UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

REVIEW OF MARITIME TRANSPORT 2008

Report by the UNCTAD secretariat

UNITED NATIONS

New York and Geneva, 2008

NOTE

The ***Review of Maritime Transport*** is a recurrent publication prepared by the UNCTAD secretariat since 1968 with the aim of fostering the transparency of maritime markets and analysing relevant developments. Any factual or editorial corrections that may prove necessary, based on comments made by Governments, will be reflected in a corrigendum to be issued subsequently.

*

* *

Symbols of United Nations documents are composed of capital letters combined with figures. Use of such a symbol indicates a reference to a United Nations document.

*

* *

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

*

* *

UNCTAD/RMT/2008

UNITED NATIONS PUBLICATION

Sales No. E.08.II.D.26

ISBN 978-92-1-112758-4

ISSN 0566-7682

ACKNOWLEDGEMENTS

The *Review of Maritime Transport 2008* was prepared by a team led by Vincent Valentine of the Transport Section, Trade Logistics Branch, Division on Technology and Logistics, UNCTAD. The principal authors were Regina Asariotis, Hassiba Benamara, Jan Hoffmann, Vincent Valentine and Gordon Wilmsmeier.

Written text on various issues was also received by Tom Butterly, Poul Hansen, Cristiana Mutiu and Bismark Sitorus. Administrative support including formatting and layout design was provided by Florence Hudry. Graphic support was provided by Sophie Combette.

Various parts of this publication were peer reviewed by the following UNCTAD staff members Deepali Fernandes, Aurélie Legrand, Mina Mashayekhi, Khalilur Rahman, José Maria Rubiato, Bismark Sitorus, Anh-Nga Tran-Nguyen and Birgit Viohl.

This publication was also peer reviewed by the following persons from outside the organization according to their particular expertise: Liliana Annovazzi-Jakab, Mary Brooks, Gary Crook, Herman de Meester, Prabir De, Peter Faust, Ki-Soon Hwang, Harsh Khare, Paul Kochhard, Pierre Latrille, Peter Marlow, Nora Neufeld, Melissa Newhook, Doug O'Keefe, Maxence Orthlieb, Thomas Pawlik, Aleksandra Pieczek, Jerry Rysanek, Ricardo Sanchez, DongWook Song, Wayne Talley, Dirk Visser and Teng-Fei Wang.

CONTENTS

LIST OF TABLES, FIGURES AND BOXES

Figure *Page*

Box *Page*

ABBREVIATIONS AND EXPLANATORY NOTES

Abbreviations

AEO	Authorized Economic Operator
ASEAN	Association of South-East Asian Nations
AU	African Union
BAF	bunkering adjustment factor
bcm	billion cubic metres
bpd	barrels per day
BRIC	Brazil, Russian Federation, India and China
C-TPAT	United States Customs Trade Partnership Against Terrorism
CAF	currency adjustment factor
c.i.f.	cost, insurance and freight
CSF	The Special Register of Ships and Shipping Companies of the Canary Islands
CIS	Commonwealth of Independent States
CSR	Special Register of Ships and Shipping Companies of the Canary Islands
DESA	Department of Economic and Social Affairs
DIS	Danish International Register of Shipping
dwt	deadweight tons
ECSA	East Coast of South America
EU	European Union
FDI	foreign direct investment
FEFC	Far East Freight Conference
FEU	40-foot equivalent unit
FIS	French International Ship Register
f.o.b.	free on board
FPSO	Floating Production Storage and Offloading
GDP	gross domestic product
GHG	greenhouse gas
GT	gross tons
ICT	information and communication technology
ICTSI	International Container Terminal Services Inc.
IDE	International Data Exchange
IEA	International Energy Agency
ILO	International Labour Organization
IMF	International Monetary Fund
IMO	International Maritime Organization
ISO	International Organization for Standardization
ISPS Code	International Ship and Port Facility Security Code
ITO	international terminal operator
LNG	liquefied natural gas
LPG	liquefied petroleum gas
LRIT	Long-Range Identification and Tracking System
LSCI	Liner Shipping Connectivity Index
mbpd	million barrels per day
MCCC	Modernized Community Customs Code
MEPC	Marine Environment Protection Committee
MSC	Maritime Safety Committee (IMO)
mtoe	million tons oil equivalent
n.a.	not available

NAFTA	North American Free Trade Agreement
NCSA	North Coast South America
n.e.s.	not elsewhere specified
NIS	Norwegian International Ship Register
OECD	Organisation for Economic Co-operation and Development
OPEC	Organization of the Petroleum Exporting Countries
SITC	Standard International Trade Classification
SOLAS Convention	International Convention for the Safety of Life at Sea
TEU	20-foot equivalent unit
THC	Terminal Handling Charges
TNC	transnational corporation
ULCC	ultra-large crude carrier
UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
VLCC	very large crude carrier
VLOC	very large ore carrier
VLOO	very large ore oiler
WS	Worldscale
WCO	World Customs Organization
WCSA	West Coast of South America
WTO	World Trade Organization

Explanatory notes

- All references to dollars ($) are to United States dollars, unless otherwise stated.
- Unless otherwise stated, “ton” means metric ton (1,000 kg) and “mile” means nautical mile.
- Because of rounding, details and percentages presented in tables do not necessarily add up to the totals.
- Two dots (..) indicate that data are not available or are not separately reported.
- A hyphen (-) signifies that the amount is nil or less than half the unit used.
- In the tables and the text, the term *countries* and *economies* refers to countries, territories or areas.
- Since 2007, the pressentation of countries in the *Review of Maritime Transport* is different from that in previous editions. Since 2007, the new classification is that used by the Statistics Division, Department of Economic and Social Affairs (DESA), of the United Nations, as well as by UNCTAD in the *Handbook of Statistics*. For the purpose of statistical analysis, countries and territories are grouped by economic criteria into three categories which are further divided into geographical regions. The main categories are developed economies, developing economies and transition economies. See annex I for a detailed breakdown of the new groupings. Any comparison with data in pre-2007editions of the *Review* should therefore be handled with care.

Vessel groupings used in the *Review of Maritime Transport*

As in the previous year's *Review*, five vessel groupings have been used throughout most shipping tables in this year's edition. The cut-off point for all tables, based on data from Lloyd's Register – Fairplay, is 100 gross tons (GT), except those tables dealing with ownership, where the cut-off level is 1,000 GT. The groups aggregate 20 principal types of vessel category, as noted below.

Review group	Constituent ship types
Oil tankers	Oil tankers
Bulk carriers	Ore and bulk carriers, ore/bulk/oil carriers
General cargo	Refrigerated cargo, specialized cargo, roll on-roll off (ro-ro) cargo, general cargo (single- and multi-deck), general cargo/passenger
Container ships	Fully cellular
Other ships	Oil/chemical tankers, chemical tankers, other tankers, liquefied gas carriers, passenger ro-ro, passenger, tank barges, general cargo barges, fishing, offshore supply, and all other types
Total all ships	Includes all the above-mentioned vessel types

Approximate vessel size groups referred to in the *Review of Maritime Transport*, according to generally used shipping terminology

Crude oil tankers	
ULCC, double-hull	350,000 dwt plus
ULCC, single hull	320,000 dwt plus
VLCC, double-hull	200,000–349,999 dwt
VLCC, single hull	200,000–319,999 dwt
Suezmax crude tanker	125,000–199,999 dwt
Aframax crude tanker	80,000– 124,999 dwt; moulded breadth > 32.31m
Panamax crude tanker	50,000– 79,999 dwt; moulded breadth < 32.31m
Dry bulk and ore carriers	
Large capesize bulk carrier	150,000 dwt plus
Small capesize bulk carrier	80,000–149,999 dwt; moulded breadth >32.31m
Panamax bulk carrier	55,000–84,999 dwt; moulded breadth < 32.31m
Handymax bulk carrier	35,000–54,999 dwt
Handy-size bulk carrier	10,000–34,999 dwt
Ore/Oil carrier	
VLOO	200,000 dwt
Containerships	
Post-Panamax Containership	moulded breadth >32.31m
Panamax Containership	moulded breadth < 32.31m

Source: Lloyd's Register – Fairplay.

EXECUTIVE SUMMARY

Seaborne trade volumes remain strong, fuelled by growth in emerging dynamic developing countries ……

With over 80 per cent of world merchandise trade by volume being carried by sea, maritime transport remains the backbone supporting international trade and globalization. In 2007, the volume of international seaborne trade reached 8.02 billion tons – a 4.8 per cent increase year-on-year. Indeed, during the past three decades, the annual average growth rate of world seaborne trade is estimated at 3.1 per cent.

Strong demand for maritime transport services was fuelled by growth in the world economy and international merchandise trade. In 2007, the world gross domestic product (GDP) grew at 3.8 per cent while world merchandise exports expanded by 5.5 per cent over the previous year. Growth was driven by emerging developing countries and transition economies which continued to set the pace.

Benefiting from improved terms of trade, exporters of fuel and minerals increased their overall import volumes. Imports expanded at double-digit rates in Latin America (20 per cent), Commonwealth of Independent States (CIS) (18 per cent), as well as Africa and the Middle East (12.5 per cent).

Thus, *despite rising energy prices* and their potential implications for transport costs and trade and despite growing global risks and uncertainties from factors such as soaring non-oil commodity prices, the global credit crunch, a depreciation of the United States dollar, and an unfolding food crisis, the world economy and trade have, so far, shown resilience.

…… and the world fleet continues to expand ……

The world merchant fleet expanded by 7.2 per cent during 2007 to 1.12 billion deadweight tons (dwt) at the beginning of 2008. With historically high demand for shipping capacity, the shipping industry responded by ordering new tonnage, especially in the dry bulk sector. Vessel orders are at their highest level ever, reaching 10,053 ships with a total tonnage of 495 million dwt, including 222 million dwt of dry bulk carriers. The tonnage of dry bulk ships on order at the end of 2007 is 12 times higher than it was in June 2002; since mid-2007, dry bulk orders outstrip those for any other vessel type. This influx of new tonnage into the world fleet over recent years has contributed to the decrease in the average age of the world fleet to 11.8 years.

As of January 2008, nationals of the top 35 shipowning countries together controlled 95.35 per cent of the world fleet, a slight increase over the previous year figure. Greece continues to maintain its predominant position, followed by Japan, Germany, China, and Norway; together, these five countries hold a market share of 54.2 per cent.

By May 2008, the world containership fleet reached approximately 13.3 million TEUs, of which 11.3 million TEUs were on fully cellular containerships. This fleet includes 54 containerships of 9,000 TEU and above, which are operated by five companies: CMA CGM (France), COSCON and CSCL (both from China), Maersk (Denmark) and MSC (Switzerland). Twelve existing ships have a capacity of more than 10,000 TEU; these include eight 12,508 TEU ships, owned and operated by Maersk, and four vessels of 10,000 to 10,062 TEU, owned and operated by COSCON. The total TEU carrying capacity on the gearless cellular containerships, i.e. those vessels which require port facilities to discharge, built in 2007 amounts to 1.18 million TEU, which is 8.5 times larger than the combined geared capacity of 0.14 million TEU that entered the market during the same period.

The rising prices for new ship buildings reflect the continuing high demand, as well as the surge in the price of steel and the costs of local currency inputs if measured in US dollars. The highest increase was recorded for containerships: a 2,500 TEU vessel cost 43.5 per cent more in December 2007 than one year earlier. Dry bulk carriers also recorded high increases, reaching record prices. A 170,000 dwt dry bulk carrier fetched $97 million in December 2007; this is 39 per cent more than a year before, and 2.4 times the price paid in 2000.

…… Containership market remains resilient ……

The dry bulk market has been riding high for the last four years and in 2007 this trend continued, fuelled mainly by buoyant steel production in Asia and the corresponding demand for iron ore. The Baltic Dry Index (BDI) performed spectacularly moving up from 4,421 points in January to end the year at 9,143. The highest level was reached in mid November at 11,039 points. The average Baltic Dry Index for 2007 was 7,276, more than double the 3,239 average for the previous year. The containership market showed its resilience despite the downward pressure resulting from higher fuel costs, a weakening United States dollar, a strengthening Euro and an increased supply of newbuildings coming online.

The first month of 2008 however saw a decline in rates so that year-on-year growth was nominal or marginally negative. The major exception was in the VLCC sector where ships of 200,000 dwt plus climbed from 63 points in January 2007 to a high of 201 in December to fall back to 112 in January 2008. This spectacular rise in freight rates towards the end of the year occurred principally because OPEC raised oil production in November 2007 to take advantage of the high price. Other factors included low stock levels in Europe and the Far East, the start of winter, increased refinery throughput following a heavy autumn maintenance schedule. The time charter earnings for modern VLCCs (Very Large Crude Carriers) averaged $102,000 per day for the first quarter of 2008 compared to $58,900 for the same period in 2007.

…… and the efficiency of the world fleet remains high ……

Operational productivity of the world fleet remained high in 2007, as demonstrated by the key indicators, namely (i) the comparison of cargo generation and fleet ownership, (ii) tons of cargo carried and ton-miles performed per deadweight ton, and (iii) the supply of tonnage in the main shipping market sectors. The global average of tons of cargo carried per dwt of cargo carrying capacity was 7.7; in other words, the average ship was fully loaded 7.7 times during 2007. The ton-miles performed per deadweight reached 31.6. This means that the average dwt of cargo carrying capacity transported one ton of cargo over a distance of 31,600 nautical miles (60,375 km) in 2007 or, 165 km per day. The thousands of ton-miles per dwt of oil tankers decreased from 34.2 in 2006 to 32.5 in 2007, while the corresponding figure for dry bulk carriers increased slightly from 28.8 to 29.5. The productivity of the remaining fleet, including container and general cargo ships, decreased from 36 to 33.1. It was observed that in general containership operators in 2007 tended to reduce the service speeds of their vessels thereby reducing the fleet's productivity while saving money in fuel costs.

World container port capacities continue to grow ……

World container port throughput grew by an estimated 11.7 per cent to reach 485 million TEUs in 2007. Chinese ports accounted for approximately 28.4 per cent of the total world container port throughput. Rail freight traffic for the same period grew by 28 per cent in Saudi Arabia, 12.6 per cent in Viet Nam, 9.4 per cent in India, 7.6 per cent in China, 7.2 per cent in the Russian Federation, and by a mere 1 per cent in both Europe and in the United States.

International rail transport of goods was boosted in 2007, in particular in several of the BRIC countries, caused by demographical development and globalization of trade. In January 2008 the first demonstration block train between Beijing (China) and Hamburg (Germany) was launched carrying out the 10,000 kilometres journey in only 15 days. According to an African Union 2008 report, transport infrastructure developments in Africa were reported to be in need of urgent upgrading, in particular with a need for further market-driven private sector involvement. Global contract logistics is one of the fastest growing segments in the transport and logistics industry. From 2005 to 2006 global contract logistics grew around 10 per cent, with a record growth in Asia-Pacific of 13.1 per cent.

As regards liner shipping connectivity, there is a growing connectivity divide with a widening of the gap between the best and worst connected countries. In 2008, China continued to be the best connected country; approximately 40 per cent of containerships include one or more Chinese ports in their liner shipping itinerary. As regards market concentration, on average, due to mergers and acquisitions, in July 2008 there were 7.7 per cent fewer companies providing services per country than in July 2004. This trend may raise concerns for countries with a low connectivity, as a further decline in the number of service providers may give rise to oligopolistic market structures.

…… and norms and standards for maritime transport continue to be developed ……

In the field of security, efforts to develop, implement and refine relevant legal instruments and standards are ongoing. Key players in this respect include the World Customs Organization (WCO), the European Union (EU), the International Maritime Organization (IMO) and the International Organization for Standardization (ISO). Of particular note are developments regarding the certification and mutual recognition of Authorized Economic Operators (AEOs), both at the EU level and in relation to the implementation of the WCO Framework of Standards to Secure and Facilitate Global Trade (SAFE Framework), which had been adopted in 2005. Environment-related developments include the IMO's continued commitment to making progress in a number of areas. These include measures to reduce air pollution from ships, as well as, increasingly, measures focused on helping to reduce GHG emissions from international shipping. To this end, a dedicated Working Group has been established and it is hoped that an international agreement to control GHG emissions from international shipping may be ready for adoption in 2009. Another important area of IMO's work focuses on enhancing conditions involved in ship breaking by making further progress on the draft text of an International Convention for the Safe and Environmentally Sound Recycling of Ships.

…… the Latin American region enjoys growth in seaborne trade, but the shipping connectivity divide remains a key issue.

The economies in this region experienced a continued growth in GDP per capita of 4.4 per cent during the period from 2003 to 2006. This development to a significant level has been driven by the high demand for natural resources from the Asian economies (especially China and India) and the overall growth of the global economy. With exports increasing on average 8 per cent annually between 2003 to 2006 and imports growing over 10 per cent annually, regional port throughput reached 1.47 billion tons in 2006 putting a significant strain upon port infrastructure. The role of a hub port, has been a main topic of discussion in Latin America over the last decade. With the expansion of the Panama Canal and related port developments, a discussion of potential hub ports has gained new impetus. Ambitious port projects (e.g. Manta, Ecuador; La Union, El Salvador etc.) are driven by high expectations to become regional hubs and to attract logistics industries. A number of Latin American and Caribbean countries have created specific "clusters" of excellence in parts of the maritime industry e.g. the Panamanian flag is flown by 22.6 per cent of the world fleet. The outlook for the region on the whole looks positive with some financial analysts reporting that the region has escaped much of the knock-on effects of the US sub-prime housing market.