form will be able to solve the actual problems.

5. CURRENT AND FUTURE SUPPORT MEASURES FOR EU SHIPYARDS

5.1. Historical background on operating aid

Operating aid to shipbuilding has been authorised by the Community since the early 1970s. For many years the aid rates were exceptionally high. In the 1987 Sixth directive on shipbuilding, a tighter, more restrictive policy was introduced. The reason for introducing the stricter policy was the need to ensure increased efficiency and improved competitiveness in the sector, to spur further restructuring to that end, and to ensure fair intra-EU competition. The aim was to gradually phase out operating aid, which normally is not allowed in the EU for well-known reasons of economic inefficiency.

The aid ceiling for operating aid in 1987-1988 was 28%, which was reduced to 26% in 1989 and 20% in 1990. The policy was maintained in the Seventh directive on shipbuilding, which was in force between 1991-1993. The operating aid ceiling was set at 13% in 1991 and then reduced to 9% from 1992. The operating aid rules of the Seventh directive were then prolonged six times.

Table 5 - Operating aid ceilings for shipbuilding

Year	87	88	89	90	91	92	93	94	95	96	97	98	99	00
Aid ceiling (%)	28	28	26	20	13	9	9	9	9	9	9	9	9	9

Initially, through the progressive reduction in the aid ceiling, operating aid encouraged changes towards greater competitiveness and structural change. However, the necessary impetus was not sustained in more recent years as the level of the ceiling became static. Overall, the aid has served to cushion yards from the full rigours of the market. It has also resulted in significant budgetary costs for most Member States. Shipbuilding is the only sector of manufacturing industry that systematically benefits from operating aid. It is highly questionable whether the expenditure involved represents a cost-effective use of limited public resources. Furthermore, given the extent to which competition is between EU yards the aid has tended to distort competition within the common market, particularly since there has been a wide variation in the actual levels of aid granted by the Member States. For example, in 1998 Germany provided large ships with 6,4%, the Netherlands with 4,4% and Finland with 3,1%, while France and Italy provided the maximum allowed aid of 9% (see Table 8 below).

In 1997 the Commission proposed that state aid needed to be refocused to promote and underpin efforts to improve the competitiveness of the industry since it was clear that many yards still lacked competitiveness, in particular lagging behind their Far Eastern competitors. This implied shifting away from operating aid to other forms of support, better geared towards helping industry achieve the necessary changes to overcome its weaknesses.

Council Regulation EC 1540/98 therefore provided a final two year prolongation of operating aid expiring as of 1 January 2001. It also introduced a set of other

measures, which up until end of 2003 will continue to be available to the shipbuilding sector. Most of the aid forms that will be available to the sector in the future share the common purpose of providing an incentive to improve performance of EU yards. These aids can be summarised as follows.

- Restructuring aid, necessary for structural adjustment and improved competitiveness, may be authorised provided that it complies with the Community guidelines on State aid for rescuing and restructuring firms in difficulty.
- Closure aid, which includes social aids to mitigate the social repercussions of adjustment and aids to cover other normal expenditure occasioned by total or partial closures, may be authorised if it complies with Article 4 of the Shipbuilding Regulation. When partial closures are involved, closure aid facilitates the structural adjustment and can thus increase competitiveness of the undertakings concerned.
- Regional investment aid for upgrading or modernising existing yards with the objective of improving the productivity of existing installations may be authorised provided that yards are situated in eligible regions and that the aid is limited to support expenditures as defined in the applicable Community guidelines on regional aid.
- Aid for Research and development may be authorised in accordance with the Community framework on aid for research and development since such activities are important to ensure the medium to longer-term competitiveness of the industry.
- Investment aid for innovation is a new aid form introduced in the Shipbuilding Regulation, not generally available to other sectors, where up to 10% of the costs for expenditure related to the innovative part of a project can be granted.
- Aid to defray expenditure by shipyards for environmental protection may be authorised if they are in compliance with the rules laid down in the Community guidelines on state aid for environmental protection.

In addition, the following aid possibilities exist.

- Aid granted in the form of development assistance to developing countries is available since this type of aid is permitted under OECD rules.
- Aid in the form of state-supported credit facilities granted to national and non-national shipowners for building vessels may be granted if it complies with the terms of OECD Understanding on Export credits for ships.

Finally it should be noted that under Regulation EC 1540/98 operating aid can be provided for contracts signed until the end of this year, for ships delivered until the end of 2003. This means that yards may continue to benefit from such payments, for their stock of orders signed up until 31 December 2000.

5.2. Amounts of aid provided by the Member States

Since the beginning of the 1990s the average (average over three years) total yearly amount of state aid awarded to shipbuilding has fluctuated between 1.445 million and 1.720 million euro (cf. European Commission, Fifth, Sixth and Eighth surveys on state aid in the EU). The main part of the aid has been provided in the form of operating aid and restructuring aid. The amount of operating aid provided since 1990 has fluctuated between 198 million and 1.102 million euro per year.

Operating aid is related to contract value. As a consequence most of the operating aid awarded during recent years have been for cruise ships, a market where EU yards have a dominant position in the world. The amount of operating aid provided for cruise ships between 1990 and 1998 was 1.374 million euro or 24% of all operating aid for the period. For 1998 the share of operating aid for cruise ships reached 57% of total operating aid, and such a high share is expected also for 1999 and 2000.

Table 6 - Operating aid provided to shipbuilding per year (million euro [nominal values])

Year	1990	1991	1992	1993	1994	1995	1996	1997	1998
Operating aid (in million euro)	1.102	722	198	877	466	855	500	347	548
- of which for cruise ships (in million euro)	198	43	42	314	84	173	71	135	314
- operating aid for cruise ships (as percentage of all operating aid)	18%	6%	21%	36%	18%	20%	14%	39%	57%

Source: Commission

When relating shipbuilding aid to the sector's value added, the high level of support afforded to the sector can be observed. For shipbuilding, aid represented between 20% and 26% of the sector's value added at factor cost during the years 1990-1998. For the latest period where data exist, 1996-1998, the aid related to value added was 22%. In contrast, average aid for the manufacturing sector in 1996-1998 amounted to 2,3% of the sector's value added (cf. European Commission, Eighth survey on state aid in the EU, Table 3. There may not be a direct comparability between the figures for shipbuilding and other manufacturing, but they give a correct indication of magnitudes).

Another way to relate the aid is to calculate aid per employed person. In the shipbuilding industry, aid per employed person in 1998 reached 28.000 euro. This can be compared to overall national aid for manufacturing per person employed in the EU, 1996-1998, which was 1.113 euro. The high aid rate in relation to value added and per person employed raises the question of whether scarce public resources are being spent in an optimal way, and whether the capital could not be used more efficiently.

Table 7 - Aid for shipbuilding compared to other sectors

	Shipbuilding sector	Average manufacturing
Aid as share of value-added (*) (1996-1998)	22,0%	2,3%
Annual aid per person employed (**) in 1998 (in euro)	28.000	1.113

(*) Including restructuring aid

(**) For shipbuilding average annual aid 1996-1998 of 1.549 million euro, divided by total employment 1999 in ship newbuilding (55.463) according to AWES annual report 1999-2000.

Sources: European Commission, Eighth survey on state aid in the EU, Table 3; AWES annual report 1999-2000

Incentive related aid, such as aid for research and development, innovation and regional investment aid, appears to have been used only to a negligible extent. The reasons for the low interest in the use of these aid forms are not known. One reason may be that the rules are not sufficiently well adapted to the particularities of shipbuilding. It may also be that while contract related operating aid has been available, many yards have not considered it necessary to exploit the possibilities of other aid forms, despite the fact that they have been available for several years. It would be worth investigating the reasons for the low use of these aid forms, so that Member States and industry could make better use of the full range of available aid measures to support yards in meeting future challenges.

Table 8 - Aid to shipbuilding in 1996-1998 in percent of contract values of ships

	1996			1997			1998		
	Small ships	Large ships	Total	Small ships	Large ships	Total	Small ships	Large ships	Total
Austria									
Belgium									
Denmark	4,5	9,0	8,9	4,5	9,0	8,9	4,5	9,0	8,1
Germany	4,5	6,7	6,6	4,5	6,4	6,3	4,5	6,4	6,4
France	0,0	9,0	9,0	0,0	9,0	9,0	0,0	9,0	8,6
Finland				0,0	5,3	5,3	0,0	3,1	3,1
Spain	4,3	8,0	7,4	2,9	7,6	7,4	0,5	4,3	3,9
Greece	-	-	-	-	-	-	-	-	-
Ireland									
Italy	4,5	9,0	8,7	4,5	9,0	8,9	4,5	9,0	8,9
Luxembourg									
Netherlands	3,1	4,8	3,2	3,2	3,8	3,6	2,6	4,4	4,1
Portugal									
Sweden									
United Kingdom	4,3	6,0	6,0	0,0	8,7	8,7	-	-	-

6. CONCLUSIONS AND RECOMMENDED ACTIONS

The Commission has continued its market monitoring and detailed investigations of selected orders placed with Korean yards. The findings broadly confirm those of the previous reports that the world shipbuilding market continues to face serious difficulties.

Supply still outstrips demand and despite increased ordering activity in the first 8 months of this year due to favourable market conditions ship prices have not fully recovered from the drop in prices since 1997. However, it appears that ship prices have shown some signs of improvement compared with the low point at the end of 1999.

The on-going depression in prices is caused by low offer prices from Korean yards. The detailed cost investigations continue to indicate that Korean yards are still taking orders at prices which are not covering all costs.

The Republic of Korea is now the biggest shipbuilder in the world. It has continued to increase its market share at the expense of both Japanese and EU yards. Nearly all market segments are targeted by Korean yards, leaving mainly smaller domestic orders and highly specialised tonnage to EU yards. Only in the cruise ship market EU yards continue to play a dominant role.

In addition to its monitoring work, the Commission has pursued the various actions within its competence laid down in the conclusions of the 18 May Industry Council.

As regards trade policy actions, the Commission has engaged Korea in negotiations under the consultation provisions of the bilateral agreement. However Korea did not fulfil all its commitments and was unable to agree to some concrete implementing measures.

In these circumstances, unless Korea is willing to accept the establishment of an effective price monitoring mechanism, the Commission considers that a trade action is necessary and desirable. The Commission will examine the merits of the TBR complaint by the European industry and, if accepted, will open an investigation.

Consequently, the Commission considers that:

- the TBR investigation should be vigorously pursued with the aim to launch a WTO action in order to seek remedy to the injury caused to the Community industry;
- an immediate agreement with Korea would avoid the risk of a bilateral conflict;
- the establishment of a level playing field remains an objective for the Union. However the rapid implementation of the OECD agreement would not solve the short-term problems faced by the European industry;
- the possibility of an early implementation of the 1994 Understanding on export credits for ships should be explored, even if it would not directly resolve the problems of the sector and Korean unfair practices.

So far as contacts with the IMF are concerned, these have not so far led to any concrete results in terms of ending unfair competition practices by Korean shipyards. However the Fund is now fully aware of the EU's concerns in this regard. Therefore, although the IMF's role in sectoral aspects is limited, further efforts are merited as a political signal of maintaining pressure on the issue.

The Commission has also considered its approach towards state aids, concluding that operating aid has not provided a solution to the Korean problem.

In the light of the foregoing, it is proposed that the following actions be pursued:

- the Commission to continue with its monitoring of the market situation;
- the Commission to examine industry's complaint under the TBR as rapidly as possible, and, if accepted, rigorously to pursue this with a view to a possible WTO action;
- in parallel, the Commission to remain open to eventual proposals from Korea that would meet the EU's concerns;
- the Commission and the Member States to pursue efforts to establish a level international playing field for the shipbuilding industry in the OECD;
- the Commission and the Member States to continue to encourage the IMF to ensure that the restructuring of Korean shipyards is closely monitored and assessed;
- the Commission to continue to work closely with the industry on competitiveness issues;
- in accordance with the provisions of article 12 of Council Regulation (EC) 1540/98 and without prejudice to the actions outlined above, the Commission shall as soon as possible examine the possibilities to propose measures to address the problem.

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8. REFERENCES

Report from the Commission to the Council on the situation in world shipbuilding, COM(1999) 474 final

Second Report from the Commission to the Council on the situation in world shipbuilding, COM(2000) 263 final

Council Regulation (EC) No 1540/98 of 29 June 1998 establishing new rules on aid to shipbuilding, Official Journal L 202, 18.07.1998 p. 0001-0010

Council Regulation (EC) No 3286/94 of 22 December 1994 laying down Community procedures in the field of the common commercial policy in order to ensure the exercise of the Community's rights under international trade rules, in particular those established under the auspices of the World Trade Organization, Official Journal L 349, 31.12.1994 p. 0071-0078

Report from the Commission - Fifth survey on State aid in the European Union in the manufacturing and certain other sectors, COM(1997) 170 final

Sixth survey on State aid in the European Union in the manufacturing and certain other sectors, COM(1998) 417 final

Eighth survey on State aid in the European Union, COM(2000) 205 final

OECD "Agreement Respecting Normal Competitive Conditions in the Commercial Shipbuilding and Repair Industry", Final Act signed in December 1994 by the Commission of the European Communities, and the Governments of Finland, Japan, the Republic of Korea, Norway, Sweden and the United States.

OECD "Understanding on export credits for ships", 1994