

## WORLD PASSENGER AND PASSENGER CARGO FLEET DEVELOPMENT / THE ISL CRUISE FLEET REGISTER

The ISL comment on the world passenger/cargo fleet includes the following topics:

1. World passenger fleet
2. Tonnage supply 2006
3. Ownership patterns
4. Supply/demand development in the passenger/cargo fleet sector
5. Shipbuilding industry
6. THE ISL CRUISE FLEET REGISTER - HIGHLIGHTS 2006/2007

### 1. THE WORLD PASSENGER FLEET

At the beginning of 2006, the total passenger fleet for ships of 300 gt and over was composed of 4,020 ships totalling 28.9 mill gt and representing 4.5 per cent of the total gt tonnage of the world merchant fleet. During the period 2002–2006, the total passenger tonnage, in terms of gt, expanded on average by 4.1 per cent per year. Looking at the ship type composition of the total passenger fleet, different developments can be observed.

There are 269 cruise vessels (12.2 mill gt) actively trading in 2006 or planned to be commissioned until December 2006.

### 2. TONNAGE SUPPLY 2006

The total passenger fleet is composed of various sub-types having their own momentum in the market

The tonnage development of the **pure passenger** fleet, which increased by 6.8 per cent on average in the period 2002-2006) is largely influenced by fleet additions of (larger) cruise vessels.

In the mentioned period the tonnage of the **ro-ro passenger ships** expanded by 2.5 per cent on average, whereas the cargo passenger tonnage decreased by 5.9 per cent yearly.

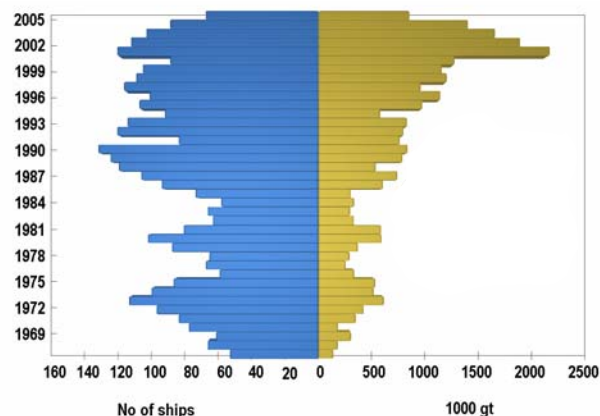
ISL records indicate that since 1998 demolition rates for passenger ships (incl. ferries etc) were relatively low. During 2005 only 57 vessels with 0.52 mill gt were broken up.

Moreover, ISL figures show that the total passenger fleet additions (newbuildings) during 2005 reached 1.4 mill gt, thereof 4 cruise vessels with 0.4 mill gt. Compared with last year's results the additions were more than 44 per cent lower than 2004.

At the beginning of 2006, passenger and passenger cargo ships, namely the whole passenger carrying fleet, had an average age of 22.4 years. Nearly

60 per cent of all ships, which equals to more than 37 per cent of the total gross tonnage, were already built before 1991, 1,622 vessels are older than 25 years.

Fig. 1: World passenger fleet by year of build as of January 1<sup>st</sup>, 2006



Please note: Only passenger ships built after 1966 are included. Ships built before 1967 comprise 524 ships with a tonnage 1.4 mill gt.

ISL 2006

At the beginning of 2006, 3,910 passenger ships equal to 97.3 per cent of all passenger ships representing in terms of gt 69 per cent of the total world passenger tonnage were attributable to size classes below 50,000 gt. This includes 2,301 of 2,309 ro-ro passenger ships and all cargo passenger ships.

At the beginning of 2006, the "Queen Mary 2" was by far the world's largest cruise ship with 148,528 gross tons. With regard to passenger capacity, the Voyager class ships of Royal Caribbean Cruise Lines with a capacity of around 1,213 crew and around 3,114 passengers are still the record holders. But since mid 2006 the new RCCL "FREEDOM OF THE SEAS" is in both tons and berth the record holder.

### 3. OWNERSHIP PATTERNS 2006

Large shares of the passenger and cargo-passenger fleet are attributable to open registry flags. As of January 1<sup>st</sup>, 2006, 10.0 mill gt equal to 37.2 per cent of the total passenger fleet were registered for the top ten open registry flags. In the period 2001-2005, the yearly average growth of these flags amounted to 9.4 per cent.

The statistical analysis by countries of domicile, based on vessels of 1,000 gt and over, included at the beginning of 2006, 2,172 passenger and cargo-passenger vessels totalling 27.8 mill gt.

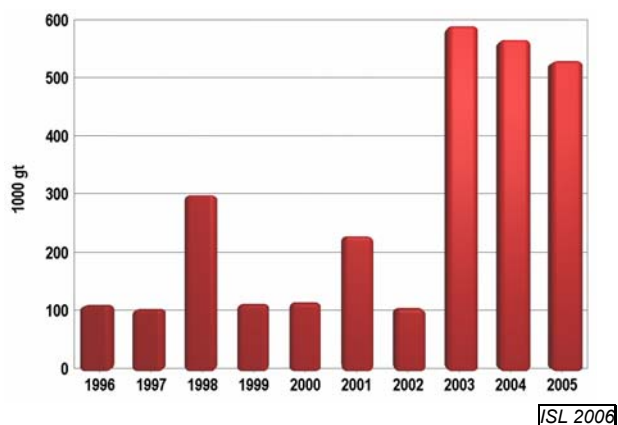
#### 4. SUPPLY / DEMAND DEVELOPMENT IN THE PASSENGER/CARGO FLEET SECTOR

Two factors are relevant for future tonnage supply of passenger and passenger cargo ships, namely the demolition potential and the order activity.

In 2005, broken-up figures are on a similar level than one year ago. 57 passenger and passenger cargo ships, totalling more than half a million gt, were sold to breakers, which represents, in terms of tonnage, a decrease of 6.5 per cent compared with results in 2004. More than 50 per cent of the broken-up passenger ships were ro-ro passenger ships.

Order activities for passenger and passenger ships are an indicator for the "market climate". Ordering of new tonnage developed positively during the period 2004 - 2006 with a peak of 32 new orders totalling 0.9 mill gt during the fourth quarter of 2005. In the second quarter of 2006 only 22 ships with 0.4 mill gt were ordered.

Fig. 3: Yearly broken-up tonnage of Passenger and Passenger cargo ships 1996-2005



At the beginning of 2006, the passenger and passenger cargo ship order book (ships of 300 gt and over) consisted of 180 ships with 5.0 mill gt, thereof 18 cruise vessels in the size class of 100,000 gt and above. In terms of gross tonnage, the order book of passenger (cruise), passenger cargo and ro-ro ships (ferries) increased by 38.9 per cent compared with tonnage figures at the beginning of 2005. This growth was mainly driven by the high amount of new orders of big cruise ships in sizes between 110,000 and 158,000 gt.

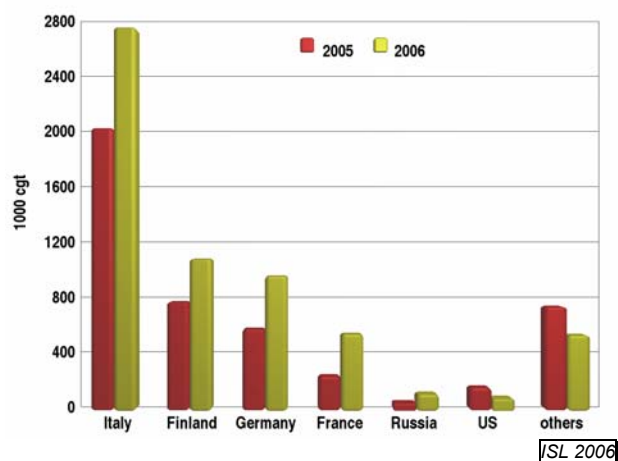
#### 5. THE SHIPBUILDING INDUSTRY

The year 2005 was a relatively good year of passenger shipbuilding activities. Newbuilding figures for passenger ships showed increasing tendencies for the third year in a row.

At the beginning of 2006, the order book reached a level of 6.0 mill cgt for all passenger ships. Two third of this tonnage belongs to cruise vessels and about 33 per cent to ro-ro passenger ships. Compared with previous years' cgt figures, the order book for all passenger ships increased by 31.2 per cent.

Marked leader is Italy (in particular the yards of Fincantieri and Visentini). Passenger ships ordered at Italian yards summarized up to 44 ships with 2.7 mill cgt, the market share on all ordered passenger tonnage stood at 45.1 per cent. As of January 1<sup>st</sup>, 2006, 87.9 per cent of all ordered passenger tonnage (cgt) was placed on Italian, Finish, German and French yards.

Fig. 6: Passenger and Passenger cargo ships on order by country of build as of January 1<sup>st</sup>, 2005 and 2006 (in cgt)



#### 6. THE ISL CRUISE FLEET REGISTER – HIGHLIGHTS 2006/2007

The following contribution relates to the ISL Cruise Fleet Register 2006/2007 published in this issue. Besides a description of the fleet development it will also give some background information on the other elements of the market.

##### Demand for cruises

In 2006, experts like the CLIA are forecasting a record of 15 million passengers, that is equal to an increase of 0.6 million guests over 2005, when the number of cruise passengers grew by 7.5 per cent up to 14.4 mill. Since 2001 the number of cruise passengers grew by 50 per cent. Cruising is most popular amongst North Americans. Figures from Cruise Lines International Association (CLIA) members, which account for 97 per cent of North American passengers, showed a 9 per cent increase from 8.9 mill in 2004 to 9.7 mill in 2005. During the 2006 season,

10.14 mill passengers are originating in North America. Thus representing a 4.5 per cent yearly growth.

The level of growth in 2005 was particularly impressive as only four new ships were added to the fleet during the year, compared with the average of ten a year over the previous 15. A slowdown in new ship orders inevitably followed the events of September 11, 2001, but these have gradually escalated again. About 28 ships are currently on order until 2010.

The industry's development is largely influenced by the Caribbean destinations, which continues to rank as the dominant cruise destination and accounting for 46.4 per cent of all itineraries. Between 2006 and 2009, the 19 top cruise lines organised in the CLIA, will invest a staggering \$13.5 billion in 22 state-of-the art new ships. In 2006 alone, six new ships, from Costa Cruises, Holland America Line, MSC Cruises, Norwegian Cruise Line, Princess Cruises and Royal Caribbean International, with guest capacities ranging from 1,848 to 3,600 passengers, will sail the world's waters for the first time.

Between 2001 and 2010, about 100 new ships will have been delivered and, significantly, the size and capacity of these ships is increasing all the time. The average maximum capacity<sup>1</sup> of the world's cruise ships has already doubled over the past ten years and, while the average capacity of those built in the 1990s was just over 1,600 passengers, it will then be more than 2,600. The seven new built ships due to be launched this year (2006) will average 3,300 passengers and will include the largest passenger ship ever built, carrying more than 4,000 passengers (Royal Caribbean International/RCI's Freedom of the Seas). It will, though, be surpassed by the first-ever 200,000-gt cruise ship in 2009 – RCI's 220,000-gt Project Genesis vessel. Of the 30 ships currently on order, 12 will carry about 3,000 passengers; six will carry more than 3,600 and one more than 5,000.

These ships will offer facilities to accommodate family members of all generations travelling together, a market that is ideally suited for Caribbean cruising. More than 1 mill children under the age of 18 are scheduled to sail with their families in 2006.

According to Carnival UK the British Cruise market will attract 1.7 to 1.8 mill passengers in 2010 and also 2.0 mill would not be a surprise. A prerequisite is that sufficient tonnage can be supplied. The one million barrier was broken in 2004 and 1.25 mill are

expected in 2006. Around 40 per cent of the British will cruise with one of the five Carnival brands offered in the UK. A very encouraging development is that now 30 per cent of the passengers book their cruise more than one year in advance compared to only 8 per cent three years ago.

With more ships being operated in Europe, mainly in summer but increasingly year-round too, passenger numbers from continental European countries resumed their impressive growth in 2005 after a disappointing 2004.

Germany continues to be the leading continental European market and third in the world after North America and the UK.

Its continuing expansion – estimated 10 per cent in 2006 - remains largely based on the growth of one brand - Aida Cruises. As this growth sees four more ships currently on order, the German market looks set to reach the 1 mill mark by the end of the decade. The rapid expansion of two Italian-based lines, Costa Cruises and MSC Cruises, ensured Italy's position as the fastest growing European market in this year and it is likely to continue to close the gap on Germany over the next five years. After a good 2004, Spain resumed its own impressive growth in 2006.

France continues to lag behind in cruise growth and, in the absence of a major French-owned cruise brand, there is no immediate prospect of significant improvement in its numbers, which have remained around the 200,000 mark for ten years or more.

Two-thirds (68 per cent) of Continental Europeans still choose to cruise in the Mediterranean. It is the choice of 82 per cent of both Italians and Spanish, the majority of whom also drive rather than fly to join their ships at the increasing number of Mediterranean embarkation ports.

### **Fleet developments**

Although only a few cruise vessels left the active fleet in 2005, the number of ships in the trading cruise fleet increased only by 6 up to 269 (table 1.3.5.1). All in all, five large ships will have been delivered in 2006 (Star Cruises' PRIDE OF HAWAI with 92,000 gt will be the smallest of these ships). During the year in focus, no vessel is sold to breakers, or is planned to be broken-up.

The total tonnage is now 12.2 million gt. Consequently the number of lower beds augmented too and has reached now the 318,000 mark. The average size of the 269 cruise vessels is around 45,400 gt and 1,184 beds.

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<sup>1</sup> Including upper beds

Cruise operators rely on flags of convenience when registering their ships (table 1.3.5.2). The most preferred flag is that of the Bahamas aggregating 5.1 mill gt. Also the Panama and Bermuda registers are developing positively and show two digits growth rates compared with last year's figures. Among the national flags Italy has won and the UK has lost nearly half of the tonnage.

The countries of domicile (table 1.3.5.4) give an indication of the real ownership of the cruise fleet. In fact the US dominance is more pronounced because the RCI fleet listed as Norwegian is owned in partnership with US companies.

Fig. 7: World cruise fleet - development of the top ranking registered flags 1996-2006 (in 1000 gt)

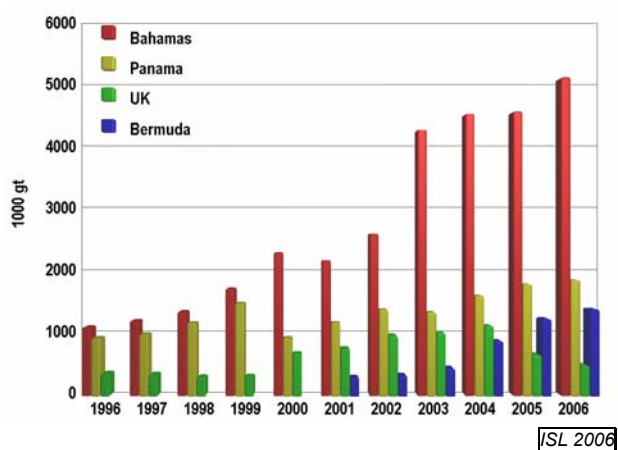


Table 1.3.5.5 allows some interesting insights into the age and size structure of the fleet. Five ships are over 50 years old. 117 (43.5 per cent) are younger than 10 years and 186 (69 per cent) are younger than 20 years. Before 1980 the average size of the vessels was always below 20,000 gt, in the 1980ies it rose to 28,000, in the early 90ies to 40,000, in the late 90ies to 57,000 and since 2000 it is 80,000 gt for newly built ships.

The most important size group (table 1.3.5.6) by aggregated tonnage was by 1985 the 20,000 to 30,000 gt class with 27 per cent of total tonnage. Ten years later it was still the same group but with only 20 per cent of the total tonnage. Today the share of the group diminished to 7 per cent while the ships above 100,000 gt make up 23.3 per cent.

### Ownership patterns and cruise operators

The Miami based Carnival Group has not enlarged its portfolio of cruise brands during the last 12 months. With 81 ships, 5,7 million gt and 143,000 beds Carnival controls 46.5 per cent of the world tonnage and 45 per cent of the lower beds. Any new major

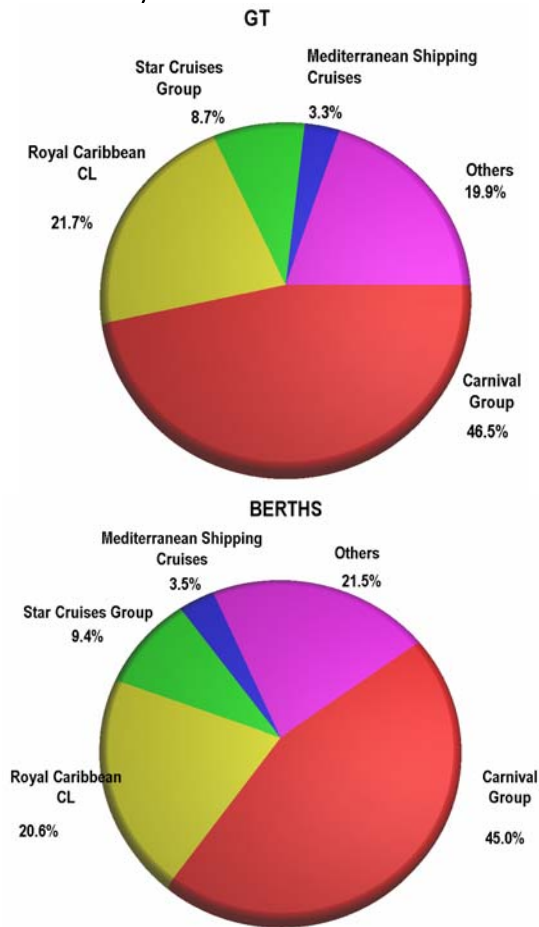
acquisition would be a case for the monopoly commissions. Nevertheless, Carnival will soon operate more than half of the world fleet based on internal growth.

The orderbook for the Carnival Group comprises 15 firm contracts, eleven with Fincantieri and four with Meyer Werft plus three options with Fincantieri. Several orders have been signed during the last 12 months. The "Pinnacle" project is not among the new contracts. Is Carnival no more interested to have the largest cruise ship afloat ? The new type for Carnival Cruise Lines will "only" measure 130,000 gt and have 3,600 lower beds. The first one comes 2009 and the options include a sister ship. Holland America Cruises will get the first ship of a new design in 2008. With 86,000 gt it is slightly larger than the previous constructions for the brand. One option is also linked to that contract. The third option is for the second unit of the new design for Costa Crociere. With 93,000 gt it is definitely smaller than the current series of 112,000 gt. Is it better to have smaller ships in Europe or are they only the replacement for the older smaller ships? The other ships on order are the QUEEN VICTORIA, the additions to the P&O and Princess Cruises fleets and the four AIDA sisters.

The Royal Caribbean Group focuses on bigger ships. The just introduced FREEDOM OF THE SEAS with 154,407 gt and 3,600 lower beds is the biggest cruise ship world-wide and two sisters have been fixed for 2007 and 2008. In 2009 the Aker shipyard in Turku will present the latest triumph of Finnish shipbuilding, the Project GENESIS for Royal Caribbean. It will be 66,000 gt larger than the actual record-holder and 5,400 lower beds. The lengthening programme for older ships is not progressing after the first completion. The speculation regarding new tonnage for the Celebrity Brand gave way to the confirmation of the SOLSTICE Class. Not only last years letter of intent and one option have been turned into a firm contract, meanwhile three ships are on order. With 2,850 beds and 118,000 gt they are very large for an up-marked brand.

Star Cruises and NCL have completed the build-up of the NCL America brand. Two more ships from Meyer Werft will join the NCL fleet before autumn 2007. Thereafter the planning of one ship per year will face real problems because of the tight shipyard capacities. If NCL cannot find free shipyard capacity they have to enter a phase of consolidation. The Asian market seems not yet to develop according to expectation. STAR had planned to transfer the smaller NCL ships to Asia, but the NORWEGIAN CROWN (1,052 beds) has been sold to Fred Olsen for delivery next year.

Fig. 8: Market shares of the major cruise ship owners in 2006 (gt- and berths- per cent share)



ISL 2006

Mediterranean Shipping Cruises (MSC) has commissioned the largest ship up to now. MSC MUSICA is the first of a series of three plus one option. The order book of the St. Nazaire shipyard includes also two 133,000 gt vessels which will be among the largest in the world fleet. The four outstanding firm contracts will bring the MSC fleet to twelve in 2009. This is regarded as the right fleet size, because according to the CEO of MSC "one must be careful not to lose through expansion the Italian charm". Because of the strong Euro and rapidly increasing demand in Europe the latest ships will stay in Europe the whole year and not change into the Caribbean as planned before. Last year MSC has still made a small loss and with a 96 per cent occupancy rate needed to break even under the current price structure it is not easy to make a profit which is planned with the addition of the new tonnage. As a private company with the backing of the powerful MSC container business the company acts other than competitors who must have an eye on the development of the shareholders' value.

Carnival, RCI and Star are the market leaders even if each in its own size group: Star offering more than 25,000 beds, RCI more than 50,000 and Carnival more than 100,000 beds. Rank number four is occupied by Mediterranean Shipping Cruises (MSC) who are the only in the group with around 10,000 beds. In 2006, MSC has four vessels on order. Two ships of 90,000 gt and two other of 133,000 gt. All four ships will be build at the Chantiers d'Atlantique yard in St Nazaire. A Letter of intent has been signed recently for one vessel with the same yard. During the last two years MSC made already a major step forward by integrating two new ships and two similar acquisitions from the bankrupt Festival Cruises. But the company is firmly intended to become a major player in the cruise business following the success of the sister company in the container branch. Neither by fleet size nor by ship size this should be the limit for expansion.

The Top12 cruise companies include now also two German companies. The reason for that appearance is that now nearly all cruise ships in the ISL Cruise Fleet Register are assigned to the tour operator and no more to the ship owner. In many cases ship owning, operating and marketing is handled by one group of companies like the Carnival Group, Royal Caribbean Inc., Mediterranean Shipping Cruises or many smaller companies. There are also ship managers who are neither owners nor tour operators. The most important ship manager of cruise vessels is V. Ships of Monaco

Germany is ranking very high as cruise ship builder and it is the third largest source market for cruise travellers. But what about the cruise shipping companies? The largest fleet for the German market is the AIDA fleet comprising four mid-size ships and four larger ships on order. Founded in Germany it belongs now to the Carnival Group. The best cruise ship of the world, the EUROPA, is owned and marketed by Hapag-Lloyd AG, one of the companies with the longest tradition in cruise shipping world-wide. Altogether four cruise ships sail under the flag of Hapag-Lloyd. The company forms part of the TUI Group as do a large container shipping company and several tour operators. One of these is Thomson based in the UK. Thus, the TUI group operates also four ships on the British market and climbs the sixth rank with a total of eight vessels.

### Shipyard dock utilisation

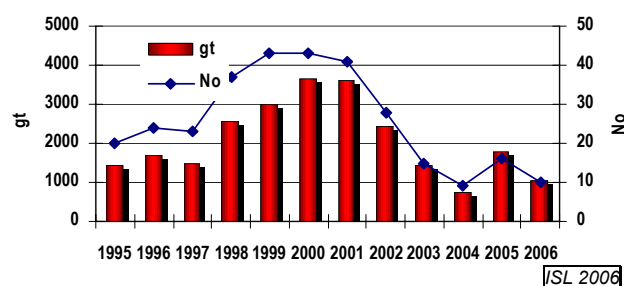
Aker Yards' acquisition of Alstom's shipbuilding business mirrors the consolidation among the cruise lines, which has resulted in essentially three big players. Now, there will be three yard companies concentrating on cruise-ship building: Fincantieri, Aker Finnyards (in Finland and France) and Meyer Werft.

The combined orderbooks for cruise ships for Aker Finnyards and Chantiers de l'Atlantique count nine ships and 1.4 billion gt, for estimated contract values of \$6.5 billion for deliveries through 2010.

The goal, according to Aker, is "to create a world leader in shipbuilding and to share in the expected strong growth in cruise shipping and to meet the anticipated demand for post-panamax vessels."

The Carnival brand Princess Cruises will get one more 113,000 gt ship of the current series in 2007 and 2008. For new ships beyond 2008 the company has entered discussions with Fincantieri, Hyundai of Korea and Japanese ship builders.

Fig. 9: Development of newbuilding contracts from 1995 – 2006 (up to July)



Fincantieri, the world leader in cruise ship and RoRo/ferry building, has now a very close relationship to the Carnival group. Carnival is now the only operator having placed cruise ship orders at the Italian builder and the group has occupied all docks at Monfalcone, Venice and Sestri until late 2008 or 2009 and incl. options even until 2010.

Meyer Werft of Papenburg has suffered a difficult period with construction of four container ships and a cruise ferry but can now enjoy again a satisfying workload of cruise ships. After delivery of the first 92,000 gt ships for NCL two more have to be finished before the end of 2007. The German subsidiary of Carnival, AIDA Cruises, has also a major expansion in mind. AIDA first required two ships for 2,030 passengers to be completed 2007 and 2008; because of the good booking level of the four existing vessels they are now committed to take over a third one in 2009 and a fourth in 2010.

Already being the only builder serving two owner groups Meyer is close to sign a contract with a third. RCI is planning to meet the demand for new tonnage for the Celebrity brand with Meyer. The three ordered

ships with spacious cabins for 2,850 passengers and 117,000 gt would be the first post-panamax vessels for the German builder. The recent successes could not hold back Meyer from maintaining another old business field: Eight orders for LPG tankers and one passenger liner for Indonesia were also accepted.

Aker yard at Turku is busy until 2009 with the largest cruise vessels ever built, the 158,000 gt Freedom class for Royal Caribbean Cruise and the first of the new Giants of 220,000 gt. Valued at some € 900 million, it is also the most valuable ship ever ordered in the history of commercial shipbuilding. Delivery is scheduled for autumn 2009. The contract includes an option for a second similar vessel. Project Genesis, as the new ship is known at the moment, represents a 43 per cent increase in size on the record-breaking 'Freedom of the Seas'. While the "Freedom of the Seas" with 158,000 gt has a capacity of 3,632 passengers, Project Genesis will be capable of accommodating 5,400 passengers. In terms of dimensions, Genesis will measure 360 metres bow to stern and have a beam of 47 metres. While this utilises the capacities of one yard the others could return to traditional work like cruise ferries, RoPax and ice-breaking ships.

Provided the Euro exchange rate against the US Dollar will further deteriorate a few more orders can be expected. If the European docks are occupied, capacity supply could still develop in line with demand for cruises. The year 2006 has every chance to become another good year for the operators with a supply growth of hardly more than 5 per cent.

One problem becomes more and more urgent: Currently only the three big operators have new ships on order placed with the four big yards. The smallest vessel under construction has a tonnage of 68,500 gt. Economies of scale lead to low operating costs on these big ships. How can the numerous small operators replace their ageing fleets of the still much beloved more intimate ships?

The overall positive development is a little bit disturbed by reports of Carnival and NCL that bookings for Caribbean cruises are behind last years figures. The higher living costs in the USA hit especially the mass market where the Carnival Cruise Lines' brand is placed. Carnivals higher priced brands and the ships not sailing in regions threatened by hurricanes are performing well.

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