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MARITIME TRANSPORT SERVICES

Background Note by the Secretariat

This Note has been prepared at the request of the Council for Trade in Services in its Special Session held on 27-28 March 2001. It updates and complements document S/C/W/62 dated 16 November 1998.

The Note includes 1997 data which were not available at the time of drafting document S/C/W/62, and generally covers the period until 1999. Additional elements are presented on subsectors that, due to lack of time, had not or only partially been dealt with before (e.g. liner, harbours, classification societies, bulk, offshore, cruise, multimodal). Nevertheless, the Note cannot be considered as reasonably exhaustive, given in particular the absence of a comprehensive database on regulatory aspects, apart from the replies to the questionnaire of the NGMTS, which are now largely outdated, and the paucity of available information on developing countries. Each of the two parts of the Note – General Developments and Sectoral Developments – first addresses economic and then regulatory issues and deals with classification questions when relevant.

Proposals concerning further improvements in classification and scheduling (paragraphs 43 to 68 of document S/C/W/62) are not repeated, but simply expanded upon in the light of recent experience.

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I. GENERAL DEVELOPMENTS

A. ECONOMIC DEVELOPMENTS

1. Shipping remained by far the most important mode of international transport of goods. World seaborne trade recorded its fourteenth consecutive annual increase in 1999, reaching a record high of 5.23 billion tonnes. Annual growth rates, however, declined to 1.3 per cent, down from 2.2 per cent in 1998 and 4.1 per cent in 1997.¹ The figures reflect the Asian financial crisis, the following recovery and the buoyant state of the US and European economies during those years.

2. The geographical pattern of trade has not changed significantly between 1997 and 1999 (Annex 1). Developing countries account for over 50 per cent of the goods loaded, and developed countries for around 43 per cent. This compares with shares of just over one-quarter for developing countries and some two-thirds for developed countries for goods unloaded.

3. Figures on the evolution of freight rates as a proportion of the total value of imports (c.i.f) are available only up to 1998. No significant changes are discernable:

TABLE 1

Year	World	Developed countries	Developing countries
1997	5.24%	4.17%	8.04%
1998	5.06%	4.07%	8.06%

Source: UNCTAD, Review of Maritime Transport.

4. The world merchant fleet tonnage has continued to expand, from 775.9 million dead-weight tonnes (dwt) at the end of 1997 to 788.7 million dwt at the end 1998 (1.6%), and 799 million dwt at the end 1999 (1.3%). Reflecting the buoyant state of the world economy, surplus capacities have generally declined:

TABLE 2

Year	World surplus tonnage (in % of the world fleet)	Tanker surplus	Dry bulk surplus	General cargo surplus	Unitized fleet*
1997	3.7%	5.8%	3.9%	2.7%	0%
1998	3.1%	5.9%	2.3%	2.6%	0%
1999	3.0%	5.0%	3.2%	3.0%	0% ²

* Unitized fleet include fully cellular container ships, partly cellular container ships, ro-ro ships and barges carriers.

Source: UNCTAD, Review of Maritime Transport.

5. Recent structural indicators point out a gradual erosion of developed countries' registers (now one-quarter of world tonnage) and a countervailing surge in open registries (now nearly one half of world tonnage). Apart from a declining share of Central and Eastern European countries (from 3.1 per

¹ In ton-miles the picture is significantly different: +3.6% in 1997; -1% in 1998; -0.05% in 1999.

² Recent partial figures (July 2001) lead to think that this tendency has ended and that overcapacity will reappear for the cellularized fleet due to the double effect of the slowdown of world growth and the entry in service of new buildings, in particular of the very large units over 6, 000 boxes.

cent of the tonnage in 1997 to 2.3 per cent in 1999), the role of other country groups, including developing countries as a whole, has remained largely unchanged (Annex 2).³

6. Taking into account the controlled fleet (i.e. ships owned nationally, but registered under a foreign, mostly open registry flags), the ranking of the leading 35 maritime countries or territories shows little change from 1997 to 1999. The top-ranking six countries or territories (Greece; Japan; Norway; United States; China and Hong Kong, China) have remained the same. While Germany advanced from the 9th to the 7th rank, the UK fell from the 7th to 10th. The average share of foreign flags in the total fleet of these 35 countries and territories has clearly risen (from 58.8 per cent in 1997, to 62.5 per cent in 1999).

B. GENERAL REGULATORY DEVELOPMENTS

7. The following section deals successively with liberalization policies, government support, safety measures, and the role of electronic trade. Due to sectoral specificities, competition policies will be dealt with in the sector part of this Note.

1. Market access and liberalization issues

(a) Multilateral developments

(i) *WTO*

8. No new or improved commitments have been obtained from the initial WTO Members since November 1998. Ten acceding countries, however, have included maritime transport commitments in their services schedules. Annex 3 gives an overview of these commitments in a format comparable to the Tables contained in pages 11-17 of document S/C/W/62.

(ii) *United Nations*

9. The number of countries that have ratified the UN Liner Code of Conduct for Maritime Conferences (in force since 1983) has remained stable, at 78, during the period 1997-2000. The UN Convention on the Carriage of Goods by Sea of 1978 (Hamburg Rules), in force since 1992, registered one more ratification, totalling now 26 parties. Other UN Conventions on Shipping have not reached the number of ratifications required for their entry into force. In some cases, the number of parties remained unchanged (UN Convention on Conditions for Registration of Ships of 1986, with 11 parties while 40 parties would be required; International Convention on Arrest of Ships of 1999 with no parties yet), in other cases, there were slight increases (International Convention on Maritime Liens and Mortgages, 1993, from 3 to 5 parties while 10 would be required; UN Convention on International Multimodal Transport of Goods, 1980, from 8 to 9 parties while 30 would be required).

(b) Regional developments

(i) *OECD*

10. The OECD Maritime Transport Committee initiated in 1998 a review of its 1986 "Common Shipping Principles".⁴ The Committee agreed in 1999 on three additional principles covering: (i) access to and use of maritime auxiliary services; (ii) access to, use and provision of multimodal transport services; and (iii) measures related to safety, the environment and substandard shipping. At the end of 2000, the OECD Council formally endorsed the new principles. A description is given

³For more detailed elements and figures on open registries see notably UNCTAD, Review of Maritime Transport, edition 2000, pages 29-32.

⁴For the complete text of these principles see: <http://www.oecd.org/dsti/sti/transport/sea/act/council.htm>

below in the subsections on port services and maritime auxiliary services, multimodal transport and, safety aspects.

11. In 1998, the Committee held a workshop with representatives of "Dynamic Non-Member Economies" (Argentina; Brazil; Chile; Hong Kong, China; Malaysia; Singapore; Chinese Taipei; and Thailand) to consider a draft "OECD-DNME Understanding on Maritime Transport Principles".

12. This Understanding was finalized in 1999. Its participants comprise all 29 Members of the OECD plus Chile; Hong Kong, China; Malaysia; Singapore; Chinese Taipei and Thailand. The text is reproduced in Annex 5 with references to similar WTO/GATS provisions. Unlike the revised "OECD Common Shipping Principles", the Preamble of the Understanding contains an explicit reference to the GATS and the future maritime negotiations ("This Understanding is without prejudice to the General Agreement on Trade in Services, the 28th June 1996 Ministerial Decision on Maritime Transport Services and to future negotiations on trade in services at the WTO").

13. The above Understanding is comparable to the 1993 "Understanding between OECD Members and "NIS-CEEC"" (Newly Independent States and Central and Eastern European Countries: Bulgaria, Estonia, Latvia, Lithuania, Romania, the Russian Federation and Ukraine). Under the latter Understanding, the Russian Federation reported in 1998 that, in respect of Principle IX,⁵ which deals with access to inland waterways, full liberalization had not been possible because of the large number of small river ports which had to be brought up to date. The Committee agreed to extend the relevant transition period on the understanding that the Russian Federation provide regular progress reports.

14. An electronic discussion group was set up to exchange information on four items, including the resumption of the WTO negotiations on maritime transport services and preparatory work.

15. In 2000, the OECD Maritime Transport Committee extended invitations to Egypt, India, Israel, the Philippines and South Africa to join future discussions on shipping issues.

(ii) *APEC*

16. APEC has a Transportation Working Group.⁶ In the area of maritime transport it has established an interactive web-based port database, a "virtual centre for transportation research development and education" web site, a program to improve training and qualifications of seafarers, "a forum on inter-modalism", and a project on "safer shipping in the Asia Pacific region". One of its projects for the future is to develop examples and case studies of the benefits of regulatory and other institutional changes aimed at maritime trade liberalisation and facilitation. A meeting of the APEC Ministers of Transport is scheduled in Lima in October 2001.

(c) *National developments*

17. The Republic of Korea modified in 1998-1999 its Maritime Transport Act by eliminating the restrictions on ocean-going shipping businesses, the freight filing system, and the prohibition on large

⁵ This principle stipulates: "Parties to this Understanding, in accepting the provisions of Principle IX, acknowledge that, because inland waterways are at present largely governed by specific national, bilateral and multilateral regulations, there may be a transitional period between acceptance of the Understanding and full implementation of the provisions of this Principle. Notwithstanding this acknowledgement, Parties agree to the principles of non-discriminatory treatment and reciprocity with respect to all seagoing vessels engaged in the transport of commercial cargoes in international trade utilising inland waterways. It must however be noted that this Principle does not apply to cabotage".

For the complete text see: <http://www.oecd.org/dsti/sti/transport/sea/index.htm>; on inland waterways see also document S/C/W/62, paragraphs 46 and 61.

⁶ For more information see: <http://apecsec.org.sg/workgroup/transportation> and <http://www.apectptwg.org.au>.

shippers from engaging in cargo transport. The procedures and conditions for the vessel's registration were relaxed. Also, foreigners have been authorized, in addition to the pre-existing possibility of joint ventures with 50 per cent participation, to engage in Korea's ocean-going shipping business in the form of mergers and acquisitions or through new establishment. They will also be free to establish branches, the approval requirement having been eliminated. Foreigners may also own and register vessels, provided they establish a commercial entity in Korea.

18. West African countries have pursued liberalization policies under the aegis of the World Bank by disbanding or reducing the role of Shippers' Councils. However, it appears that operations are still affected by various day-to-day business problems.⁷

(d) Developments in non-governmental fora

19. The International Chamber of Commerce, in close cooperation with shipowners and shippers associations, issued in June 2001 an "Issue paper on negotiations on maritime transport in the WTO" (document 322-1/31*bis* dated 29 June 2001). The paper calls for "substantial liberalization within the context of the GATS, based on the removal of remaining restrictive measures, unfettered market access on a non-discriminatory basis for all international maritime related activity and the participation of a significant number of countries".

2. Government support⁸

20. During the period under review, developed countries, but also in certain instances developing countries, have continued to use various support regimes in order to protect their fleet under national flag. While certain measures have been terminated (e.g. direct financial contributions in Germany in 1998), others have been modified or introduced. In general, tax incentives have been preferred over direct subsidies.

21. A tonnage tax (i.e. a lump sum tax based on the tonnage of the ship rather than on profits) was introduced in Germany in 1998 and in the United Kingdom in 2000. Finland took the principle decision to introduce such a tax in the near future, and discussions are underway in several other countries, notably Denmark and India, to create similar schemes.

22. Other recent tax incentives, introduced by the German Government in 1998, is the possibility for shipowners to withhold 40 per cent of the income tax to be paid by the crew.

23. Support policies may also be targeted at the seafarers directly. For instance, to diminish labour costs, Ireland instituted in 1998 a special £5,000 tax allowance for seafarers and amended its foreign earnings deduction scheme with the same intention. In 1998, Sweden prolonged its repayment of seamen taxes and increased the coverage of social fees by the State. In 2000, Finland extended the coverage of a parallel register subsidy with regard to cargo vessels. In addition to

⁷ <http://www.ecsa.be/annualreport/item05.htm>.

⁸This Section is based on the OECD Maritime Transport Committee's Annual Reports during the period under review. These reports are based on voluntary individual contributions, hence the fragmentary and heterogeneous character of the information provided. For more information on support schemes in the OECD area, see document DSTI/DOT/MTC(2001)1 "Analysis of Selected Maritime Support Measures" dated 1 December 2000. Systematic and publicly available data for other regions are lacking. Documents S/WPGR/W/25, dated 26 January 1998, S/WPGR/W/25/Add.1, dated 29 May 2000, S/WPGR/W/25/Add.1/Corr.1, dated 11 July 2000 and S/WPGR/W/25/Add.2, dated 12 December 2000, contain some information on subsidy schemes operated by WTO Members in all services sectors, including maritime transport, based on Trade Policy Review (TPR) Reports. Of the eleven TPR Secretariat reports published since S/WPGR/W/25/Add.2, only one, WT/TPR/S/88 (United States), dated 15 August 2001, deals with maritime subsidies (paragraph 42).

amounts equivalent to sailors' taxes withheld in advance and social security contributions paid by the employer, the subsidy now covers those parts of the sailors' pension insurance premiums that are fully paid by the employer as well as certain Social Insurance fees. In a reverse move, Norway reduced in 1998 the scope and extent of its seafarer tax reimbursement scheme.

24. The tendency towards establishing second registries and alleviating nationality requirements in the first registries has continued. For instance, in Germany, in addition to the captain, only one or two nautical or technical officers of German or European nationality are required to form part of the crew, depending on the size of the vessel. A second registry has been established in Korea in 1998. This registry allows the hiring of foreign seafarers. In addition vessels operated under this registry enjoy tax benefits. Under an "International Ship System" introduced in Japan in 1996, Japanese flag vessels meeting certain requirements are entitled to preferential treatment under the local-property and ship-registration taxes. The system was expanded in 1999 to allow foreign officers other than the captain and chief engineer to be assigned with the approval of the Minister.

3. Safety measures

25. During the period under review, many safety-related policy initiatives were implemented as a result of previous decisions or as consequence of recent maritime catastrophes.

(a) International Maritime Organization (IMO)

26. IMO legislative work normally proceeds by way of amendments to major conventions such as the International Convention for Safety of Life at Sea (SOLAS) of 1960, the International Convention on Standards of Training Certification and Watch-Keeping for Seafarers (STCW) of 1978, the International Convention for the Prevention of Pollution from Ships (MARPOL) of 1973 and the International Convention on Civil Liability for Oil Pollution Damage (CLC) of 1969. During the period under review, several amendments came into force,⁹ and new measures have been adopted but not yet become effective.¹⁰ The latter include:

- Mandatory regulations requiring ships to carry voyage data recorders (VDRs) i.e. "black boxes" (December 2000). At the same date, IMO also agreed on a list of parties deemed to be fully in compliance with the STCW, known as the "white list";
- the International Maritime Dangerous Goods Code (IMDG) was made mandatory and a regulation prohibiting new installations of materials containing asbestos in all ships was adopted;

⁹ The following Amendments relating to SOLAS came into effect during the reporting period: the 1988 Protocol introducing a new harmonized system of surveys and certification; the May 1994 amendments making mandatory the International Safety Management Code (ISM); the June 1996 amendments on life-saving appliances and arrangements on the December 1996 amendments to on fire safety measures, on 1st July 1999 the June 1997 amendments on vessels traffic services (i.e. traffic management system); the November 1997 amendments on additional safety measures for bulk carriers; the May 1999 amendments making mandatory the International Code for the Safe Carriage of Packaged Nuclear Fuel (INF Code). STCW was once modified, through the 1997 amendments concerning training for personnel on passenger ships, the 1990 amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code); the 1990 amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH); and the 1997 amendment on stability criteria for double hull tankers.

¹⁰ For a complete list of IMO conventions and relevant data see: <http://www.imo.org>.

- An amended regulation of the MARPOL convention, establishing a global timetable to eliminate most single hull oil tankers by 2015 or earlier (April 2001).¹¹ A "conditional assessment scheme" will be applied in 2005 and 2010 to the remaining single hull tankers.

27. Other important "post Erika" measures are the amendments adopted by IMO in October 2000 in order to raise by 50 per cent the limits of compensation payable to victims of pollution by oil from oil tankers under the International Convention on Civil Liability for Oil Pollution Damage (CLC Convention) and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (IOPC Fund).

(b) OECD

28. While OECD shipping activities have traditionally centered largely on market access and competition issues, safety matters have recently gained in importance.

29. In 1998, the OECD Secretariat circulated a Discussion Paper on "Possible Actions to Combat Substandard Shipping by Involving Players other than the Shipowner in the Shipping Market" which recommend predominantly industry self-regulation.¹² The Paper was discussed at a round table with Member States and industry representatives; results were consolidated in the form of an Action Plan which received the endorsement of the Maritime Transport Committee (MTC).¹³ A progress report on the implementation of the Action Plan was issued in 1999.¹⁴

30. Further, the MTC examined who effectively bore the costs of substandard shipping – the owners concerned or, due to insurance arrangements, the industry as a whole. The resulting report issued in 2000 concluded that the majority of parties that are directly involved in the use of substandard shipping did not apparently incur significant costs, principally because of cover provided by the insurance industry.¹⁵ The Committee invited comments from industry and governments, and decided to forward them to IMO.

31. The MTC also agreed to focus attention on ways to encourage the industry to participate in the elimination of substandard shipping. One area of investigation is current practices of providing insurance cover to vessels that may be substandard. Discussions also include the possibilities of incentives to promote higher standards, and enable shipowners and other parties to better combat the competition from operators and users of substandard shipping.

32. In a parallel process, the OECD Council adopted in 2000 a recommendation on Measures Relating to Safety, the Environment and Substandard Shipping. Accordingly, the shipping policies of OECD Member countries should be directed to: involving all players in the shipping market in creating a fair and transparent market; ensuring that all vessels meet applicable international rules and standards concerning safety of ships and persons and the prevention of pollution of the marine environment; and properly exercise port state control.

¹¹ Double hulls are compulsory for new tankers since 1996. The flag State may authorize a single hull vessel to operate for up to 25 years until its 25th anniversary. However, the receiving State can deny entry to those ships after 2015 provided they notify IMO of their intention. The European Community, Malta and Cyprus did so. Double hulls were already compulsory in U.S. waters following legislation Oil Pollution Act, taken after the Exxon Valdez catastrophe.

¹² Document DSTI/DOT/MTC(98) 10/final dated 8 July 1998.

¹³ <http://www.oecd.org/dsti/sti/transpor/sea/act/substan.htm>.

¹⁴ <http://www.oecd.org/dsti/sti/transpor/sea/news/ACTIONPLAN.htm>.

¹⁵ http://www.oecd.org/dsti/sti/transpor/sea/prod/Cost_to_users.pdffolwiwng.th.

(c) Regional Memoranda of Understanding on Port State Control

33. Port State Control (PSC) is the inspection of foreign ships in national ports to verify that the conditions of ship and equipment comply with international conventions and that the ship is manned and operated in accordance with applicable international laws. PSC is exercised under national law, based on relevant Conventions. While the relevant controls help to promote the safety of ships and the protection of the marine environment, a regional approach would ensure that substandard ships and operators have fewer places to hide. Hence the multiplication of regional Memoranda of Understanding on PSC (see also paragraph 30 of document S/C/W/62). These Memoranda cover exchange of information about ships, their records and the results of inspections carried out. They also ensure that port state inspections are carried out in a uniform manner, and that similar standards are applied with regard to detention of ships and the training of inspectors.

34. During the period under review, three more Memoranda of this kind were signed: the Indian Ocean MOU on Port State Control, signed in Pretoria on 15 June 1998 by 15 countries; the MOU for the Western and Central African region signed in Abuja on 22 October 1999; and the Black Sea MOU signed in Istanbul in April 2000. A similar MOU is in preparation for the Persian Gulf region.

35. On 28 June 2000, the United Kingdom, Spain, France, Singapore and the European Commission signed a MOU setting up the Equasis Information System, which is aimed at collecting safety-related information on the world merchant fleet. The US coastguards and the Japanese Maritime Administration are reported to consider joining this MOU.

(d) European Union

36. Following the catastrophes of Ievoli Sun (October 1999) and of Erika (December 1999) the Commission presented on 21 March 2000 a Communication on Safety of the Seaborne Oil Trade (COM (2000) 142) together with legislative proposals to: strengthen controls in ports (refusal of access to substandard ships, more stringent inspections, greater transparency); monitor more closely the activity of classification societies to which Member States delegate their powers to verify the quality of structure of ships; and generalise the ban on single-hull tankers.

37. The European Parliament and the Council of Ministers acted promptly on those proposals. On 21 December 2000, the Council reached agreement on:

- reinforcing controls over classification societies and their responsibilities;
- setting a target of 4400 ships to be inspected on the basis of age, flag, results of safety inspections;
- banning from European waters "high risk" and "very high risk" ships, notably those that have been arrested and detained twice for safety reasons in the past 24 months; and
- setting a calendar for elimination of single-hull tankers to be, if possible, harmonized with an IMO schedule.¹⁶

38. On 8 December 2000, the Commission also presented a Communication (COM (2000) 603) proposing a second package of measures to improve maritime safety, together with legislative proposals to establish a Community maritime traffic monitoring, control and information system; a European oil pollution compensation fund; and a European Maritime Safety Agency.

¹⁶ See also section on IMO above.

4. Electronic trade

39. The performance of the shipping sector depends on information flows preparing and accompanying the physical transport of the goods. As in the case of air transport computer reservation systems, e-trade on dedicated professional networks pre-existed the Internet. The commonly agreed format for professional messages, EDIFACT (Electronic Data Interchange for Administration, Commerce and Transport) was completed in 1992 under the aegis of the United Nations. Internet gave a new impetus to e-trade in shipping, and professional web-sites appeared as early as 1995.

40. There is a multitude of possible applications for e-trade in shipping. UNCTAD lists the following examples:

For shipping lines: on-line information on sailing schedules; tariffs; independent action rates and service contracts; rate changes; surcharges; calculation of rates; negotiating rates; sending shipping advice; transmitting booking requests and booking confirmation; sending packing lists; export declaration; shipping instructions; commercial invoices; producing bills of lading; confirmation of loading; authorizing payment; tracking of shipments; B to B procurement platforms; exchange of containers between lines; and chartering ships or space.

For ports: on-line notification of port tariff schedules; control of shipping traffic; guiding into harbour ships of different characteristics; information on incoming and outgoing ships; information on dangerous substances and safety readiness; information on cargo characteristics.

41. Due to lack of harmonized data, it is difficult to assess the volume and identify the main players of business through e-channels, and develop a view on the long-term viability of different services. Sites have flourished, some have gone bankrupt and many others have scaled down their ambitions. While some Sites had hoped to automatise negotiations of freight rates by the shippers, and bypass freight forwarders, they have repositioned themselves as information providers financed by advertisements and subscriptions.

42. Prominent Sites include Setfair, One Sea and shipVertical for procurement, Ocean Connect and Smartbunkers for bunkering, ShipDesk and LevelSeas for chartering, GoCargo for cargo booking, Synchronet and Interasset for equipment exchange, Bolero and tradiant for processing documents, Portsportal and Portnet for ports. It is also likely that the Sites created by major shipping companies will survive: INNTRA founded by P&O – Nedlloyd, Hamburg Süd, CMA-CGM, Maersk Sealand, Mediterranean Shipping Company, Hapag Lloyd, Columbus line, Crowley, Safmarine, ANL and Aliança (offering tracking and online booking services) and of GT/Nexus founded by APL, ANZL, Canada maritime, Cast; Contship, Lykes Lines, TMM, Hanjin; Hyundai, K-line, Mitsui OSK lines, Senator Lines, Yang Ming and ZIM.

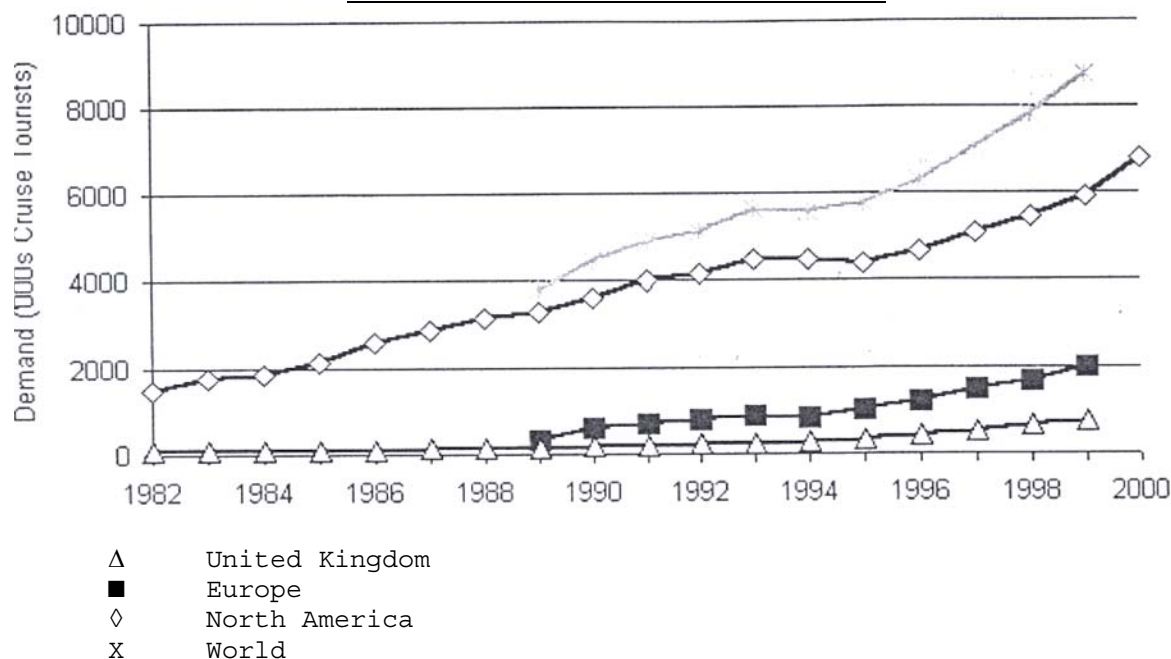
II. SECTORAL DEVELOPMENTS

A. CRUISE SHIPPING

43. The cruise industry, emerging from what has been left of passenger shipping after the advent of jets, has meanwhile become a major sector with positive growth prospects. In 1999, cruise ships carried 8.75 million passengers, 12 per cent up from 1998. North America accounted for 5.9 million passengers, followed by Europe with 2 million.¹⁷

¹⁷ Source: G.P Wild (international) Ltd.

CHART 1
Number of cruise tourists between 1982-1999



44. The major host markets or sailing regions, in terms of capacity deployed are: Caribbean/Bahamas (45%); Asia/South Pacific (17%); Mediterranean (13.5%); Alaska (5.5%); West Coast of Mexico (4.5%); and Northern and Western Europe, (3.5%).¹⁸ Total turnover of the industry was estimated at US\$6.7 billion in 1998. The sector employs over 90,000 persons directly onboard who are mostly involved in hotel (70%) and entertainment activities (9%). In view of numerous impending ship deliveries, employment is estimated to increase by 40,000 to 60,000 by 2004.¹⁹

45. A study conducted in 1999 by Business Research and Economic Advisors (BREA) and by Wharton Economic Forecasting Associates (WEFA), concluded that the US cruise industry generated almost 210,000 American jobs, that direct spending of cruise lines and passengers in US goods and services amounted US\$8.1 billion and that the overall economic benefit for the US totalled some US\$15.5 billions.²⁰ The WTO Secretariat is not aware of similar studies for other countries or geographical regions.

46. In addition to the 300-odd ships with 210,000 beds that are actually operating, 54 ships (103,000 beds) are firmly ordered until 2004. Positive marked expectations have been fuelled by two-digit growth rates over the past two decades. Unlike the freight market, cruise shipping seems to offer significant potential for growth. Conservative forecasts, based on a comparison of market penetration ratios between the United States (1.95 per cent per head of population) and Europe (around 0.4 per cent in France, Italy, Germany, Benelux and Scandinavia and 1.28 per cent in the UK) see an additional potential in Europe of 5.5 million passengers. Perspectives are also bright in Asia.²¹

47. Continued market expansion was accompanied by a process of industrial consolidation. For example, in May 2000, Star Cruise from Singapore took over Norwegian Cruise Lines (NCL). In

¹⁸ Source: "Cruise Industry News Annual, 2000".

¹⁹ Source: Jim Evans Associated Ltd.

²⁰ Source: http://www.icl.org/pressroom/press_39.htm.

²¹ Star Cruise has extended its operations from bases in Singapore and Malaysia to South Korea, Thailand, Taiwan and Japan, and has made some limited moves towards India and the Middle East. Other operators could soon emerge in Japan, South Korea and India.

July 2000, Royal Caribbean Cruise acquired 20 per cent of the capital of the tour operator First Choice; and in August 2000, Carnival Corporation took over 100 per cent of Costa Crociere in which it had already held a 50 per cent stake since 1997. The four leading companies - Carnival Corporation, Royal Caribbean Cruises, Star Cruises and P&O - represented 75 per cent of the market in 2000.

48. For cost reasons, most of the cruise fleet operates under open registry flags, with ownership concentrated in relatively few countries: US, Norway, United Kingdom, Singapore, Greece, Italy, France and Japan. While high capital cost may deter new entrants, one economically potent newcomer has appeared recently: Walt Disney Cruise has been operating since April 1998 two 2400-passenger ships between its Florida parks and an island in the Caribbean.

49. Recent economic and technical developments include the use of sophisticated computer reservation systems using yield management techniques and adjusting tariffication to the load factor of the ship; the development of short-duration cruises; the development of package including air tickets; arrangements and of pure "fun cruises" with no specific destinations ("nowhere cruises"), marketing efforts towards a younger clientele; the construction of larger ships (now exceeding over 100,000 gross tons and 2000 passengers); the globalization of the industry with mature US operators taking over European companies; the emergence of strong Asian operators; and the survival of niche luxury operators.

B. OTHER PASSENGER TRANSPORT (FERRY SERVICES)

50. Ferry markets tend to be local or regional, and it is relatively difficult to find aggregated data. According to sources quoted by OECD²², ferries carry annually over 250 million passenger worldwide and the market is expected to increase at 10 per cent per annum. Fleetward Associates estimates the worldwide fleet of ferries at 1110 units at present, 60 per cent of which are in Europe.²³ The abolition of duty-free sales inside the European Union and the creation of fixed links (between UK and France and between Denmark and Sweden) has led to significant withdrawals of fleet and a departure from previous trends towards ever larger units. Another significant development is the growing number of fast ferries, notably fast car ferries of which over 100 are currently in service, mostly in Europe.

51. From a geographical point of view, the Baltic region, Northern Europe, the Mediterranean, South East Asia and Japan are the main ferry markets. A large part of the fleet providing international links (e.g. across the Channel or between Italy and the French island of Corsica) uses open registry flags for cost reasons. Ferries operating only in national waters are subject to cabotage laws which generally, but not always, prescribe the use of national flags and recruitment of national seafarers. Services to remote locations are often subject to public service obligations, with the costs often covered by subsidy schemes.

52. An important regulatory development during the period under review is the termination on 1 January 1999 of an exemption granted under Article 6 of Regulation No. 3577/92²⁴ to five Southern EU Member States. The exemption concerned regular passenger and ferry services as well as island trades and allowed Member States to reserve cabotage traffic for national flag ships. This traffic is now open to vessels registered in other Member States and participants of the European Economic Area.²⁵

²² "Setting the Scene, the Challenge Ahead" by Danny Scorpecci at the Symposium on "Port and Shipping on Millennium", organized by the Lloyd's list.

²³ The figure does not include the large number of small passengers and mixed vessels serving islands and coasts all over the world.

²⁴ Official Journal, L364, 12 December 1992.

²⁵ An exemption for regular passenger and ferry services provided by vessels of less than 650grt remains in Greece until 1 January 2004.

53. A draft Community Directive seeks to regulate the terms of employment of third-country nationals onboard passenger and ferry services between Member States. They would be guaranteed the terms and conditions laid down by law and/or collective agreements which are applicable to the residents of the Member State where the vessel is registered or otherwise the terms and conditions of one of the Member States between which the vessel operates.

C. BULK SHIPPING

54. Bulk shipping consists of carrying single cargoes in large volumes. For analytical purposes a distinction is normally made between principal types of commodities: dry bulks (industrial raw materials e.g. coal, iron ore and bauxite/alumina, and foodstuffs such as grain and sugar), petroleum (crude oil, condensates and refined products), liquefied gases (LNG and LPG), and liquid chemicals. Developments during the period under review are presented in Annex 2; apparently, no significant structural changes have occurred in this subsector.

55. The fleet continues to be in the hands of a large number of small owners with one or two vessels. However, many of these "single-ship companies" are beneficially owned by larger groups, with the legal separation being aimed at safeguarding the rest of the fleet in the event of significant losses. This applies particularly to the tanker sector.

56. Competition has remained intense, leading to low freight rates even if a large part of the traffic is carried under long-term contracts (iron ore, LNG, LPG and chemical trades). Unlike in the liner sector, cooperation among shipowners tends to be limited to rudimentary forms of pooling, which are not normally stable over the business cycle. During the period under review, the Secretariat is not aware of any competition cases involving the bulk sector. Stiff competition explains why the sector has relied earlier and more widely than liner shipping on open registries and low-cost seafarers. As shown in Annex 2, this tendency has continued during the period under review.

57. Given the volatile nature of bulk traffic and the relatively low value of the cargo involved, governments have not generally operated cargo reservation schemes. In 1998, one of the few such schemes was abolished; Korea removed the last three items (liquefied gas, iron ore and coal) from a list of products it had undertaken to liberalize when acceding to OECD in 1996.

58. A previous trend towards ever larger units has apparently come to a halt and has sometimes been reversed (e.g. there are no more Ultra Large Crude Carriers, written over 500,000 dwt, as there were in the seventies). Shipowners do not have the same "scrap and build policy" as the liner shipowners; the average age of the fleet is higher (over fifteen years in certain subsectors) while the goods transported are potentially more pollutant (oil, chemicals). Safety and pollution problems are thus more acute in the bulk sector which, as result, has attracted more attention from regulators.

D. LINER SHIPPING

59. Concentration in the sector has continued in the period under review. The top 20 liner operators, 11 of whom are based in Asia, accounted for close to 70 per cent of capacity in 2000, up from less than 50 per cent in 1997 (see Annex 4). This trend is likely to continue with the entry into service of ships that were on order at the end of 1999 with an additional capacity of 325,000 TEU.

60. Operators grouped in alliances accounted for 45 per cent of the capacity available in 2000. They are highly concentrated on the three main north-north routes: Asia/North America; North America/Europe; and Asia/Europe. Apart from the commercial advantages of hub-and-spoke operations, one of the main factor driving the expansion of alliances are the costs associated with movements of empty containers. Cooperation among shipping lines helps to diminish these costs. Membership of alliances has remained surprisingly stable compared to traditional liner conferences.

1. Market Access and Liberalization Policies

61. "Traditional" access issues linked to the implementation of unilateral cargo reservation or cargo sharing provisions have continued to lose relevance during the period under review. They have increasingly been replaced by a stronger focus on the scope of admissible business operations and of onshore establishment rights. This focus is reflected both in pure maritime bilateral treaties and in the shipping provisions contained in broader trade and economic integration agreements. Examples include the Europe Agreements between the EU and Estonia, Latvia and Lithuania (1998), the EU's Partnership and Cooperation Agreement with Ukraine (1998) the Poland-South Africa Maritime Agreement (1999), the Poland-Morocco Maritime Agreement (1999), the Free Trade Agreement between Mexico and the EU (2000), and the Agreement between the Asia-Pacific-Caribbean (ACP) countries and the EU (2000).

62. Liner shipowners have continued to complain about trade barriers. For instance the European Community Shipowners Association lists in its Annual Report for 2000 the following restrictions faced by its members:²⁶ foreign equity ceilings; restrictions on establishment of own branch offices; limitations on government cargoes; discriminatory taxation and port charges; restrictions in the feeding of international cargoes between national ports; cumbersome procedures and/or personal harassment during port calls, as well as unrealistic and unjustifiable liability claims by customs administrations. Apart from these more general observations, there are country-specific complaints about: discriminatory lighthouses dues; and discriminatory anchorage and waterfront operations. Many of these complaints concern measures or practices in developing countries.

63. Section 19 of the US Merchant Marine Act provides, and has been used as, an instrument to address perceived market access restrictions. In 1998, the US removed an exemption from the payment of a special tonnage tax previously granted to Brazilian ships. This was in response to discriminatory tax and duty preferences Brazil had extended to imports carried on ships in the second register, REB. The issue was solved in consultations. In October 1999, the two countries signed a new three-years Maritime Agreement granting equal access for each other's carriers to government cargoes and providing for non-discriminatory treatment with respect to maritime services and other matters such as shipping taxes. In 1998, the Federal Maritime Commission (FMC) opened an investigation into laws, rules, and policies of China that appear to have an adverse impact on US shipping, and may merit further action under Section 19 of the Merchant Marine Act, 1920, or the Foreign Shipping Practices Act of 1988.

2. Competition policies²⁷

64. As a first approximation, five forms of cooperation among shipping lines can be distinguished:²⁸ conferences, consortia, alliances, agreements between conference and non-conference members (discussion or capacity stabilisation agreements), and mergers. As a general feature, it appears that the number of conferences and their impact on prices has decreased in recent years. Coincidentally, new forms of cooperation, such as consortia, alliances and mergers, have emerged. They are generally regarded favourably by competition authorities in view of expected productivity gains. Opinions are more diverse with regard to discussion or stabilization agreements.

²⁶ <http://www.ecsa.be/annualreport/item05.htm>.

²⁷ This section draws largely on the descriptive part of OECD document DSTI/DOT/MTC(99)8 "Discussion Document on Regulatory Reform in International Maritime Transport".

²⁸ Different approaches may coexist or overlap, and the relevant legal definitions and concepts may vary significantly between jurisdictions.

(a) Conferences

65. Conferences, the oldest form of shipowner cooperation, first appeared in the 1870s. They can be defined as groups of two or more vessel-operating carriers which provide international liner services for the carriage of cargo on particular routes for which they have agreed to apply uniform or common freight rates and any other conditions (e.g. coordination of sailing dates and dates of call, determination of frequencies, regulation of capacity, and allocation of cargo and revenues).²⁹

66. The share of conferences in liner trade has continued to decline. Although detailed figures are lacking, it is now estimated at 50%; independent operators or "outsiders" account for a similar share. As already noted, the number of conference seems to have declined as well. For instance, while for traffic involving the United States, 32 conference agreements were filed with the Federal Maritime Commission in 1997, only 22 were filed in October 2000. Only one conference operated in the major East-West trades.³⁰ The two conferences operating on the US-Asia route chose to dissolve themselves on the day of entry into force of new US competition legislation, the Ocean Shipping Reform Act (OSRA). Apparently all conferences are now open, i.e newcomers cannot be denied entry. While open conferences have always been mandatory on US trades, close conferences are not banned in many other jurisdictions.

67. Conferences that pre-existed competition legislation, have generally enjoyed antitrust immunity. This lenient approach is based on the assumption that the industry needs flexibility to weather the endemic volatility of prices and demand.³¹ The introduction of progressively larger ships, imbalances and seasonal fluctuations in trade flows, and the influence of non-commercial factors such as national prestige and security has led to chronic overcapacity. As a result, carriers have tended to compete aggressively and bid rates down to levels below cost. A degree of antitrust immunity is thus intended to prevent over-adjustments in the market and, in addition, to allow for a range of efficiency-enhancing arrangements. Carriers may team up to share larger and more efficient vessels, terminals and other assets. Such cooperation may facilitate entry into new trades. Alternatively, carriers might consider mergers which appear less desirable from a competition perspective.

68. During the period under review, antitrust immunity of conferences was discussed in various fora and contexts. Whenever challenged under competition law, it has been confirmed by the competent authorities, subject, however, in many instances to the conclusion of confidential services contracts between the shippers and individual members of the conference.

69. In 1999, the OECD Secretariat circulated a Discussion Paper on "The Review of Regulatory Reform".³² It recommended, *inter alia*, to remove immunity from the application of anti-trust law for

²⁹ See Articles 1.3(b) and 3 of Council Regulation (EEC) 4056/86 of 22 December 1986 "Laying Down the Detailed Rules for the Application of Articles 85 and 86 of the Treaty to Maritime Transport", Official Journal L378 of 31 December 1986. Definitions in other jurisdictions are similar. However, US legislation increasingly denies conferences price fixing authority.

³⁰ Speech delivered by Harold J. Creel, Chairman of the Federal Maritime Commission, before the 1st Lloyd List International Shipping Convention on 19 October 2000. See <http://www.fmc.gov/speeches/creel/london%2010-19.htm>.

³¹ According to a speech of the Chairman of the US Federal Maritime Commission delivered in March 2001 before the 4th Annual Conference of Containerisation International (see: <http://www.fmc.gov/speeches/Creel/london-Mar27.htm>). Similar views can be found in the 6th and 7th recitals to the EC Council Regulation 4056/86 or in the 1999 review by the Australian Productivity Commission of the 1974 Trade Practice Act (see <http://www.pc.gov.au/inquiry/shipping/index.html>).

³² DSTI/DOT/MTC(99)8 "Discussion Document on Regulatory Reform in International Maritime Transport". In 2000, a World Bank Research Paper, based on econometric modelling, developed similar ideas. "Trade in international maritime services: how much does policy matter?" by Carsten Fink, Aaditya Mattoo and Cristina Neagu, World Bank Research Group. For a conflicting opinion see "A review of trade in international maritime services" by the World Shipping Council, May 2001.

common rate fixing by conferences. In May 2000, a joint workshop involving the industry considered the findings of this paper. Shipowners and a number of OECD Governments noted that the current system was working, that the liner industry was structurally different from other industry sectors, and that the exemptions were necessary to ensure the stability of services to shippers; the need for change had to be established by the proponents. Reportedly, several OECD governments recently re-examined their position *vis-à-vis* the exemptions and saw no compelling reason for change.³³ Following the workshop, the OECD Secretariat decided to further study the implications of common pricing. A further workshop is scheduled for December 2001.

70. In the United States, the Ocean Shipping Reform Act (OSRA) became effective on 1 May 1999. The Federal Maritime Commission issued its final rules of implementation on 1 March 2000 and circulated an interim status report on implementation in June 2000.³⁴ The OSRA continues to provide antitrust immunity for conferences and, more widely, for agreements between ocean carriers, but imposes significant constraints. In particular, it eliminates conference control over services contracts, i.e. over the individual medium-to-long-term contracts between carriers and shippers. The rates agreed to by the parties are no longer made public and carriers are no longer required to offer the same deals to other shippers. Carrier conferences must not prohibit or restrict their members from offering services contracts, but they are allowed to issue "voluntary guidelines" for such contracts.

71. In the European Union, the legislative framework remained unchanged during the period under review (Regulation 4056/86 of 22 December 1986), but the Commission issued several Decisions. In September 1998, the Commission imposed fines of US\$251 million on the 15 parties of the TACA conference, for inland price fixing, the fixing of brokerage and freight forwarder remuneration, a collusion and abuse concerning the terms and availability of individual services contracts, and for attempts to alter the competitive structure of the market.

72. The Commission also held discussions with carriers and shippers with a view to resolving conflicts and creating a more open and competitive environment for liner shipping. These discussions resulted in a tentative set of principles calling on conferences operating on Community trades to place no restrictions on the right of their members to enter into confidential services contracts, and no longer fix inland prices in Europe. The latter principle was combined with the possibility of adopting a "not-below-cost" clause. At the beginning of 1999, the Commission received the notification of the revised TACA Conference Agreement based on these principles. While the maritime aspects of the Agreement are still under review, the Commission approved its inland-related part in August 1999.

73. These developments point to increasing regulatory convergence between the US and the EU, but certain differences of positions have remained. Inland price fixing by conferences or carrier agreement is allowed in the United States, subject to filing and control by the FMC. The filing requirements, review and waiting periods provided for in US legislation, do not have a counterpart in the EC, where the Block Exemption granted under Regulation 4056/86 dispenses conferences from filing.

74. Japan reviewed previous a exemption system from the Anti-Monopoly Law and amended the Marine Transportation Law in 1999. The changes are intended to promote "fair and free competition among carriers as well as to secure a stable supply of ocean going shipping services". While maintaining a system of block exemptions, the amendments introduced an examination procedure which enables the Minister to take correcting measures against individual agreements which are deemed not in compliance with certain criteria (e.g. no undue restrictions of competition or impairment of user interest).

³³ For details on individual positions see the report DSTI/DOT/MTC(2000)2 dated 27 November 2000.

³⁴ <http://www.fmc.gov>.

75. In 1999, Australia conducted a review of its competition legislation governing liner shipping (Section X of the 1974 Trade Practices Act). The review led to certain amendments, including the application of Section X to inward conferences, the creation of new investigatory powers in case of refusal of new members in a closed conference, a national interest test to better take into account the interests of shippers, and a greater range of sanctions.³⁵ These amendments came into force on 2 November 2000, except for those concerning inward conferences (2 March 2001).

76. Canada also began a review of its 1987 Shipping Conference Exemption Act (SCEA) in January 1999. On 2 March 2001, the Government introduced a bill (Bill C-14) providing for various amendments to the SCEA, including the abolition of a tariff-filing requirement with the Canadian Transport Agency, the shortening from 15 to five days of the period during which a member has to notify other members of its intention to take independent rate action; the right for individual conference members to negotiate confidential services contracts; and the increase of fines in case of non-compliance with the Act from Can\$1,000 to Can\$10,000 a day.³⁶

(b) Consortia

77. Consortia are agreements between liner shipping companies aimed primarily at operating joint services by means of technical, operational or commercial coordination (e.g. joint use of vessels, port installations, marketing organisations, etc.). The regulatory treatment of consortia may vary from jurisdiction to jurisdiction. Under the legislations of Australia, Canada, Japan, New Zealand and the US, they seem to qualify for immunity from anti-trust law, without regulating whether ship operators apply uniform or common freight rates.³⁷

78. In the European Union consortia are not granted price fixing authority, except if they obtain an individual exemption under Regulation 4056/86 to that effect. Regulation 870/95 allows group exemptions for consortia whose market share does not exceed 35 per cent if members are not part of a conference (30 per cent if members are part of a conference).³⁸ For market shares between 30-35 per cent and 50 per cent, a simplified opposition procedure applies; the consortium benefits from the group exemption unless the Commission objects within six months of notification. In the event of higher market shares, the consortium may apply for an individual exemption. The provisions governing the granting of block exemptions were renewed in April 2000 under Commission Regulation 23 /2000³⁹ for five years with no significant changes.

(c) Alliances

79. Strategic or global alliances, which became operational at the beginning of 1996, establish a framework for cooperation on a Worldwide scale among the same group of companies. Such alliances typically embrace at least two of the major east/west trade routes (Europe/Asia, Asia/US, or US/Europe) served either by combined services on each route or round-the-world services. The parties agree, *inter alia*, on utilization of vessels, including joint vessel route assignments, itineraries, sailing schedules, the type and size of vessels to be employed, additions and withdrawal of capacity, ports and port rotations on a global scale. The agreement typically covers charters, space charters, use of joint terminals and containers, pooling of containers, establishment of container stations, vessel feeder routes, co-ordination (where permitted) of inland services, information exchanges and relevant procedures. In other words, each participant's services are fully integrated into one operating

³⁵ See: http://www.dotrs.gov.au/media/anders/archive/1999/dec_99/a207_99.htm.

³⁶ See: http://www.tc.gc.ca/releases/nat/01_h033e.htm.

³⁷ Source: OECD DSTI/DOT/MTC(99)8, "Discussion Document on Regulatory Reform in International Maritime Transport".

³⁸ Official Journal L89, 21 April 1995.

³⁹ Official Journal L100, 20 April 2000.

system.⁴⁰ Participants in alliances include may national and cross-traders, as well as conference and non-conference lines.

80. From a legal perspective, global alliances are no different from consortia or carrier agreements. Parties have thus far implemented their alliances by way of route-specific agreements taking into account the regulatory regimes or transport conditions on individual routes. Competition authorities have not yet challenged alliances, but are closely monitoring them. The US authorities seem to have developed a positive view of the effects of alliances in terms of rationalization and customer benefits.⁴¹ On both the US and the EU sides, alliances are seen as a way to avoid mergers which could lead to increased concentration and oligopoly situations.⁴² Nevertheless, the EU authorities are considering whether the definition of the relevant market, which is so far on a "trade-by-trade" basis, should be extended or complemented by a more global approach.⁴³

(d) Agreements between conference and non-conference members (stabilization or discussion agreements)

81. Efforts by conferences to regulate capacity may be thwarted, in certain instances, by competition from non-conference operators. Such situations have resulted in "stabilization segments" across trade or regions, or in looser, non binding "discussion/talking agreements" and the like.

82. In Australia, Japan, New Zealand and the US, conferences or individual members of conferences are allowed to enter into agreements with non-conference shipping lines; no particular restrictions apply. In Australia, such agreements must be registered, however and are subject to reinforced oversight since the 2001 amendment of Section X of the Trade Practices Act. In the US, such agreements are subject to the same procedures as any other form of agreement between carriers. This relatively lenient approach may be explained by the agreements' perceived positive impact on the stability of services and efficient capacity management.

83. Other countries have adopted a different stance; Canada has agreements exempted only inter-conference agreements, but not agreements between conference members and non-conference operators from the relevant competition provisions.

84. In the European Union, such agreements do not benefit from the Block Exemption, and the Commission has recently issued several Decisions against them. In the EATA case, it prohibited a capacity-management programme between conference and non-conference lines, which was combined with direct price-fixing.⁴⁴ At the beginning of 2000, the Commission launched surprise inspections of shipping companies suspected of fixing prices outside the scope of the conference

⁴⁰ By contrast, strategic or global alliances do not cover: joint sales, marketing or joint maritime/multimodal pricing; joint ownership of vessels or maintenance or insurance; joint or common bill(s) of lading; common tariffs; joint management and executive functions; revenue pools or cargo pools; and sharing of profits/losses.

⁴¹ See, for instance, the statement of the Chairman of the Federal Maritime Commission before the Committee on the Judiciary of the House of Representatives on 22 March 2000 (<http://www.fmc.gov/speeches/creel/creel.htm>).

⁴² See <http://www.fmc.gov>, and "Liner shipping: Market Developments and Government Action – the EU Competition Policy Perspective" speech delivered by Jean François Pons, Deputy Director-General of the Competition Directorate of the European Commission at the 1st Lloyd List International Shipping Convention, 18-22 October 2000.

⁴³ Ibid.

⁴⁴ Official Journal L193, 26 July 1999.

block exemption. In May 2000, the Commission's FETTCSA Decision came against an agreement between conference lines and independent operators not to grant discounts on published tariffs.⁴⁵

(e) Mergers

85. In the mid 1990s, the liner shipping industry started a process of transnational consolidation. Mergers and acquisitions were already common before, but remained generally confined to the national level. The most significant mergers and acquisition in the sector occurred before the period under review (P&O from UK and Nedlloyd from Netherlands, and the acquisition of the US carrier Sealand by Maersk from Denmark).

86. The acquisition of DSR/Senator Line from Germany by Hanjin from Korea is probably the first case where a line from a developing country, although member of the OECD, has taken over a line from a developed country. In the United States, most of the major international liner shipping companies have passed under foreign control, involving Singaporean, Danish, German and Anglo-Dutch companies.⁴⁶ The Federal Maritime Commission (FMC) has repeatedly stated in this context that it would not change its policy with regard to the use of the section 19 of the 1920 Shipping Act and its related instruments⁴⁷, the mission of the FMC was not limited to pursuing US beneficial interests in shipping, but more widely to defend US flags and maritime trade objectives.

87. Where mergers have been submitted to competition authorities for authorization, subject to the relevant thresholds, they have not so far been objected to. This is probably due to the fact that, by other industries' standards, the liner shipping sector is still not very concentrated. For instance, at the time of the merger, the combined fleets of Maersk and Sealand represented 12 per cent of the capacity Worldwide and a 30 per cent market share on the transatlantic routes.

E. OFFSHORE OPERATIONS

88. Little information is available on this subsector, which has not been the subject to focused negotiations during the Uruguay Round and since.⁴⁸ It has, however, been mentioned recently in the context of discussions of energy-related services and negotiating proposals regarding maritime transport. Elements of a possible sector definition are contained in the "Guidelines concerning the transport activities of mobile offshore vessels", which are annexed to the OECD Common Shipping Principles.⁴⁹ Paragraph 4 defines mobile offshore vessels as "vessels that are engaged in activities associated with the exploration or exploitation of the non-living natural resources on or below the

⁴⁵The 1999 OECD Discussion Paper on "the Review of Regulatory Reform" also recommended the removal of immunity for shipping lines entering into discussion and capacity stabilization agreements. See DSTI/DOT/MTC(99)8 "Discussion Document on Regulatory Reform in International Maritime Transport".

⁴⁶See the recent TPR Report for the United States (WT/TPR/S/88), paragraph 41.

⁴⁷See, for instance, remarks of the Chairman of the FMC before the 88th Annual Convention of the American Association of Port Authorities, on 28 September 1999 (<http://www.fmc.gov/Speeches/creel/SPAAPA.htm>).

⁴⁸There have been five references in replies to the Maritime Questionnaire, generally about the composition of the fleet; two references during the examination of the Questionnaire; one in a conditional offer that did not translate into commitments; and one in a Schedule of Commitments which expressly excluded this subsector. (Australia used the following definition: "Offshore Transport refers to shipping services involving the transportation of passengers or goods between a port located in Australia and any location associated with or incidental to, the exploration or exploitation of natural resources of the continental shelf of Australia, the seabed of the Australian coastal sea and the subsoil of that seabed;" see documents S/C/6).

⁴⁹The complete text of these Guidelines can be found at: <http://www.oecd.org/dsti/sti/transport/sea/act>, page 7.

seabed".⁵⁰ The scope of the OECD Guidelines is limited to the transport activities of mobile offshore vessels.

89. A search on potentially relevant private web sites reveals considerable diversity concerning the types of vessel and activities covered.⁵¹ Table 1 of Annex 6 provides an overview and suggests possible CPC correspondences. Table 2 of the same Annex contains a description of the offshore fleet at the end of 2000, by types of vessels, countries of registration and countries of beneficial ownership. The bulk of the fleet, comprising of some 3200 vessels, consists of two types: offshore supply ships and offshore tug/supply ships. The large difference in numbers between countries of registration and of beneficial ownership reflects the role of open registries. Nevertheless, in some cases, the country of registration corresponds to the country of beneficial ownership, meaning either that the companies concerned are sufficiently prosperous to cover higher crew costs or that they are subject to national flag restrictions. Available data do not allow, however, for more detailed inferences. The fact that the geographical patterns of registration and, more so, of beneficial ownership depart significantly from traditional shipping patterns reflects the increasing role of large oil-producing countries as owners and operators. The regional distribution of oil rigs may provide a rough approximation of the fleet that serve them: North Atlantic (14%); Gulf of Mexico and Caribbean (41%); South America (8,7%); West and South Africa (9%); Pacific Rim (8%); and others (17,%).⁵²

F. OTHER MARITIME TRANSPORT

90. This is a residual category contained in the Maritime Model Schedule as well as, with slightly different definitions, in the annual UNCTAD "Review of Maritime Transport". It cover traffic which is neither liner nor bulk or tramp. The Secretariat is not aware of significant regulatory developments during the period under review, with the general impression being that the relevant subsectors are free of market access restrictions.

G. PORT SERVICES AND MARITIME AUXILIARY SERVICES

1. Economic developments

91. In April 1999, the International Association of Ports and Harbours (IAPH) published a study on the growing involvement of the private sector in port activities.⁵³ This study gives a reasonably comprehensive picture, based on a questionnaire on which IAPH received 188 answers from 61 countries, 54 of which are WTO Members.

92. The vast majority of respondents indicated that they were a public sales agency or corporation established by government (71 per cent). Only 7 per cent were private companies, mostly with significant government shareholdings. The role of the private sector has increased over the past two years in one-third of the ports covered.

93. Tables 1 and 2 in Annex 7 try to establish correspondences between the nomenclature used by IAPH, CPC provisional, and the Maritime Model Schedule.⁵⁴

⁵⁰ These Guidelines stipulate that "Governments of Member countries of the OECD should secure free trade in transport services rendered by mobile offshore vessels and refrain from measures giving preferential treatment to national flag vessels"(paragraph 1). The statement applies to transport activities of mobile offshore vessels "beyond the territorial water of a Member country" (paragraph 3).

⁵¹ See for instance <http://www.oilpubs.com/oso/archive/left.htm> or <http://www.barges.com>.

⁵² Source: "Platou report 2001", page 29, downloadable from <http://www.platou.com/platoureport.htm>.

⁵³ "IAPH Task Force, final report of the Institutional Reform Working Group", April 1999.

⁵⁴ Similarly constructed Tables have been used in the past by the Secretariat to describe airport services (see S/C/W/163/Add.1 Tables 12 and 13, pages 30 to 35).

94. The majority of ports owns key infrastructural assets such as breakwater (77 per cent public ownership), access channels (87 per cent), land and wharves (86 per cent for container and general cargo terminal land, 78 per cent for bulk terminal land, 80 per cent for container and general cargo wharves, 75 per cent for bulk terminal wharves). The ownership of handling equipment and cranes is lower than for infrastructure, but remains important for both container terminals (58 per cent) and general cargo terminals (50 per cent). A significant number of respondents indicated that such superstructures are provided by private companies: 22 per cent for container terminals, 25 per cent for general cargo terminals, and 44 per cent for bulk handling equipment.⁵⁵ Private involvement in individual port operations amounts to 40 per cent for warehousing, 39 per cent for ship agencies between 34 and 37 per cent for stevedoring, 13 per cent for navigational aids, and 6 per cent for harbour master services.

95. According to World Bank data at end 1998 there were around 100 port concessions or BOT contracts signed Worldwide for a total private investment amount of US\$6.3 billion.⁵⁶ Of the projects signed, 42 per cent were in Latin America and the Caribbean, 38 per cent in East Asia and Pacific, 7 per cent in South Asia, 5 per cent in the Middle East and North Africa, 4 per cent in Europe and Central Asia, and 4 per cent in Africa. Most of the investments concerned container terminals, with the rest focusing on grain, coal and liquid bulk terminals. Non-specialized general cargo facilities have not attracted significant private financing. The World Bank anticipates growth of world maritime traffic between 3 to 5 per cent annually from 1998 to 2010, which in turn, would require 200 to 300 new full-fledged container terminals until 2005.

96. Annex 8 gives an indication of the structure of operations of the world's five leading terminal operators. They consist of four pure terminal operators, Hutchison Port Holdings from Hong Kong, China (managing 18 harbours in eight countries in 1999); Port of Singapore Authority (12 harbours in 6 countries); P&O Ports from the United Kingdom and Australia (21 harbours in 13 countries); and Eurokai/Eurogate (three countries). These operators are complemented by one shipping line Maersk/Sealand (Denmark/USA) which covers 15 harbours in 12 countries.⁵⁷ The sector is increasingly concentrated; in 2000, the top five terminal operators handled 25 per cent of the world container traffic, while in 1994 the leading ten operators had a share of 14 per cent. Despite its economic weight, the sector is segmented into a variety of different categories under the Maritime Model Schedule and CPC.⁵⁸

97. The list of 33 countries or territories in which those major operators are present is geographically extremely diversified and includes developed countries as well as developing countries.⁵⁹ A recent feature is the involvement of private companies, to a certain extent, in port management. For instance, since 1999, France has allowed corporatized public harbours to create joint ventures with the private sector to manage container terminals and bulk terminals.

⁵⁵ The shares for public and private sectors involvement do not necessarily add up to 100 per cent, due to incomplete replies to the IAPH questionnaire.

⁵⁶ Source: http://www.worldbank.org/html/fpd/transport/ports_ss.htm. In total, there are some 2000 significant shipping harbours.

⁵⁷ Other major players include Stevedoring Services of America (USA); International Container Terminal Services Inc (Philippines); ECT (Netherlands, but in a process of partial takeover by Hutchison), Ceres Terminals (USA); Neptune Orient lines/APL (Singapore/USA), OOCL (Hong Kong China); and COSCO (China).

⁵⁸ The activities of container terminal operators to fall under several categories of the Maritime Model Schedule, including at least maritime cargo handling services, storage and warehousing, container station and depot services. Relevant CPC categories are container handling (7110), storage and warehousing (742) and port and waterway operation services (74510).

⁵⁹ Argentina, Australia, Bahamas, Brunei, Canada, China, Chinese Taipei, Germany, Hong Kong China, India, Indonesia, Italy, Korea, Mexico, Mozambique, Myanmar, Netherlands, New Zealand, Pakistan, Panama, Philippines, Portugal, Russia, Sri Lanka, Saudi Arabia, Singapore, Spain, Thailand, Ukraine, United Kingdom, United States, Vietnam and Yemen.

98. Another trend, already indicated in document S/C/W/62 has continued in recent years: the development of hub-and-spoke systems. They have enabled the share of the leading ten container harbours in world traffic to increase from 30 per cent to nearly 40 per cent, reflecting transshipments and additional traffic generated by feederage. Container transshipment is believed to account for one-fifth of total maritime container traffic today, and is still growing.⁶⁰ In certain harbours without large hinterland, such as Singapore and Hong Kong, transshipment represents over four-fifths of total activities (Singapore and Hong Kong handle together as many containers as all US harbours combined).

99. The expansion of "distriparks" or logistics zones within, or in the vicinity of, harbours has continued as well.⁶¹ These zones accommodate companies that provide either general logistics services (storage, loading /unloading; stripping stuffing, groupage, consolidation and distribution) or value-added logistics (repackaging, customizing, assembly, quality control, testing, repair, equipment maintenance, equipment renting and leasing, cleaning facilities, tanking, information and communication, safety and security services, offices). A further step is the creation of inland logistics centres ("dry ports") or Inland Container Depot (ICD) where all logistical operations that need not be carried out in the port itself can take place.⁶² Examples include the São Paulo dry port in Brazil, the Manila inland container depot in the Philippines, and the Harbin inland port in China. Relevant operations frequently involve customs clearance.

100. In the absence of relevant information it is difficult to assess the regulatory conditions under which private (foreign) port service providers operate.⁶³ A World Bank research paper has attempted a quantification, based on US imports, suggesting that the lifting of port restrictions would diminish transport costs by nine per cent in this case.⁶⁴

2. Regulatory developments

(a) International organizations

101. In September 1998, UNCTAD published its "Guidelines for Port Authorities and Governments on the Privatization of Port Facilities (document UNCTAD/SDTE/TIB/1).

102. In 2000, the OECD Council adopted Principle 14 of the revised "Common Shipping Policy Principles", dealing with maritime auxiliary services. The complete text of this principle reads as follows:

⁶⁰ The Model Schedule for Maritime Transport contains explicit refers to transshipment activities under "maritime cargo handling services". The market access and national treatment columns "Unbound* except for - no limitation on transshipment (board to board or via the quay) and/or on the use of on-board cargo handling equipment."

⁶¹ For more information "distriparks" see "Globalization, Privatization and Restructuring of Ports", (intervention by Marc H. Juhel from the World Bank at the 10th Annual Australian Summit on Ports, Shipping and Waterfront reform).

⁶² Certain container-related activities of such dry ports are already covered by the Maritime Model Schedule which defines "container station and depot services "as" activities consisting in storing containers, whether in port areas or inland, with a view to their stuffing/stripping, repairing and making them available for shipments".

⁶³ The NGMTS Maritime Questionnaire did not comprise detailed questions on the provision of port services.

⁶⁴ "Trade in international maritime services: how much does policy matter?" by Carsten Fink. Aaditya Mattoo and Cristina Neagu.

"Principle 14 - Maritime Auxiliary Services"

OECD Member countries consider that there should be non-discriminatory treatment as regards the access to and use of maritime auxiliary services, and that the application of fees and charges should be transparent.

Additionally, where these auxiliary services are commercially provided, there should be a free and fair competitive environment as regards their provision, subject to providers meeting required safety and other standards of the country where the services are provided.

This Principle applies to those services which a vessel might use within a port, including while berthed, and includes (but is not limited to): Pilotage, towing and tug assistance; Provisioning; Discharge of waste and ballast water; Navigational aids; Shore based operations essential to ship operations, including communications, water and electrical supplies; Emergency repair services; Anchorage and berthing services; Container handling, storage and depot services; Maritime agency services; Maritime freight forwarding services; Maritime cargo handling services; Custom clearance services and Maintenance and repair of vessels".

Turkey is unable to accept those elements of Principles 14 and 15 which relate to the "provision" of those services. Greece cannot commit itself to accepting the new Principles 14 and 15 at this stage.

103. As shown in Annex 5, the categories used in this context are nearly the same as those underlying the GATS Maritime Model Schedule, and the core obligations are similar sometimes more ambitious.⁶⁵

(b) European Union

104. In December 1997, the European Commission presented its Green Paper on Seaports and Maritime Infrastructure.⁶⁶ Its basic approach was reflected later, in February 2001, in a Draft Directive on market access to port services which aims to liberalize these services⁶⁷, complementing jurisprudence of the Court of Justice and competition authorities.⁶⁸ The Directive, once adopted, would prohibit limitations on the number of port service providers, except for safety reasons in the case of technical/nautical services (i.e. pilotage, towage and mooring) and for space or capacity constraints in the case of other services (including stevedoring, stowage, transshipment, depot and warehousing services). Table 4 in Annex 7 juxtaposes the classification contained in the Draft Directives, with the Maritime Model Schedule (MMS) and the CPC.

105. In harbours exceeding a threshold of 500,000 passengers or 3 million tonnes of traffic, there should be at least two providers of the services covered. Authorization procedures should be fair, transparent and non-discriminatory. The harbour authorities should not participate in the selection process if they provide themselves commercial services; and their commercial accounts should be separated from regulatory activities. Self-handling of shipowners would be permitted. Port service providers would be allowed to use personnel of their choice, subject to relevant national legislation. Public service obligations related to safety, regularity, continuity, quality and prices could be imposed

⁶⁵ Principle 14 opens the possibility of liberalizing the provision of certain port services and not only of access to them; it seems to cover the right of access to/use of maritime auxiliary services and contains a transparency obligation for fees and charges.

⁶⁶ COM (1997) 678 (final) 10 December 1997.

⁶⁷ Communication from the Commission to the European Parliament and the Council "Reinforcing Quality Service in Sea Ports, a Key for European Transport, Proposal for a Directive of the European Parliament and of the Council on Market Access to Port Services". COM(2001) 35 (final), 13 February 2001.

⁶⁸ For the period under review, see Court Decisions C-242/95 *GT Link A/s v. De danske Statsbaner*, dated 15 July 1997, on port duties; C-163/96 criminal proceedings against *Silvano Raso and others*, dated 12 February 1998, on port terminal concession; C-266/96 *Corsica ferries SA v. Gruppo Antichi Ormeggiatori del Porto di Genova Coop*, dated 18 June 1998 on mooring; C-22/98 *Openbaar Ministerie c/Jean Claude Becu - Annie Verweire*, dated 16 September 1999 on dockers; and a pending case, "*les abeilles*", on tugging.

on them. Transitional provisions are foreseen existing private monopolies (e.g. in the United Kingdom). Finally, the Draft Directive addresses measures considered as State Aid which would be subject to authorization by the Commission.⁶⁹ The Directive is currently pending before the Council.

(c) National developments

106. Several countries have amended their regulatory frameworks governing port and auxiliary services during the period under review. Chile's national port holding company Emporchi was dismantled in 1998. Canada corporatized in 1998, and Greece also continued corporatization policies.

107. In October 1997, the Japan Foreign Steamship Association (JFSA), the Japan Harbour Transportation Association (JHTA), the Japan Shipowners Council (JSPC) and the Ministry of Transport (MOT) reached agreement ("Four-Party Agreement") to introduce more transparent and simplified procedures. Moreover, JFSA, JSPC, and MOT agreed on an alternative system to the present Prior Consultation System. In response to the latter, the US Federal Maritime Commission decided to suspend sanctions it had imposed earlier on the grounds that the Prior Consultations System create conditions unfavourable to US shipping.⁷⁰

H. MULTIMODAL TRANSPORT

108. In 2000, the OECD Council adopted Principle 15 of the revised "Common Shipping Principles", dealing with international multimodal transport. The complete text reads as follows:

"Principle 15 - International Multimodal Transport"

OECD Member countries consider that international multimodal transport involving a sea leg is an integral part of the transport chain, and that there should be non-discriminatory treatment as regards the access to and use of those services, as well as a free and fair competitive environment in regard to their provision."

109. The Principle is consistent with Additional Commitments on the ability to rent, hire or charter trucks, railways carriages or barges contained in the Maritime Model Schedules (access to/use of); and the possibility of liberalizing the provision of multimodal transport services themselves in accordance with option 2A of the first column of the Maritime Model Schedule.

110. The OECD Maritime Transport Committee undertook an assessment of the importance of multimodal transport.⁷¹ It confirms the growing interest of carriers in providing value-added door to door services to increase potential sources of revenue. The tri-modal inland terminal (inland waterway-rail-road) and the logistical center set up in 2000 by P&O/Nedlloyd in Duisburg is considered a pertinent example. Nevertheless the proportion of door-to-door services in total activities vary greatly from carrier to carrier reaching 50 per cent of the European traffic of P&O/Nedlloyd, but no more than 30 per cent of the European traffic of Safmarine/CMBT or Mitsui/OSK.

111. Multimodal transport is of particular interest to liner shipping; bulk cargo traffic has essentially a point-to-point structure. The very design of modern containers was meant to facilitate

⁶⁹ Support to public general infrastructure (dikes, breakwaters, locks and other high-water protection measures etc.) would not *a priori* be considered as State Aid, whereas support for user-specific infrastructure (yards, jetties, pipes and cables for utilities) and superstructures (warehouses, workshop, offices, fixed and semi-mobile equipment such as cranes and ramp) would be considered as State Aid. Support for docks and quay walls would be assessed on a case by case basis.

⁷⁰ Details are provided in FMC docket 96-20, 16 November 1996 at <http://www.fmc.gov/dockets/962D20.htm> and subsequent actions and reports. See also http://www.mofa.go.jp/announce/announce/archive_2/97227.tml and <http://www.mofa.go.jp/announce/press/1997/10/1028.html>

⁷¹ Document /DSTI/DOT MTC (2001)3, 11 January 2001.

the transfer of freight from land-based modes to ships and back again. In Europe, 74 per cent of the containers arriving by sea are sent on via other modes, principally road. This also implies that shippers increasingly rely on third-party logistics. According to a recent survey, this is the case for 64 per cent of the European companies. UNCTAD estimates growth rates in the next few years of about 10 to 15 per cent in Europe and 20 to 30 per cent in the United States.⁷² Strong growth is also reported for developing countries like India, where third-party logistics has expanded recently at rates of 30 per cent per year. According to a survey by the Magazine Containerization International in 1999, based on a questionnaire sent to 1000 major shippers Worldwide, contracts with maritime carriers for intermodal services account for 53 per cent of outgoing and 36 per cent of incoming shipments.

112. Carriers have used various strategies to develop their multimodal activities: direct ownership, creation of nominally independent logistics companies, and strategic alliances with inland multimodal operators particularly on feeder service routes. Direct commercial links between logistic providers and shipowners are frequent. For instance, Sealand/Maersk has created a 50:50 joint-venture with the Dutch logistics group Ewals Cargo Care to create a logistics platform providing for quality control, storage and warehousing, inventory management, order preparation, and distribution services. Existing regulatory frameworks play a major role in this context. Regulations on inland freight transport licensing and competition legislation prohibiting inland price fixing by groups of carriers may in certain instances impair the emerging of full-fledged multimodal services.

113. From an economic perspective, the multimodal transport services reveal significant similarities with integrated express delivery services. Such integrated operations help to avoid the legal and physical fragmentation of the transport chain between different operators and the ensuing costs, coordination problems and inefficiencies, which can be avoided by integrated operations. In response to an OECD questionnaire, various carriers have estimated the cost savings of integrated operations at between 7 and 30 per cent, which appears highly attractive in view of the thin profit margins of pure shipping activities. The savings vary significantly, depending on the nature of land operations (10 per cent of total costs for rail, 7.5 per cent for road, 30 per cent for inland waterways, and 7.5 per cent for local delivery services).

I. CLASSIFICATION SOCIETIES

114. Classification societies for maritime transport have been dealt with in document S/C/W/62, paragraphs 66 and 67. Annex 9 provides recent data on the main classification societies, their activities and international networks.

J. SHIPBROKERS

115. Neither CPC nor the Maritime Model Schedule explicitly cover a very traditional maritime auxiliary service: shipbroking.⁷³ Shipbrokers are intermediaries with two principal functions; they assist owners and charterers in concluding charter contracts for vessels ("cargo for ships") and help buyers and sellers of vessels, including shipbuilders, to conclude sales or construction contracts. There are two broad categories, housebrokers, who are directly employed by one or more principals, (charterers and owners), and competitive brokers who work for an independent broking company or as sole traders.

116. The shipbroking profession has developed a self-regulated market since 1744, the Baltic Exchange. It is located in London and has remained the leading market (50 per cent of the global

⁷²UNCTAD Review of Maritime Transport, 1998, part 192.

⁷³ See for instance the web-site of their Worldwide association, the Federation of National Ship Brokers and Agents: <http://www.fonasba.com>. For information on US and EU shipbrokers, respectively, see <http://www.asba.org/> and http://www.fonasba.com/about_ecasba.htm.

tanker market, 30 to 40 per cent of the dry bulk market, over 50 per cent of the sales of new and second hand tonnage). It disseminates information, such as the Baltic Dry Index (BDI), and helps to solve disputes between members and with non-members. The Baltic Exchange has developed "freight derivatives" to allow shipowner or charterers to hedge or take position on future movements of freight rates. Most commonly used are Forward Agreements (FFA), whose volume grew six-fold between 1995 and 1999, from £160 million to £1 billion.

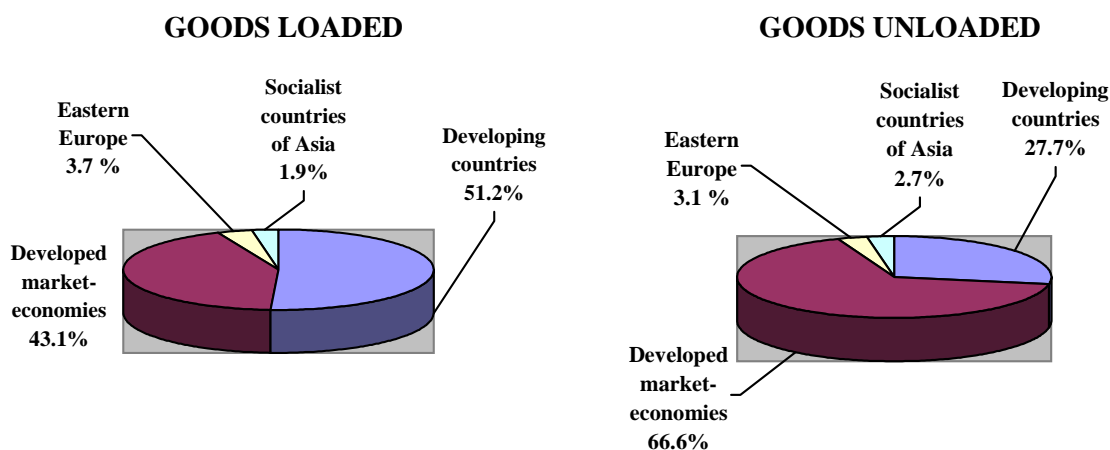
117. On the charter side, shipbrokers (recruiting ships for cargo and cargo for ships) concentrate exclusively on the bulk sector where they perform similar intermediary functions as agents for liner shipping (cargo for ships). In-house chartering activities ("housebrokers") are probably covered by the "bulk, tramp" entry of the Model Schedule and, alternatively, by CPC 72122, 72129, 72130 and 83103. However, independent intermediary activities for chartering ships or recruiting cargo do not appear to be clearly covered (Annex 10).

K. CONTAINER LESSORS

118. The economic importance of container leasing services and GATS-related classification problems are discussed in document S/C/W/62, paragraph 64. During the period under review, the industry has continued its growth in spite of the Asian crisis (8.2 per cent in 1998, 7.6 per cent in 1999). Leased containers account for 45 per cent of the total container fleet. The sector is extremely concentrated; the top 20 lessors own 94 per cent of the fleet.

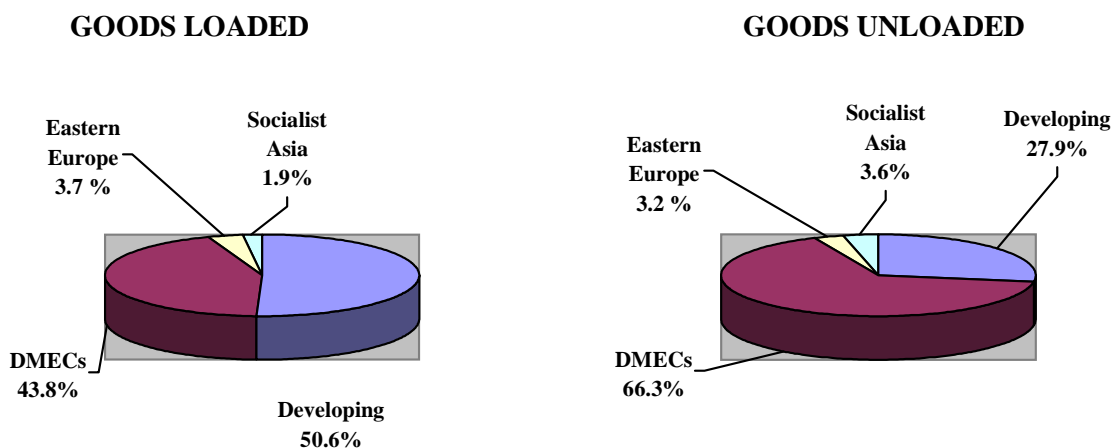
ANNEX 1
World Seaborne Trade by Country Groups*

CHART 1
(Percentage distribution of tonnage, 1997)



Source: See Table 4.

CHART 2
World seaborne trade by country groups
(Percentage distribution of tonnage, 1999)



* More detailed information can be found in the UNCTAD "Review of Maritime Transport"; paragraphs 10.

Source: UNCTAD Secretariat on the basis of data supplied by reporting countries and specialized sources.

ANNEX 2
World Tonnage by Types of Vessel and Country Groups, from 1997 to 1999

Country Group	Year	Total dwt		Oil tankers	Bulk carriers	General cargo ships	Container ships	Other ships
		Million dwt	% of world total					
World total	1997	775.9	100.0	35.1	36.2	13.4	8.1	7.2
	1998	788.7	100.0	35.6	34.9	13.1	7.8	8.6
	1999	799.0	100.0	35.5	34.5	13.0	8.0	9.0
				Percentage share by group of countries				
Developed market-economies	1997	202.5	26.1	30.8	18.8	19.0	37.0	40.2
	1998	202.6	25.4	29.8	18.1	19.6	37.1	38.7
	1999	203.2	25.4	30.5	17.0	19.2	34.6	38.6
Major open-registry countries	1997	361.0	46.5	50.2	51.9	36.1	36.9	32.4
	1998	376.8	47.2	51.2	53.5	37.0	38.6	35.1
	1999	384.7	48.1	50.2	54.9	37.7	39.8	36.6
Central and Eastern Europe	1997	24.3	3.1	1.4	2.8	8.4	0.7	5.6
	1998	20.7	2.6	1.2	2.2	7.3	0.7	4.8
	1999	18.3	2.3	1.0	1.8	6.7	0.7	4.4
Socialist countries of Asia	1997	26.0	3.4	1.2	4.0	8.0	3.1	2.2
	1998	25.9	3.2	1.2	4.2	7.6	2.7	2.1
	1999	25.8	3.2	1.3	4.1	7.5	2.6	2.0
Developing countries	1997	149.9	19.3	15.6	20.6	26.9	17.7	18.8
	1998	150.8	18.9	15.9	20.1	26.7	17.3	18.5
	1999	153.6	19.2	16.2	20.1	26.5	18.8	17.5
of which in:	1997	6.5	0.8	0.8	0.5	1.6	0.3	1.9
	1998	6.3	0.8	0.6	0.5	1.6	0.3	1.8
	1999	6.0	0.8	0.6	0.5	1.6	0.3	1.7
Africa	1997	6.5	0.8	0.8	0.5	1.6	0.3	1.9
	1998	6.3	0.8	0.6	0.5	1.6	0.3	1.8
	1999	6.0	0.8	0.6	0.5	1.6	0.3	1.7
America	1997	34.4	4.4	3.2	3.9	9.4	3.2	5.0
	1998	34.5	4.3	3.1	3.7	9.5	3.8	5.3
	1999	33.9	4.2	2.7	3.5	9.5	4.7	4.8
Asia	1997	107.6	13.9	11.6	15.9	15.4	14.1	11.8
	1998	108.5	13.6	12.1	15.6	15.3	13.0	11.2
	1999	112.2	14.0	12.9	15.7	15.2	13.6	10.9
Europe	1997	1.2	0.2	-	0.3	0.3	0.1	-
	1998	1.3	0.2	-	0.3	0.2	0.2	-
	1999	1.2	0.2	-	0.3	0.2	0.2	-
Oceania	1997	0.2	-	-	-	0.1	-	0.1
	1998	0.2	-	-	..	0.1	..	0.1
	1999	0.2	-	-	..	0.1	..	0.1
Other, unallocated	1997	12.1	1.6	0.8	1.9	1.5	4.7	0.8
	1998	11.8	1.5	0.7	1.9	1.8	3.7	0.8
	1999	13.4	1.7	0.8	2.1	2.4	3.5	0.9

Source: UNCTAD Secretariat on the basis of data supplied by Lloyd's Maritime Information Services (London).

ANNEX 3
Specific Commitments undertaken since November 1998

Member and accession date	International Shipping	Auxiliary services¹	Port services	Other
Albania (8 September 2000)	No commitments	No commitments	Supporting services for maritime transport: none (except mode 4MA: UEHS ²)	Rental of vessels with crew; maintenance and repair of vessels: none (except mode 4,MA: UEHS)
Croatia (30 September 2000)	Freight and passenger transportation: none (except cabotage in mode 1 and in mode 4: UEHS)	No commitments	towing and pushing (mode 3) subject to concession, tendering and possible numerical limitations due to port capacity supporting services for maritime transport except navigational aids and pilotage: (mode 3): subject to establishment, concession, tendering and possible numerical limitations due to port capacity	Rental of vessels with crew: none, (except cabotage in mode 1 and mode 4: UEHS) Maintenance and repair of vessels: none (except mode 4: UEHS)
Estonia (13 November 1999)	No commitments	No commitments	No commitments	Maintenance and repair of vessels: none (except mode 4: UEHS)
Georgia (14 June 2000)	Freight transportation: mode1: U*, ³ modes 2 and 3: none mode 4: UEHS	No commitments	pushing and towing: mode1 : U*, modes 2,3: none, mode 4: UEHS	Maintenance and repair of vessels; rental of vessels with crew mode 1: U*, modes 2 and 3: none, mode 4: UEHS
Jordan (11 April 2000)	freight and passenger transportation: modes 1, 2, 3: none except mode 1 - liner: requirement of local agent mode 4: UHES + 1/5 of the crew of Jordanian nationality.	Storage and warehousing, mode 1: U*, mode 2 and 3: none mode 4: UEHS Shipping Agents, Maritime Freight Forwarding Services, Maritime Freight, Inspection services, Food Supply Catering (Provisioning) mode 1: unbound mode 2: none mode 3: access restricted to Jordanian natural or juridical entities. mode 4: UEHS	Made available on reasonable and non-discriminatory terms, except for pilotage and anchorage	Maintenance and repair of vessels; rental of vessels with crew: modes 1, 2, 3: none mode 4: UEHS

Member and accession date	International Shipping	Auxiliary services¹	Port services	Other
Kyrgyz Republic (20 December 1998)	Freight and passenger transportation modes 1, 2, 3: none mode 4: UEHS	No commitments	Towing and pushing services, supporting services for water transport. modes 1, 2, 3: none mode 4: UEHS	Rental of vessels with crew, maintenance and repair of vessels modes 1, 2, 3: none mode 4: UEHS
Latvia (10 February 1999)	Freight and passenger transportation: modes 1,2,3 : none mode 4: UEHS	No commitments	Towing and pushing services, supporting services for water transport. mode 1, 2, 3: none mode 4: UEHS	Rental of vessels with crew, maintenance and repair of vessels modes 1, 2, 3: none mode 4: UEHS
Lithuania (31 May 2001)	No commitments	Ship agency services modes 1, 2: none mode 3: licencing with language requirement	Towing and pushing services, modes 1, 2: none mode 3: unbound mode 4: UEHS Supporting services for water transport. modes 1, 2: none mode 3: licencing with language requirement mode 4	No commitments
Moldova (27 July 2001)	Freight and passenger transportation modes 1,2,3: none mode 4: UEHS	No commitments	Towing and pushing services, supporting services for water transport. modes 1, 2, 3: none mode 4: UEHS	Rental of vessels with crew, maintenance and repair of vessels modes 1,2,3: none mode 4: UEHS
Oman (9 November 2000)	Freight and passenger transportation: modes 1, 2, 3: none mode 4: UEHS	No commitments	No commitments	No commitments

¹This column reflects only entries in Schedules under the heading "Maritime transport services". A commitment on cargo handling, following CPC and MTN.GNS/W/120, would not appear in this column since it is listed by W/120 as service auxiliary to all modes of transport (11.H). Similarly, a commitment on rental of vessels with crew according to the Maritime Model Schedule would not appear in the last column of this Table since the Model Schedule does not list this activity as a maritime transport service.

²MA: Market Access; UEHS : Unbound except as indicated in Horizontal Commitments

³U*: Unbound due to lack of technical feasibility.

ANNEX 4

Leading 20 Container Service Operators (January 2000) on the Basis of Number of Ships and Total Shipboard Capacity (Teus)

Ranking	Operator	Country/territory	No. of ships in 2000	TEU capacity in 2000
1	Maersk Sea-Land	Denmark	244	599, 601
2	Evergreen Line/Uniglory/ Lloyd Triestino	Taiwan Province of China/ Italy	139	327, 813
3	P&O/Nedlloyd	UK/Netherlands	114	277, 582
4	Hanjin/DSR-Senator	Republic of Korea/Germany	83	258, 025
5	Mediterranean Shipping	Switzerland	122	233, 751
6	COSCO	China	114	201, 263
7	NOL/APL	Singapore	70	191, 284
8	NYK Line	Japan	67	154, 344
9	CMA/CGM/ANL	France/Australia	61	138, 956
10	CP Ship Group	Canada	68	138, 823
Total 1-10			1, 082	2, 521, 442
11	Zim	Israel	59	124, 425
12	MOL	Japan	48	116, 152
13	K Line	Japan	49	109, 463
14	Hyundai Merchant Marine	Republic of Korea	32	106, 137
15	OOCL	Hong Kong China	40	103, 896
16	Yangming Marine	Taiwan Province of China	36	95, 712
17	Hapag-Lloyd	Germany	26	89, 076
18	UASC	Kuwait	23	61, 461
19	CSAV	Chile	29	54, 839
20	Cho Yang	Republic of Korea	23	51, 129
Total 1-20			1, 447	3, 433, 732
World Total			3, 696	4, 967, 496

Note: Including TEU capacity of ro-ro vessels and other types of vessels engaged in container services.

Source: Kaiun (Shipping), June 2000.

ANNEX 5
A Comparison between the "OECD-DNME" Understanding and GATS Maritime Provisions

UNDERSTANDING BETWEEN DNMEs AND OECD MEMBER COUNTRIES ON PRINCIPLES TO BE ADHERED TO IN INTERNATIONAL MARITIME TRANSPORT	COMPARABLE GATS PROVISIONS AND RELEVANT ENTRIES IN THE MARITIME MODEL SCHEDULE (MMS) PROVISIONS
PREAMBLE	
<p>Discussions on shipping policy have taken place in Kobe, Japan between members of, and observers to, the OECD Maritime Transport Committee and representatives from government and business circles of the Dynamic non-Member Economies on 27-28 October 1999 (for participating Parties see the end of this Understanding).</p> <p>Participating governments "Parties" agreed upon the principles of open markets, competitive shipping services, and generally accepted international rules and standards and codes on safety and pollution control.</p> <p>The following items record the Understanding on Principles concerning shipping policy, encouragement of commercial initiatives and co-operation, safety and protection of the environment, consultations and the future of the dialogue. These Principles should be applied amongst the participants and without prejudice to any higher standards or commitments for the benefit of freer sea-borne trade and enhancing maritime safety and the marine environment⁽¹⁾. Parties may apply cabotage principles for their domestic trade routes.</p> <p>This Understanding is without prejudice to the General Agreement on Trade in Services, the 28th June 1996 Ministerial Decision on Maritime Transport Services and to future negotiations on trade in services at the WTO.</p>	
I. SHIPPING POLICY	
<p>I.1. Free and non-discriminatory access to international sea-borne trade</p> <p>Appropriate policies, based on the principle of free circulation of shipping in international trade in free and fair competition, should be put in place in order to promote unrestricted and thereby fair participation of sea-going vessels, of any nationality, in international seaborne trade of commercial cargoes. Parties should refrain from any discriminatory measure and/or practice which would impinge upon the choice of the flag or upon free competition in international seaborne transportation of commercial cargoes shipped on carriers of participating Parties.</p> <p>I.2. Shippers' freedom and needs</p> <p>Shippers should be free to choose among different shipping services for the transport of commercial cargoes on all international trade routes. This Principle needs to be supported by measures facilitating administrative procedures to expedite cargoes beyond ports or across borders.</p>	<p>MMS "International freight transport (CPC7211) less cabotage transport", Mode1, liner shipping, bulk tramp and international shipping: "none" in the Market Access and National Treatment columns.</p> <p>MMS "international freight transport (CPC 7211) less cabotage transport", mode 2, liner shipping, bulk tramp and international shipping: "none" in the Market Access and National Treatment columns.</p>

<p style="text-align: center;">UNDERSTANDING BETWEEN DNMEs AND OECD MEMBER COUNTRIES ON PRINCIPLES TO BE ADHERED TO IN INTERNATIONAL MARITIME TRANSPORT</p>	<p style="text-align: center;">COMPARABLE GATS PROVISIONS AND RELEVANT ENTRIES IN THE MARITIME MODEL SCHEDULE (MMS) PROVISIONS</p>
<p>I.3. Promoting competition on a free and fair basis Appropriate policies should be put in place to safeguard and promote free and fair competition in international shipping between carriers from all Parties participating in international maritime transport operations, while preventing the abuse of dominant positions, to the benefit of the economic interests of shipowners, shippers and, ultimately consumers.</p> <p>Such policies should also ensure that applicable competition laws, regulations and other policies contain the required flexibility to adjust to the rapidly evolving conditions of international shipping.</p> <p>I.4. Promotion of compatibility of competition laws and regulations Co-operation and, where appropriate, consultation among Parties, both in the application of existing regulatory arrangements and as regards their future development, is agreed upon as a pragmatic means of promoting compatibility of competition rules applied to international shipping.</p> <p>I.5. Non-discrimination as regards access to and treatment in ports Parties should accord non-discriminatory treatment to all national and foreign suppliers of shipping services with respect to access to ports open to international trade, access to and use of port and maritime auxiliary services, as well as related fees and charges.</p> <p>I.6 Commercial presence of foreign operators: agency operations, freight forwarding, intermodal haulage associated with an international sea leg Parties should allow access on a non-discriminatory basis to all suppliers of shipping and related services to provide:</p> <ul style="list-style-type: none"> • agency operations and <u>related freight services</u>, and • intermodal haulage⁽²⁾ transport operations associated with an international sea leg. <p>I.7. Transfer of funds Parties should provide unrestricted, efficient and timely transfer of funds related to commercial shipping operations.</p>	<p>GATS Article IX</p> <p>MMS, additional commitments on access to /use of port facilities.</p> <p>MMS maritime agency services (and possibly several other auxiliary services) mode 3 "none", in the Market Access and National Treatment column MMS option 2A (i.e. maritime international freight transport including multimodal transport services) mode 3 "none", in the Market Access and National Treatment column</p> <p>GATS Article XI</p>

<p align="center">UNDERSTANDING BETWEEN DNMEs AND OECD MEMBER COUNTRIES ON PRINCIPLES TO BE ADHERED TO IN INTERNATIONAL MARITIME TRANSPORT</p>	<p align="center">COMPARABLE GATS PROVISIONS AND RELEVANT ENTRIES IN THE MARITIME MODEL SCHEDULE (MMS) PROVISIONS</p>
<p>II. ENCOURAGEMENT OF COMMERCIAL INITIATIVES AND CO-OPERATION</p>	
<p>II.1. Efficient use of resources by commercial operators</p>	
<p>As a general principle, Parties agree that commercial operators should be encouraged to identify and eliminate existing commercial practices, which lead to the uneconomic allocation of resources, and to develop efficient and cost-effective commercial systems and practices so that maritime transport does not impede the flow of trade.</p>	
<p>II.2. Co-operation between all those involved in international sea-borne transport</p>	
<p>Co-operation between all those involved in the international sea-borne transport chain should continue. In this context special emphasis should be put on co-operation in areas such as Electronic Data Interchange.</p>	
<p>II.3. Improvement in transparency as regards those involved in maritime transport operations</p>	
<p>Within the limits of their laws and regulations, Parties to this Understanding confirm their readiness to provide without undue delay information to those having a legitimate interest in obtaining information on owners, operators or any other person involved in maritime transport operations.</p>	<p>GATS Article III</p>
<p>III. PROMOTION OF MARITIME SAFETY AND PROTECTION OF THE ENVIRONMENT</p>	
<p>III.1. Strict compliance with internationally agreed rules and standards</p>	
<p>Parties stress their determination that all vessels should comply with internationally agreed rules and standards concerning the safety of ships, persons on board and the prevention of pollution of the marine environment. They agree to ensure compliance with these rules by all vessels within their jurisdiction. Apart from being a safety and environmental risk, non-compliance might provide unfair advantages to those shipowners who operate substandard ships.</p>	<p>GATS Article XIV</p>
<p>III.2. Support given to actions taken by the International Maritime Organization and the International Labour Organization</p>	
<p>Strong support should be given to actions taken by the International Maritime Organization to improve the safety of ships and persons on board and the prevention of pollution of the marine environment and to enhance the implementation of international conventions. Third countries should be urged to adopt a similar approach.</p>	<p>GATS Article XXVI</p>
<p>Where appropriate, strong support should also be given to relevant actions taken by the International Labour Organization.</p>	<p>GATS Article XXVI</p>
<p>III.3. Flag and port state control</p>	
<p>Parties agree on the fundamental importance of effective flag state control and the necessity also of effective port state control, as processes for monitoring compliance and enforcement of standards.</p> <p>Parties also agree on the need for improved regional co-operation among port state control authorities.</p>	

<p align="center">UNDERSTANDING BETWEEN DNMEs AND OECD MEMBER COUNTRIES ON PRINCIPLES TO BE ADHERED TO IN INTERNATIONAL MARITIME TRANSPORT</p>	<p align="center">COMPARABLE GATS PROVISIONS AND RELEVANT ENTRIES IN THE MARITIME MODEL SCHEDULE (MMS) PROVISIONS</p>
<p>III.4. Adequately trained seafarers</p>	
<p>Parties agree to exchange information on the efforts undertaken in training skilled seafarers, and on how to promote seafaring whilst at the same time fostering and improving the quality of crewing.</p>	
<p>IV. CONSULTATIONS</p>	
<p>Whilst not inhibiting bilateral discussions, parties to the Understanding recognise the merits of consulting as regularly as is necessary on problems which they encounter, or to exchange views on the implementation of the Principles of this Understanding. These consultations should also involve, as appropriate, private and commercial interests in the maritime sector and should, inter alia, cover the following matters:</p> <ul style="list-style-type: none"> • the means of both maintaining and improving competitive access to international sea-borne trade on a free and commercial basis; • developments as regards each other's shipping policies; • any problems encountered in the application of each other's or third country's shipping policies and practices; • ways and means of achieving mutually acceptable solutions if conflicts of law or policy in shipping and related fields arise. • 	<p>GATS Article XXII</p>
<p>1. These Principles are to be adhered to without prejudice to measures applied by Parties to protect their essential security interests, public order and health.</p>	<p>GATS article XIV and XIV <i>bis</i></p>
<p>2. Malaysia expresses a reservation on this element of Principle I.6</p>	

ANNEX 6
Offshore Services

TABLE 1
Possible Classification under CPC Provisional of Offshore Activities and Types of Vessels

Types of vessels	Possible CPC Classification
Anchor handling tugboats, tugs	72140* <u>Towing and pushing services</u> Towing and pushing services on the high seas and on coastal waters. These services are generally provided by vessels which do not themselves carry freight or passengers. Included here are towing services of oil rigs, floating cranes, dredging vessels, buoys, and of hulls and incomplete vessels, on a fee or contract basis. Towing services for distressed seagoing vessels are also included.
Supply vessels	72119* other passenger transportation, 7212* freight transportation
Cable laying vessels, pipe laying bury barges	5134* 51340* [Construction works] <u>For long distance pipelines, communication and power lines (cables)</u> Construction work of long distance overland <u>or submarine pipelines</u> and power and telecommunication transmission lines (<u>cables</u>). 5135* 51350* [Construction works] <u>For local pipelines and cables; ancillary works</u> Construction work of local gas <u>pipelines</u> and water and sewer mains and local power and communication transmission lines (<u>cables</u>). Construction work of ancillary works such as transmission towers including antennas
Construction vessels, offshore workshops	88300* <u>Services incidental to mining:</u> Services rendered on a fee or contract basis <u>at oil and gas fields</u> , e.g. drilling services, <u>derrick building, repair and dismantling</u> services, oil and gas well casings cementing services.
Floating storage units	7422* 74220* <u>Bulk storage services of liquids or gases</u> Bulk storage and warehousing services of liquids and gases.
Shuttle tankers	72122* <u>Transportation of bulk liquids or gases</u> Transportation by seagoing vessels of bulk liquids or gases in special tankers. These vessels may also be refrigerated.

Types of vessels	Possible CPC Classification
Mobile drilling units	<p>88300* <u>Services incidental to mining:</u></p> <p>Services rendered on a fee or contract basis at oil and gas fields, e.g. <u>drilling services</u>, derrick building, repair and dismantling services, oil and gas well casings cementing services.</p>
Mobile production systems	<p>Possibly "88300* <u>Services incidental to mining:</u></p> <p>Services rendered on a fee or contract basis at oil and gas fields, e.g. drilling services, derrick building, repair and dismantling services, oil and gas well casings cementing services." Unless considered as a direct production activity not covered by the GATS</p>
Remotely operated vehicles (ROV)	<p>88300* <u>Services incidental to mining:</u></p> <p><u>Services rendered on a fee or contract basis at oil and gas fields, e.g. drilling services, derrick building, repair and dismantling services, oil and gas well casings cementing services."</u></p>
Standby and rescue vessels	<p>91260* Police and fire protection services and 91290* Other public order and safety affairs related services. see exclusion under 74540</p> <p>"Lifeboat services, marine fireboat services and other marine search and rescue services are classified in subclass 91260 (Police and fire protection services) and 91290 (Other public order and safety affairs related services) ".</p>
Survey vessels	<p>86751* <u>Geological, geophysical and other scientific prospecting services</u></p> <p>Geological, geophysical, geochemical and other scientific consulting services as they relate to the location of mineral deposits, <u>oil and gas</u> and groundwater by studying the properties of the earth and rock formations and structures. Included here are the services of analysing the results of subsurface surveys, the study of earth sample and core, and assistance and advice in developing and extracting mineral resources.</p> <p>86752* <u>Subsurface surveying services</u></p> <p>Gathering services of information on <u>subsurface</u> earth formations by different methods, including seismographic, gravimetric, magnetometric and other subsurface surveying methods.</p>

Types of vessels	Possible CPC Classification
Floating hotels	6411* 64110* <u>Hotel lodging services</u> Lodging and related services typically provided by hotels. Related services comprise services normally furnished with and included in the lodging price and include room service, desk service, mail service and bellboy service. or 64199* <u>Other lodging services n.e.c.</u> Lodging and related services of a type not elsewhere classified.

TABLE 2
Major Countries of Registration and of Beneficial Ownership
of the Offshore Fleet by Type of Vessels

Types of vessels	Total number of vessels	Main countries of registration (in terms of number of ships)	Main countries of beneficial ownership (in terms of number of ships)
Drilling ships	54	Panama (18), Bahamas (10), Russia (4), Saint Vincent (3), Liberia (3), India (3), US (2), Azerbaijan (2), Marshall Island (2)	US (17), Norway (6), Russia (5); Netherlands (4), United Kingdom (3), India (3), France (3), Azerbaijan(2)
Offshore processing ships	53	Liberia (10), Panama (8), Australia (5), United Kingdom (4), Bahamas (4), Norway (4), Isle of Man (4), Netherlands Antilles (3)	Norway(9), United kingdom (7) Brazil(5), Australia (5), US (4), Switzerland (4), Netherlands (2), Malaysia (2), China (2)
Offshore supply ship	1370	US (418), Panama (86), China (49), Belize (48), Norway (45), Vanuatu (43), Singapore (37), Saint Vincent (34), Honduras (34), Indonesia(33), United Arab Emirates (30), United Kingdom (29), Mexico (29), Brazil (28), Bahrain(26), Russia (25), Bahamas (23), Malaysia (20), Azerbaijan (19), Marshall Island (16), India (16), Italy (15), Egypt (15), Isle of Man (14), Trinidad (13), Iran (11), Chile (10), Netherlands (10)	US (499), Norway(71), United Arab Emirates (66), Singapore (64), China (50), United Kingdom (46), Indonesia (33), Brazil (31), Mexico (26), Russia (25), Saudi Arabia (21), Azerbaijan (19), Malaysia (18), Greece (18), Bahrain (16), Netherlands (16), India (16), Italy (15), Egypt (15), Panama (13), Trinidad (12), Iran (12)
Offshore support vessels	201	US (26), Bahamas (17), Panama (16), United Kingdom (14), Russia (7), Qatar (7), Vanuatu (6), Ukraine (6), Italy (6), Norway (5), Liberia (5), Belize (4), Bermuda (4), Singapore (4), Saudi Arabia (4), Norway(NIS ¹ - 4), Malaysia(4), India(4)	US (41), United Kingdom (26), Norway(17), Russia (7), Qatar (7), Italy (6), Ukraine (5), Singapore (5), Malaysia (5), Saudi Arabia (4), Netherlands (4), Japan(4), India (4)
Offshore tug /supply ship	1220	US (164), Panama(95), Vanuatu (83), Saint Vincent (65), China (62), India (59), Belize (47), Norway (42), Singapore (41), Italy (33), Egypt(33), Bahamas (30), Marshall Island (29), Denmark (DIS ² -28), Liberia (25), Isle of Man (24), United Arab Emirates (23), United Kingdom (21), Indonesia (21), Malaysia (19), Norway (NIS-17), Brazil (15), Canada (14), Azerbaijan (12), Mexico (12), Vietnam(11), Bahrain (10), Russia (10), Netherlands(10)	US (341), United Arab Emirates (87), Singapore (78), China (73), Norway (69), India (62), United Kingdom (56), Egypt (35), Italy (33), Denmark (29), Netherlands (24), Indonesia (22), Brazil (19), Panama (13), Canada(13), Australia (12), Azerbaijan (12), Vietnam (11), Spain (11), France (11), Greece (11)
Pipe Layer	20	Panama (5), Bahamas (4), Vanuatu (2), Mexico (2), Liberia (2), Isle of Man (2)	Norway (4), US (3), United Kingdom (3), Mexico (3), China (2), Switzerland (2)
Production testing vessel	10	Saudi Arabia (3), Panama (2)	Saudi Arabia (3), Singapore (2), United Arab Emirates (2)
Standby-safety vessel	289	United Kingdom (114), Norway (28), Saint Vincent (22), US (16), Denmark (DIS-12), Brunei (9), Malaysia (9), Panama (8), Belize (5), Cayman Islands (5), Netherlands (5)	United Kingdom (88), Norway (53), US (24), Netherlands (20), Denmark (DIS 12), Brunei (9), Malaysia (9), Hong Kong (6), Australia (5)
Well stimulation vessel	11	Bahamas (3), US (2), United Arab Emirates (2)	US (3), Norway (3), United Arab Emirates (2)

Source: Lloyd List data base 2001, compiled by the Secretariat.

¹Norway International Shipping Register.

²Danish International Shipping Register.

ANNEX 7
Various Port Classifications

TABLE 1
IAPH Classification of Port Assets

IAPH Classification	CPC Provisional Possible Correspondence (provision only)	Maritime Model Schedule Possible Correspondence
Breakwater	DIVISION 51 CONSTRUCTION WORK	
Access channels	<p>Pre-erection work; new construction and <u>repair</u>, alteration, restoration and <u>maintenance work</u> on residential buildings, non-residential buildings or civil engineering works.</p> <p>51330 <u>For waterways, harbours, dams and other waterworks</u></p> <p>Construction work of waterways, harbours and riverworks, dams, irrigation and other waterworks.¹</p>	No correspondence
container and general cargo terminal <u>land</u>	CPC 82102 "Renting or leasing services involving own or leased non-residential property	
Bulk terminal <u>land</u>	<p>Renting or leasing services of industrial, commercial or other non-residential buildings or property by owners or leaseholders to others. Examples include factories, office buildings, warehouses, theatres and multiple use buildings which are primarily non-residential, as well as agricultural, forest and similar properties, and land for mineral or oil exploitation" for leasing.</p> <p>CPC 74510 "Port and waterway operation services (excl. cargo handling)</p> <p>Port operation services such as <u>wharves</u>, docks, piers, quays and other marine terminal facilities related services, including passenger terminal services in connection with marine transportation, on a fee or contract basis, and operating and maintenance services of boat, barge and ship canals, of canalized rivers and of other artificial inland waterways. Also included here are services of locks, boat lifts, weirs, sluices and towing services on canals other than by tugboat, e.g. by tractors or locomotives on the towpath." for operation</p>	No correspondence
Container and general cargo terminal <u>wharves</u>	CPC 51330 for maintenance and CPC 74510 for operation	No correspondence for maintenance
Bulk terminals <u>wharves</u>		possibly [9. Anchorage, berth and berthing services] (access to /use of) for operation

IAPH Classification	CPC Provisional Possible Correspondence (provision only)	Maritime Model Schedule Possible Correspondence
Handling equipment and cranes at container terminals	<p>CPC 74110* <u>Container handling services</u></p> <p>Cargo handling services provided for freight in special containers. Included are services of freight terminal facilities, on a fee or contract basis, for all modes of transport, including stevedoring services (i.e. the loading, unloading and discharging of vessels' containerized freight, at ports).</p>	<p>"maritime cargo handling services: activities exercised by stevedore companies, including terminal operators, but not including the direct activities of dockers, when this workforce is organised independently of the stevedoring or terminal operator companies. The activities covered include the organisation and supervision of:</p> <ul style="list-style-type: none"> - the loading/discharging of cargo to/from a ship; - the lashing/unlashing of cargo; - the reception/delivery and safekeeping of cargoes before shipment or after discharge.
handling equipment and cranes at general cargo terminals	<p>CPC 74190 <u>Other cargo handling services</u></p> <p>Cargo handling services provided for non-containerized freight or for passenger baggage. Included are services of freight terminal facilities, on a fee or contract basis, for all modes of transport, including stevedoring services (i.e. the loading, unloading and discharging of vessels' non-containerized freight, at ports), and cargo handling services incidental to freight transport, not elsewhere classified. Also included are baggage handling services at airports, and at bus, rail or highway vehicle terminals.</p>	<p>The activities covered include the organisation and supervision of:</p> <ul style="list-style-type: none"> - the loading/discharging of cargo to/from a ship; - the lashing/unlashing of cargo; - the reception/delivery and safekeeping of cargoes before shipment or after discharge.

¹ The terms "breakwater", "access channels" and "wharves" do not appear explicitly in this definition. However, the construction item CPC5223 which uses the terms "waterways, harbours, dams and other waterworks" has a subcategory 52232 "harbours, rivers, canal and related facilities". It is defined as "Harbour bottoms and harbour channels, breakwaters, piers, wharfs and similar structures, and riverworks and canal constructions for water transport traffic".

TABLE 2
IAPH Classification of Harbour Services

IAPH Classification	CPC Possible Correspondences	Maritime Model Schedule Possible correspondences
Navigational aids	CPC 74530 Navigation aid services: Services provided by lighthouses, lightships and light vessels, buoys, channel markers	Navigation aids (only access to/ use of)
Harbour master	CPC 74510 Port and waterway operation services (excl. cargo handling) ¹	Port' captain's services (only access to/ use of)
Dredging	CPC 72140 Towing and pushing services ...included here are towing services of oil rigs, floating cranes, dredging vessels, or CPC 51330 For waterways, harbours, dams and other waterworks Construction work of waterways, harbours and riverworks, dams, irrigation and other waterworks ² .	
Pilotage	CPC 74520 Pilotage and berthing services ³	Pilotage (only access to/ use of)
Stevedoring/cargo handling at container terminal	CPC 74110* Container handling services	Maritime cargo handling services
Stevedoring/cargo handling at bulk terminals	CPC 74190 Other cargo handling services	
Stevedoring/cargo handling at other terminals		
Towage	CPC 74520 Pilotage and berthing services ⁴	Towing and tug assistance (only access to/ use of)
Warehousing	CPC 742 storage and warehousing services	Storage and warehousing CPC 742
Ships agency	Freight transport agency services	Maritime agency services
Port information services	CPC 91134 <u>Administrative transport and communications related services</u> ...Also included are support services and information dissemination services for all the above-mentioned affairs". CPC 74510 Port and waterway operation services	

¹ Defined as " Port operation services such as wharves, docks, piers, quays and other marine terminal facilities related services, including passenger terminal services in connection with marine transportation, on a fee or contract basis, and operating and maintenance services of boat, barge and ship canals, of canalized rivers and of other artificial inland waterways. Also included here are services of locks, boat lifts, weirs, sluices and towing services on canals other than by tugboat, e.g. by tractors or locomotives on the towpath."

² This correspondence is established via CPCRev.1 which establishes full correspondence between CPC prov. 51330 and 54230 "General construction service of harbours, waterways dams, irrigation and other water works. The latter comprises "Dredging services, rock and silt removal and other water associated construction services". Rev. 1 also establishes a link with towing services, but clearly limits it to the dredging of (un-motorized and under-motorized) dredging vessels. This footnote completes and up to a certain extent corrects the developments on the classification of dredging services contained in paragraph 65 of document S/C/W/62.

³ Defined as "Tugboat services in connection with the docking and undocking of vessels of all types, and pilotage services, including the services of pilot vessels, whether supplied to conduct a vessel in or out of harbours or around navigational dangers".

⁴ See the exclusion contained in 74510 "port and waterways operation services" which stipulates that "Tugboat-assisted docking and towing services are classified in subclass/74520 (Pilotage and berthing services) "the item CPC 72140"towing and pushing services" is limited to towing in the high seas and coastal waters.

TABLE 3
OECD Classification of Port and Auxiliary Services

OECD Classification	Access to /use of (OECD)	Access to /use of (WTO-MMS)	Provision (OECD)	Provision (WTO-MMS)
Pilotage	yes	yes	yes, if commercially provided	no
Towing and tug assistance	yes	yes	yes, if commercially provided	no
Provisioning ¹	yes	yes	yes, if commercially provided	no
Discharge of waste and ballast water ²	yes	yes	yes, if commercially provided	no
Navigational aids	yes	yes	yes, if commercially provided	no
Shore based operations essential to ships including communications, water and electrical supplies	yes	yes	yes, if commercially provided	no
Emergency repair services	yes	yes	yes	yes
Anchorage and berthing services	yes	yes	yes, if commercially provided	no
Container handling ³	yes	no	yes	yes
Storage and depot services ⁴	yes	no	yes	yes
Maritime agency services	yes	no	yes	yes
Maritime freight forwarding services	yes	no	yes	yes
Maritime cargo handling services	yes	no	yes	yes
Custom clearance services	yes	no	yes	yes
Maintenance and repair services ⁵	yes	no	yes	yes

¹ The Maritime Model Schedule (MMS) category is "provisioning, fuelling and watering"

² The MMS wording is slightly different, but the content seems identical: "garbage collecting and ballast water disposal".

³ The relevant MMS category is "container station and depot".

⁴ The relevant MMS category is "storage and warehousing".

⁵ These services do not appear in the MMS, but are classified as maritime transport services in document MTN.GNS/W120.

TABLE 4
EU Draft Directive List of Port Services

EU draft directive classification	Possible CPC correspondences	Maritime Model Schedule
1 Technical nautical services		
1.1 Pilotage	74520	1. Pilotage (access to/use of)
1.2 Towage	74520	2. Towing and the tug assistance (access to/use of)
1.3 Mooring	n.a; possibly 74510	possibly 9. [anchorage, berth and berthing services] (access to /use of)
2 Cargo handling		
2.1 Stevedoring stowage, transshipment and other intra terminal transport	74110, 7490	maritime cargo handling services
2.2 Storage, depot and warehousing	742	CPC 742
2.3 Cargo consolidation	74800	n.a.
3 Passengers services (including embarkation and disembarkation)	possibly 74510	n.a.
4 Other services		
4.1 Fire fighting	91260	n.a.
4.2 Water and electricity supply	74590, 88700	3. Provisioning fuelling and watering (access to/use of)
4.3 Safety services	91260	n.a.
4.4 Bunkerage	61300, 62113, 62271	3. Provisioning fuelling and watering (access to/use of)
4.5 Cleaning	74590	n.a.
4.6 Pollution control	possibly 74590 or 9409	n.a.

n.a. – not available

ANNEX 8
The Top Five Worldwide Operators of Container Terminals (in volume)

Company (Origin)	Volume 1999 (million TEU)	Market share (%)	Main Port (% of the activity)	Establishment (number of countries)	Turnover/revenue 1999 (US\$ million)	Profit in 1999 (US\$ million)	Profit margin (%)
Hutchison Port (Hong Kong, China)	18	9	Hong Kong (49%)	8	1, 555	618 ¹	39.7
PSA (Singapore)	17.9	9	Singapore (89%)	6	1, 495	649 ¹	43.4
Maersk Sealand (Denmark)	12.5	6	Algeiras, Spain (15%)	12	6, 000	400 ²	6.7
Eurokai/Eurogate (Germany)	6.4	3	Gioia Tauro, Italy (35%)	3	285	20 ³	7
P&O Ports (G.B. & Australia)	6.2	3	Southampton, GB (15%)	13	550	10 ⁴	20

¹ Operational result.

² Estimated overall profit of the A.P. Moller Group.

³ After tax.

⁴ Operating profit.

Source: Drewry Shipping Consultants, "Forbes"

TEU: Twenty Equivalent Units

ANNEX 9
Elements on the Main Classification Societies

Companies	Country of origin	Foundation year	Employees	Number of delegations at maritime authorities	Fleet covered	Network	Observations
American Bureau of Shipping(ABS)	USA		1600	99	105 million Gross Tonnage (GT) or 19% of World Tonnage (WT)	225 locations in 70 countries	Not for profit
Det Norske Veritas (DNV)	Norway	1864	5500	130	85 million GT or 15% of WT	300 locations in 100 countries	
Germanischer Lloyd AG (GL)	Germany	1867	1800	105	33 million GT or 6% of WT	400 locations in 135 countries	Not for profit
Lloyd Register (LR)	United Kingdom	1760	4500 direct, 6000 in total	135	105 million GT or 19 % of WT	200 locations	
Bureau Veritas (BV)	France	1828	10000	119	37 million GT or 7 % of WT	500 offices in 120 countries	
Korean Register of Shipping (KR)	Korea	1960		35	19 million GT or 3% of WT	52 locations in 17 countries	
Registrano Italiano Navale (RINA)	Italy	1861	720	63	17 million GT or 3% of WT	52 locations	
Nippon Kaiji Kyokai (ClassNK)	Japan	1899	950	98	110 million GT or 20% of WT	80 locations	Not for profit
Indian Register of Shipping (IRS)	India	1975	150				
Croatian Register of Shipping (CRS)	Croatia						
China Classification Society (CCS)	China	1956	1990	14		50 locations in 15 countries	
Russian Register of Shipping (RS)	Russia	1913					
Polski Rejestr Statkow (PRS)	Poland	1936	300	25			

Note: Companies listed in this Table are Members of the International Association of Classification Societies (IACS). Other significant classification companies include: Hellenic Register of Shipping; Honduras Bureau of Shipping; Honduras International Naval Surveying and Inspection Bureau; INCLAMAR; International Naval Survey Bureau; International Register of Shipping; Isthmus Bureau of Shipping S.A.; Panama Maritime Documentation Services; Panama Maritime Surveyors Bureau; Panama Shipping Register; Panama Bureau of Shipping; Panama Register Corporation; Register Naval Roman; China Corporation Register of Shipping; Bulgarski Koraben Register; Turku Lloyd Vafki. For more information on classification societies and safety records, see: <http://www.uscg.mil/hq/g-m/psc/textonly/class.htm>.

ANNEX 10
Possible Classification of Shipbroking activities CPC Provisional
and the Maritime Model Schedule

Shipbroking activities	CPC Provisional	Maritime Model Schedule (MMS)
1. House brokers		
1.1 Chartering of ships	<p>CPC 72130 <u>Rental services of seagoing vessels with operator</u> Rental and leasing services of all types of self-propelled, seagoing vessels with operator, such as passenger vessels (except pleasure boats) tankers, bulk dry cargo vessels, cargo and freight vessels, tugboats and fishing vessels.</p> <p>CPC 83103 <u>Leasing or rental services concerning vessels without operator</u> Renting, hiring or leasing services concerning boats, ships and hovercraft without operator, primarily designed for the conveyance of passengers and freight.</p>	MMS does not cover rental and leasing (see S/C/W/62, paragraph 50)
1.2 Recruitment of freight	<p>CPC 72122 <u>Transportation of bulk liquids or gases</u> Transportation by seagoing vessels of bulk liquids or gases in special tankers. These vessels may also be refrigerated.</p> <p>CPC 72129 <u>Transportation of other freight</u> Transportation by seagoing vessels of freight not elsewhere classified</p>	Market Access column under "bulk and tramp"
1.3 Purchase and sale of ships	<p>CPC 62282 <u>Wholesale trade services of transport equipment other than motor vehicles, motorcycles and bicycles</u> Specialized wholesaling services of transport equipment other than motor vehicles, motorcycles and bicycles, e.g. <u>commercial ships and boats</u>, except for pleasure, railway and tramway locomotives and rolling stock, aircraft, spacecraft and aeronautical equipment and supplies and other transport equipment. (Goods classified in CPC 493, 495, 496, 499.)</p>	(MMS does not cover distribution aspects)

Shipbroking activities	CPC Provisional	Maritime Model Schedule (MMS)
Cont'd	CPC 63299 <u>Specialized retail sales of non-food products n.e.c.</u> Retailing services of a variety of consumer goods, not elsewhere classified, e.g. trailers and semi-trailers, electrical machinery and apparatus, and transport equipment, not elsewhere classified. (Goods classified in CPC 43, 44, 46, 49.) (via ships CPC 493)	
2. Competitive brokers		
2.1 Chartering of ships	Unclear whether intermediaries is who lease, but do own ships, are covered by CPC 72130 and 83103.	MMS does not cover leasing aspects
2.2 Recruitment of freight	CPC 74800 <u>Freight transport agency services</u> ¹ Freight brokerage services; freight forwarding services (primarily transport organization or arrangement services on behalf of the shipper or consignee), ship and aircraft space brokerage services, and freight consolidation and break-bulk services. CPC 74900 <u>Other supporting and auxiliary transport services</u> Freight brokerage services; bill auditing and freight rate information services; transportation document preparation services; packing and crating and unpacking and de-crating services; freight inspection, weighing and sampling services; and freight receiving and acceptance services (including local pick-up and delivery).	n.a.
2.3 Purchase and sale of ships	CPC 62114 <u>Sales on a fee or contract basis of machinery, industrial equipment and vehicles other than motor vehicles, bicycles and motorcycles</u> Wholesaling services by commission agents, commodity brokers, auctioneers and other wholesalers who trade on behalf of others, of machinery, industrial equipment and vehicles other than motor vehicles, bicycles and motorcycles. (Goods classified in CPC 327, 43-49.) ²	MMS does not cover distribution aspects

¹Given that CPC items are supposed to be mutually exclusive, it may come as a surprise that "freight brokerage services" appear under both CPC 74800 and 74900. CPC Rev. 1 has only one item for freight brokerage (67910) which, however, is put in correspondence with the two provisional items.

²Ships fall under CPC 493