# UNCTAD Transport Newsletter

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# NOTE

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# **Editorial**

Dear readers:

This issue of our Transport Newsletter sets out with a briefing at our UNCTAD XI conference in Sao Paulo and our background issues note on the topic of "Trade and Transport Facilitation: Building a Secure and Efficient Environment for Trade" (see page 4).

Three articles (starting on page 5) deal with trends in container shipping. The first is about the process of concentration in different maritime businesses, the second about the surge of freight rates during the last two years, and the third briefly presents some forecasts of containerized trade. Feed back and discussion from you on these items is always very welcome.

Three items (starting on page 19) in this newsletter are about capacity development, including information about the World Maritime University, the International Port Training Conference, and UNCTAD's Port Training Programme.

Finally, we also announce a few new publications and upcoming events which we believe are of interest to international transport and development.

For feedback, comments, and suggestions for our next Transport Newsletter (3<sup>rd</sup> Quarter 2004), please contact Jan Hoffmann at jan.hoffmann@unctad.org before September.

With best wishes from the Palais des Nations in Geneva,

Your Transport Section Team Geneva, June 2004

# **Subscriptions**

To subscribe or un-subscribe to the UNCTAD Transport Newsletter, please use the following on-line form: <u>http://extranet.unctad.org/transportnews</u>

# **UNCTAD XI**

### **Plenary Session**

As already announced in the last issue of the Transport Newsletter, UNCTAD XI will include a special session on "Trade and Transport Facilitation: Building a Secure and Efficient Environment for Trade", within the Session "Partnership for Development: Information and Knowledge for Development" on 17 June. Confirmed speakers of the High Level Panel include His Excellency Dato' Ahmad Husni Mohamad Hanadzlah, Deputy Minister of International Trade and Industry, Malaysia; Mr. Issa Baluch, President, FIATA, and CEO, Swift Freight International Dubai, UAE; Mr. Kunio Mikuriya, Deputy-Secretary General of the World Customs Organization; Mr. Jayson P. Ahern, Assistant Commissioner, Office of Field Operations, U.S. Customs and Border Protection; Mr. Marc Juhel, Transport and Logistics Advisor of the World Bank.

The agenda can be accessed via <a href="http://www.unctadxi.org/templates/Event\_67.aspx">http://www.unctadxi.org/templates/Event\_67.aspx</a>

#### **Issues note**

As part of our preparations for the plenary session, we have prepared an issues note on the same topic. This note analyses recent developments in trade and international transport and their role in globalization and the development process. The environment within which trade takes place has changed as a consequence of terrorist threats and ensuing security measures. The document presents some of the new requirements that shippers and transport service providers must adhere to. From its introduction: "Patterns of provision and management of trade logistics services evolved fundamentally in the 1990s. Two major trends appeared: on the one hand, global trade induced the development of global transport systems with global service providers operating global routes; on the other hand, the merging of manufacturing and distribution activities and the growing geographical fragmentation of global production processes led to the development of supply chains servicing door-to-door transport solutions. For many developing countries, these trends pose a major challenge: to ensure that their own trade supply capacity can take advantage of global transport systems available to their competitors. In practice, this means Governments have to adopt policy reforms that will allow their national and regional transport systems to keep efficient operative linkages to global trade logistics systems. At the same time, Governments need to take into account the obligation to comply with new and more stringent security requirements, whose implementation poses particular challenges for developing countries. This document looks at recent developments in international trade and transport, as well as at new requirements related to security and trade efficiency. It discusses how trade and transport facilitation measures can help achieve compliance with new security measures while at the same time assisting developing countries and their participation in global trade and production processes. Finally, it introduces the Global Facilitation Partnership for Transportation and Trade as a multilateral platform to contribute to a more efficient and secure environment for international trade and transport."

The complete document can be downloaded under <u>www.unctad.org/en/docs//td393\_en.pdf</u>

# Live on-line transmission 17 June 2004

Our plenary session on Trade and Transport Facilitation will be transmitted on Thursday, 17 June live via <u>www.un.org/webcast/unctadxi</u> at 11.00 o'clock local time (16.00 Geneva time).

# Concentration in Shipping and the Specialization of Countries in Maritime Sectors (1)

At two recent conferences in GwangYang (Republic of Korea) and Karachi (Pakistan), UNCTAD staff presented some research findings concerning the process of concentration in maritime businesses and the closely related trend that countries tend to "specialize" in different maritime sectors. In this issue of the Transport Newsletter, we will summarize some of these findings concerning the process of concentration in 14 different maritime businesses. In the next issue (3<sup>rd</sup> Quarter 2004), we will present more information about the specialization of countries in different maritime businesses.

### 1) Liner shipping companies

At the beginning of 2004, the top 25 container carriers control 79% of the world's TEU capacity. Their TEU capacity grew by 12% during 2003. The next largest 26th-50th companies by comparison grew by only 9%. The Maersk-Sealand group accounts for 12.2% of operated slots, followed by MSC with 7.15%. Maersk-Sealand belongs to the Danish AP Moller group. MSC's headquarters are in Geneva in landlocked Switzerland. Chilean based CSAV is the largest container carrier headquartered in the Americas. American President Lines is based in Singapore, CP ("Canadian Pacific") Ships is headquartered in London. Maersk-Sealand charters about 41% of its fleet, and MSC an even higher 56%, i.e. MSC owns only 44% of the TEU capacity it operates. Ten of the top 15 liner companies are based in Asia.

# 2) Ownership of containerships

The ownership of containership is less concentrated than its operation. As mentioned above, operators tend to charter a large proportion of their vessels, which tend to be owned by "non-operating" owners, such as NSB Nordelbe (Germany). The latter has a market share of 15% among the top 20 charter-owners. In Europe, the ownership and operation of vessels tends to be more split into different companies than in Asia, where companies tend to own a relatively larger proportion of their fleet than the major European carriers.

# 3) Vessel registries

Taking into account all types of vessels, including fishing, passenger and other specialized ships of 300 GT and above, about two thirds of the world's tonnage uses a "foreign" flag, i.e. a flag different from the operator's country of domicile. If we take only containerships of 500 GT and above, 73% of the world's TEU capacity uses a foreign flag. The major open registries have continuously increased their market share over the last decades, although in recent years the introduction of a tonnage tax in some European countries, as well as the surge of a few younger registries such as Marshall Islands or Vanuatu has slowed down this process of concentration.

# 4) Container ship building

Three Korean and one Japanese company are the world's four biggest containership builders, in terms of TEU, based on the order book in November 2003. Korean shipyards account for 62% of orders, and all Asian shipyards together for 86%. European yards together have a 13% market share, and North and South American yards together less than 1%.

### 5) Classification societies

The four largest classification societies are based in Japan, United States, United Kingdom, and Norway. The ten largest classification societies are also the ten members of the "International Association of Classification Societies" (IACS). Together, these have a market share of 85%.

They include the above-mentioned top-four, plus Germanischer Lloyd (Germany), Bureau Veritas (France), China Class Society, Russian Register, South Korean Register, and Registro Italiano.

### 6) P&I Clubs

Most of the major Protection and Indemnity (P&I) clubs are based in the United Kingdom; some others in Scandinavia, Japan and the United States.

### 7) Container manufacturing

Approximately 82% of all containers are being built in China, the two leading companies being CIMC and Singamas.

### 8) Container leasing

Container leasing is among the few maritime subsectors where concentration has decreased in recent years. Transamerica and GESeaCo used to control about 50% of the market in the 1990s. There are now four major players in leasing containers. Triton and TransAmerica have 13% market share each, Textainer 12.5% and GESeaCo 11.5%. TransAmerica, Textainer and Triton are administratively headquartered in the United States, although Textainer and Triton have corporate Headquarters in Bermuda. GESeaCo is headquartered in London. Container carriers own about 50% of the container fleet, leasing companies about 45%, and the remainder is owned by trucking and other companies.

### 9) Ship-to-shore crane manufacturing

At the beginning of 2004, there were around 250 cranes on order globally. The by far biggest supplier is ZPMC, based in Shanghai, with a market share of 55%, up from 32% one year ago. The other three main producers are Europe-based, although production often takes places in Asia.

### 10) Container ports

Chinese ports, including Hong Kong, make up three of the world's top five ports, measured in TEU throughput. In 2003, Shanghai and Shenzhen have overtaken Busan, which now ranks 5th in the world. Six of the top ten, and 20 of the top 30 container ports are located in Asia.

### 11) Container port operators

Half of the top 10 port operating companies are linked to shipping lines; APM, for example, belongs to the same grouping as Maersk-Sealand. Others originate from a major container port; Hutchison, for example, started in Hong Kong, PSA in Singapore, and Eurogate in Hamburg. The market share of these global port operators has been growing in recent years mainly due to concessions of previously state run facilities.

### 12) Ship agencies

Globally, about 95% of ship agency companies are still locally based and operate in only one country. However, there is a growing trend towards single agency contracts. It is estimated that around 25 agency companies have contracts with ship operators covering more than one country. The largest three companies appear to have a combined market share of around 10%. The largest, Inchcape, is headquartered in London, while GAC is in Dubai, and Barwil in Oslo.

### 13) Ship scrapping

Effectively 99% of world ship scrapping during the last decade has taken place in Asia. The largest market share is that of India, followed by Bangladesh, Pakistan and China. The Chinese market share has increased in recent months due to its high demand for steel.

# 14) Seafaring

About 56% of seafarers come from Asian countries (2000 data), the largest providers being the Philippines, followed by Indonesia, China, Turkey and India. In recent months, more stringent visa requirements for seafarers from some predominantly Muslim countries have led to certain shifts in the traditional employment patterns.

### Comparative table

By far most of the 14 maritime sectors described above have seen increasing levels of concentration over the last decade. Today's situation is summarized in Table 1 (the sectors of ship scrapping and seafaring are not included in the table because the available data is not on the company level). The Table ranks the sectors according to their level of concentration, using the measure "Herfindahl Hirschmann Index" (HHI) for the top four companies. The HHI is computed by summing the square market shares of the companies.

Sector	Comments	market share top 4	HHI top 4
Container manufactur- ing	Largest companies are CIMC and SINGAMAS, both from China. Note: the market shares and the HHI are estimated with information on only two companies. Source: Lloyds List, various issues.	81	3'623
Ship to shore crane manufacturing	Largest company is ZPMC (56% market share). Source: Cargo Systems, February 2004.	80	3'366
Container ship building	Hyundai has 32.8% of TEU on order. Next largest builders are Sam- sung, Hanjin and IHI. Source: Clarkson Container Intelligence Monthly, February 2004.	62	1'426
Classification societies	Largest society in terms of GT is Nippong Kaiji, with 18.9%. Next largest are ABS, Lloyds Register and Det Norske Veritas. Source: LRFairplay, January 2003.	66	1'097
P&I Clubs	The "United Kingdom Club" has a market share of approximately 17%, followed by Britannia, Gard and Standard. Source: Bow Wave, March 2004.	52	704
Container leasing	Source: Exim News Service Mumbai, quoting Drewry Shipping con- sultants, 12 May 2004.	50	627
Vessel registration	Panama registers the largest share of vessels (22% of GT), followed by Liberia, Bahamas and Greece. Source: LRFairplay, January 2004.	42	626
Port operation	Largest operating companies are Hutchison (13%), PSA, APM Ter- minals and P&ON. Source: Dyna Liners, 2003.	34	330
Liner shipping compa- nies	Largest companies are Maersk Sealand (12.2% market share), fol- lowed by MSC, Evergreen and P&ON. Source: Dyna Liners, various issues	31	268
Container ports	Hong Kong (China) has a world market share of 7%. Source: Dyna Liners, 2004.	22	129
Container ship owning	The largest owners are Maersk Sealand and Evergreen, followed by NSB Nordelbe, which is the largest non-operating owner. Source: Clarkson Container Intelligence Monthly, February 2004.	19	96
Ship agencies	Inchcape has an estimated market share of about 4.4%. Source: Lloyds Shipping Economist, September 2003.	11	39

<b>Table 1: Concentration</b>	indicators fo	or maritime	sectors, summary

Source: UNCTAD, based on a wide variety of primary sources (see notes in Table). Please contact <u>jan.hoffmann@unctad.org</u> for more detailed information and sources.

It is important to note that, for the present article, these concentration indices were not calculated with a view to analysing market power. Concentration is only looked at as a first step to analyse which countries specialize in what type of maritime business. Market power could be examined by studying ports or individual routes. Nevertheless, it is still noteworthy that the HHI is a measure of market concentration that is widely used by anti monopoly agencies. US Federal agencies handling anti-trust issues consider a market having an HHI of 1000 or more as "concentrated" and 1800 or more to be highly concentrated, probably requiring intervention to ensure that no market monopoly is exercised. Given that usually information is not available for all market players, and given also that the squared market share decreases exponentially for smaller participants, sometimes the HHI of only the top four players it computed, which is also what is presented in Table 1.

From Table 1, it can be seen that the "building" sectors (cranes, containers, vessels) are the most concentrated maritime industries. They require abundant and relatively inexpensive and skilled labour. China is dominating crane and container manufacturing. China is also right now building the world's largest shipyard and it is expected to increasingly compete with Korea and Japan for market share in ship building. At the same time, several European and American ship yards have closed down in recent years.

The countries that historically used to be strongest in terms of nationally built, flagged, manned and operated fleet are the major OECD economies. These countries are still hosting the main classifications societies and the P&I Clubs. They also continue to be relatively strong in liner shipping and container vessel owning, although in these two sectors the newly industrialized Asian economies have become very strong, too. The United States is no longer a major player in container ship owning or operation.

Container leasing is concentrated in the United States and United Kingdom. Both countries also export other capital and leasing services.

Vessel registration is a business with little relation to other maritime sectors, and most countries whose flags are used by the owner/operators are relatively small open economies. Most do not possess much else of a "maritime" sector, although some, such as Cyprus and Panama, have managed to attract other maritime service providers in the areas of crewing, arbitrage, or ship financing.

Port-related activities are the least concentrated on a global scale. However, here, too, we observe a trend of the beginning of concentration, where major port operating companies are linked to those countries with large ports, increasingly from Asia, and agency services are provided by companies from countries with a large service sector.

As we observe how certain businesses are concentrated in a limited number of countries, it can be said that certain countries are specializing in different sectors. There are only very few countries that maintain a relevant participation in a wide range of maritime businesses. Most countries find that they are becoming stronger in some "niche" while losing market share in other sub-sectors. In the next issue of the Transport Newsletter we will present some "maritime country profiles" which illustrate this process specialization.

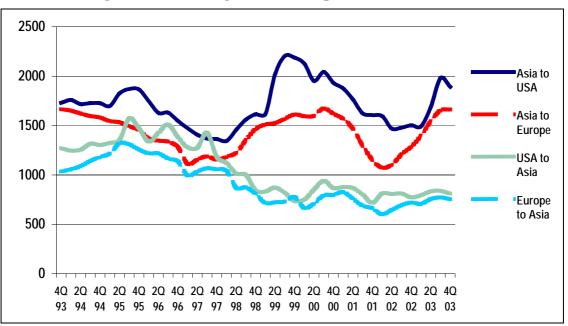
Jan Hoffmann, Economic Affairs Officer, Transport Section, UNCTAD. jan.hoffmann@unctad.org

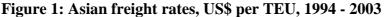
# **Recent Trends in Liner Shipping Freight Rates**

Since the beginning of 2002, liner shipping freight rates have increased significantly on practically all routes and vessel sizes. At UNCTAD, we have received queries about this situation from several of our member states. Above all, those with an interest in trade are worried that the high freight rates, combined sometimes with an actual lack of vessels or container slots, would be "special" to a given country or route. In this article, we show that the trend of higher freight rates is global and not confined to particular ports or routes, although differences also persist. We will discuss the differences, as well as the apparent cyclical fluctuations of freight rates.

#### **Recent trends**

On the main East-West liner shipping trades, rates have gone up on all routes since beginning of 2002. The highest increase has been recorded for Asian exports to Europe, where freight rates have gone up by 44% in two years (Figure 1).





Source: <u>www.ci-online.co.uk</u>, 30 April 2004. For detailed annual information about freight rates see also UNCTAD's Review of Maritime Transport, <u>http://r0.unctad.org/ttl/ttl-rmt.htm</u>

As regards North-South and South-South routes, the following changes have been reported in recent months: For Mauritius, import freight rates from Asia were to increase by 33% in March 2004.<sup>1</sup> In South America, rates increased between 18 and 30% in 2003.<sup>2</sup> In the specific case of Chile, between 4<sup>th</sup> quarter 2003 and 2<sup>nd</sup> quarter of 2004, freight rates for the export of a 20-foot container to the US East Coast went up by 49%, to Japan by 89% and to Republic of Korea by 143%.<sup>3</sup> Pakistani rice shippers complain about losing export markets for lack of ship space in combination with sharply increased rates; between beginning of 2003 and beginning of

<sup>&</sup>lt;sup>1</sup> <u>www.lexpress.mu</u> on 1 April 2004.

<sup>&</sup>lt;sup>2</sup> Ricardo Sanchez in FAL Bulletin 213, United Nations ECLAC, May 2004, <u>www.eclac.cl/transporte</u>.

<sup>&</sup>lt;sup>3</sup> Calculation based on data from "reporte económico", Asexma, Chile, 2<sup>nd</sup> April 2004.

2004, freight rates per TEU are reported to have gone up by 56% from Karachi to Dubai, by 69% to Australia, by 106% to Mauritius, and by 133% to Kenya.<sup>4</sup>

For the immediate future, rate setting agreements continue to announce increases, although it must be stressed that the market may not always allow for the freight rates to be implemented as planned by carriers. Rates from South and South East Asia to Australia where announced to increase by 500 US\$ per TEU by 1 July.<sup>5</sup> On the same date, the India Pakistan Bangladesh Ceylon Conference has scheduled to increase rates from Indian Sub-Continent ports in the Chittagong-Kochi range (including Colombo) to the Mediterranean and Northern Europe by 250 US\$ per TEU.<sup>6</sup> The Intra-Asia Discussion Agreement decided there should be three rate increase stages this year; depending on the route, freight rates will go up by 30 US\$ to 100 US\$ per TEU effective 1 March and 40 US\$ to 150 US\$ per TEU on 1 June; the level of the third round to become effective on 1 September is still to be decided upon. Intra-Asia regional cargo and feeder operators are "warning that they will have to seriously cut back on service levels if the above rate increases are not actualized. As reported, already some carriers have been forced to off-hire ships for not being able to meet renewal charter prices or to stop losses."<sup>7</sup> One Asian carrier expects the average intra-Asia all-in box rate to go up from 480 US\$ at the end of last year to 630 US\$ per TEU by the end of 2004.<sup>8</sup> Member lines of the Europe Southern Africa Conference announced to raise rates from the Mediterranean and Portugal to southern African ports by 200 US\$ per TEU and half that amount in the northbound direction by 1 July.<sup>9</sup>

The bulk market, too, has seen increased freight rates.<sup>10</sup> In the dry bulk freight market, "with almost steamroller-like momentum, freight rates have risen through one ceiling then another"<sup>11</sup> reaching more than 30,000 US\$ per day for a Capesize vessel end of 2003, up from less then 10,000 per day at the beginning of 2002. The "Baltic dry index" for dry cargo vessels multiplied by six between January 2002 and March 2004.<sup>12</sup> As a result, today about half of the price for iron ore delivered to Europe from Brazil today is for shipping costs.<sup>13</sup> Rates for oil tankers have increased by 90% in 2003.<sup>14</sup>

#### Freight rates and the liner shipping industry

Freight rates, vessel charter rates, ship scrapping prices, new building prices, shipping company share prices, container prices, and even raw steel prices are all intimately linked to each other (Figure 2). Higher prices to build (Figure 2.b) or to charter (Figure 2.c) a ship imply higher costs for those who use the vessel to provide the shipping service (Figure 2.a). High demand for vessels will discourage owners to send vessels for scrap, and those who want to purchase vessels for recycling purposes will thus also have to pay more (Figure 2.d). As steel from scrap vessels is partly recycled to build containers or new vessels, here, too, exists a direct relation between prices for new (Figure 2.b) and scrap (Figure 2.d) vessels.

<sup>&</sup>lt;sup>4</sup> Fairplay Daily News Service, 21 April 2004.

<sup>&</sup>lt;sup>5</sup> Dyna Liners, 21 May 2004.

<sup>&</sup>lt;sup>6</sup> Dyna Liners, 21 May 2004.

<sup>&</sup>lt;sup>7</sup> Dyna Liners, 27 February 2004.

<sup>&</sup>lt;sup>8</sup> Dyna Liners, 28 May, 2004.

<sup>&</sup>lt;sup>9</sup> Dyna Liners, 28 May, 2004.

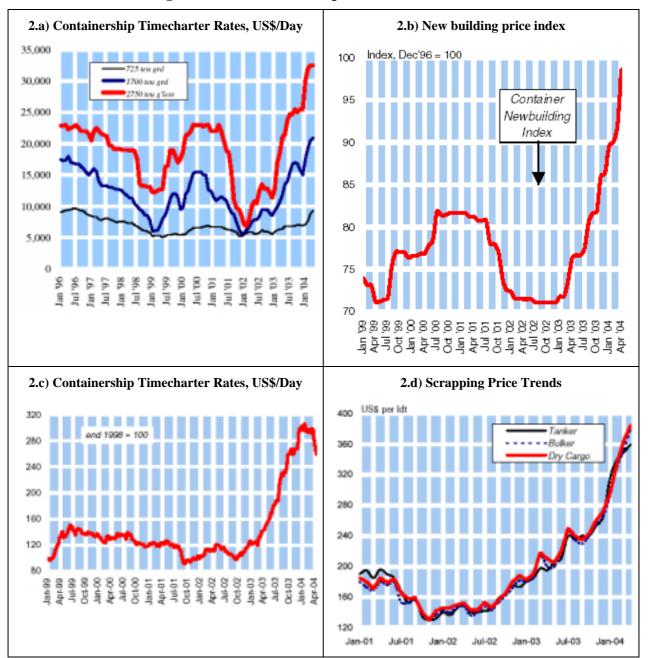
<sup>&</sup>lt;sup>10</sup> Bulk cargo tends to be transported by chartered vessels. Freight rate trends are thus betters measured per vessel per day, and not per container per transaction.

<sup>&</sup>lt;sup>11</sup> CoalTrans International, October 2003, page 47.

<sup>&</sup>lt;sup>12</sup> The Baltic Exchange, quoted by Ricardo Sanchez, United Nations ECLAC, <u>rsanchez@eclac.cl</u>

<sup>&</sup>lt;sup>13</sup> "Ocean-Going Shipping's Fair Wind", by John Mothersole and Paul Bingham, <u>www.globalinsight.com</u>, April 2004.

<sup>&</sup>lt;sup>14</sup> <u>www.mundomaritimo.cl</u>, noticia 1666, on 5 April 2004.



#### Figure 2: Trends in vessel prices and charter rates

Source: Container Intelligence Monthly, Volume 6, No.5, May 2004, Clarkson Research Studies, <u>www.clarksonresearch.com</u>. Notes: grd stands for "geared", i.e. with cranes on board the ship; g-less means "gearless".

The main underlying trend and cause of the surge in freight rates is a shortage of vessels and containers. Given a relatively inelastic demand and supply – at least in the short term – this shortage directly leads to increased prices if an operator wants to purchase or lease containers or vessels, or – in other cases – the shortage leads to a reduction of services. For example, it was reported that "a severe shortage of containerships is forcing a group of major carriers to plan a new Asia-Europe service deploying just seven vessels rather than the usual eight. The unusual configuration is a direct reflection of the unprecedented squeeze on tonnage availability, with the carriers in question unable to find enough ships to meet their preferred

requirements."<sup>15</sup> Equivalently, "in view of extremely high and still rising charter rates, more and more carriers/ groupings are trying to save on charter costs by curtailing services and/or reducing the number of ships deployed on particular routes",<sup>16</sup> and "high charter rates as well as increasing new-building costs are causing Regional Container Lines to delay expansion of its operations to the Middle East".<sup>17</sup>

Concerning container vessels charters, in March 2004, the commonly used charter rate index "Howe Robinson" was 12.5% above the previous record recorded in 1995<sup>18</sup>. These previous records "many once thought would be unobtainable again".<sup>19</sup> Between March and April 2004, the index rose another 5.4%.<sup>20</sup> The annual increase up to that month varied between +54% and +95%, depending on vessel types (Table 2). "In a market where records are being smashed almost daily, MOL has nevertheless set a new standard by agreeing to the highest charter rate ever paid for a containership", paying a daily charter rate of 43,500 US\$ for a 4,600 TEU vessel.<sup>21</sup> Carriers not only pay higher than usual rates, but also engage in longer charter periods than before. "There is no sign of any slowdown, with lines struggling to find tonnage and forced to pay record amounts for much longer periods than ever before".<sup>22</sup> In 2003, for ships between 2,500 and 3,000 TEU, almost half of all fixtures were for more than 24 months, as compared to no single fixture of such duration in 2002.<sup>23</sup>

Nominal ship si	ze, TEU	speed (knots)	April 2004	March 2004	April 2003	Growth 03-04
1,100	geared	18.5	14350	14000	8750	+ 64%
1,700	geared	19.0	21400	20000	11000	+ 95%
2,050	gearless	20.0	26125	25100	14250	+ 83%
2,500	geared	22.0	31125	30600	17900	+ 74%
2,900	gearless	22.0	31625	31200	19400	+ 63%
3,500	gearless	22.0	35650	35150	23100	+ 54%

Table 2: Average daily charter rates for container vessels, US\$ per day per ship

Source: Dyna Liner 21 May 2004, based on data from the Howe Robinson Container Index.

Hence, in order to benefit from high freight rates, shipping companies are prepared to pay record high charter rates. Put differently, from the perspective of the carrier, high charter rates oblige carriers to charge higher freight rates. For example, the "19 member lines of the India Pakistan Bangladesh Ceylon Conferences (IPBCC) will raise their eastbound rates with effect from 1 July. A statement said the increases are necessary because all members are facing record charter costs as well as a world-wide shortage of containers. In announcing rate increases of \$100 per 20ft and \$150 per 40ft box from Mediterranean ports to India, Pakistan, Bangladesh and Sri Lanka, the conference also advised that the revised rate levels would only be valid until 30 September. Further increases will be implemented during the remainder of the year in both the Eastbound and Westbound trades, the conference confirmed."<sup>24</sup> In the end, vessel owners are likely to be the ones that ultimately benefit most from higher freight rates, and "current

<sup>&</sup>lt;sup>15</sup> <u>www.lloydslist.com</u> on 20 May 2004.

<sup>&</sup>lt;sup>16</sup> Dyna Liners, 5 March 2004.

<sup>&</sup>lt;sup>17</sup> Dyna Liners, 23 April 2004.

<sup>&</sup>lt;sup>18</sup> Deutsche Verkehrszeitung, 15 April 2004.

<sup>&</sup>lt;sup>19</sup> Fairplay Daily News Service, 27 April 2004.

<sup>&</sup>lt;sup>20</sup> Dyna Liners, 21 May 2004.

<sup>&</sup>lt;sup>21</sup> www.lloydslist.com on 8 April 2004.

<sup>&</sup>lt;sup>22</sup> www.lloydslist.com on 14 April 2004.

<sup>&</sup>lt;sup>23</sup> www.lloydslist.com on 14 April 2004.

<sup>&</sup>lt;sup>24</sup> Fairplay Daily News Service, 26 May 2004.

moves by the major liner conferences to increase freight rates and surcharges could give tramp owners some further opportunity to raise charter costs".<sup>25</sup>

Concerning containers, increased demand for empty containers, combined with the rising price of steel, has led to an increase of the twenty-foot container price from 1,300 US\$ in 2003 to 2,200 US\$ now.<sup>26</sup> Carriers are reported to have said that container shortages will further force up freight rates during the coming months. "The acquisition, and availability, of new equipment [containers] to meet demand is being frustrated by steel shortages, which has pushed up the price of steel, adding to costs."<sup>27</sup>

Increased demand for steel and the rising steel price, have also lead to increased demand and prices for scrap from vessel recycling (see also Figure 2), thus practically closing a "cycle": Record prices for scrapping vessels further encourage the building of new vessels, which again leads to an increased demand for steel.

Shipping companies' profits have gone up too, just as their share prices. Between October 2002 and April 2004, the Clarkson Liner Share Price Index increased by almost 200%, although it has since then gone down by about 13%.<sup>28</sup> If carriers depended only on chartered-in tonnage, then one could actually expect profits and share prices to fall, because the costs of chartering vessels and leasing containers have gone up. But as carriers tend to own half or more of their vessels and containers, the benefits generated from ownership appear to outweigh the costs of leasing and chartering. Also, not all costs for carriers are related to vessels or containers. Examples of recent reports of higher profits and share prices include "rising freight rates have enabled Korea's Hanjin Shipping to achieve a record net profit of W158.9 Bn (US\$ 137 million) for the first quarter of 2004".<sup>29</sup> "P&O Nedlloyd swung back into the black in the 2004 first quarter", "the dramatic recovery was underpinned by a 15% leap in average freight rates compared with 12 months ago".<sup>30</sup> "Hapag-Lloyd reported that it achieved a record operating profit of 343 million Euro on sales of 2.9 billion Euro for 2003".<sup>31</sup> "Evergreen sees profits doubling".<sup>32</sup> "K Line said net income for its fiscal year ended March 31 jumped 220 per cent". <sup>33</sup> "NOL blasts off 2004 with record US\$ 164-million profit in first Quarter 2004".<sup>34</sup> And for the next years, "UBS Investment Research is predicting a staggering 19.5% net profit increase for AP Moller-Maersk between the end of 2003 and 2005 as a result of increased freight rates.

#### Reasons for the surge in freight rates

There are several particular reasons that can be mentioned to explain the general increase of liner shipping freight rates. Among them, the Oil price reached a 21-year high in May 2004, which directly affects voyage costs. For certain routes, it may also be relevant that the Panama Canal has increased its tariffs, especially for container carriers. Further, carriers have to comply with new security requirements.

<sup>&</sup>lt;sup>25</sup> Fairplay Daily News Services, 5 April 2004.

<sup>&</sup>lt;sup>26</sup> <u>www.Eximin.net</u> on 11 May 2004.

<sup>&</sup>lt;sup>27</sup> www.ci-online.co.uk, on 30 April 2004, quoting and announcement of the Trans-Atlantic Conference Agreement. Ci-online also reports that according to one source, "steel shortages and the consequent lack of containers are over, according to the latest reports from China's metal production industry, relieving the expected pressure on box supply."

<sup>&</sup>lt;sup>28</sup> Container Intelligence Monthly, Volume 6, No.5, May 2004, Clarkson Research Studies.

<sup>&</sup>lt;sup>29</sup> Fairplay Daily News Service, 28 April 2004.

<sup>&</sup>lt;sup>30</sup> <u>www.lloydslist.com</u> on 6 May 2004.

<sup>&</sup>lt;sup>31</sup> www.Eximin.net on 10 May 2004.

<sup>&</sup>lt;sup>32</sup> www.joc.com on 30 April 2004.

<sup>&</sup>lt;sup>33</sup> www.joc.com on 14 May 2004.

<sup>&</sup>lt;sup>34</sup> www.eximin.net on 26 May 2004.

Another major cause of the general surge of freight rates are growing trade imbalance. As Asian exports outgrow their imports, shippers increasingly have to pay not only for the transport of their full container, but also for the positioning costs of the empty container. For an export of a forty-foot container from Shanghai (China) to Manchester (United Kingdom), for example, these positioning costs can reach 40% of the total transport costs.<sup>35</sup> During the first quarter of 2004, Asian exports to Europe have grown by 18%, versus an increase of only 15% of European exports to Asia. Consequently, freight rates from Asia have been announced to increase by twice as much as the rates from Europe to Asia, i.e. 300 US\$ per TEU versus 150 US\$ per TEU as at 1 June 2004.<sup>36</sup> Weekly, ten 8,000 TEU ships could be filled to carry the imbalance of empty containers from the United States West Coast back to the Far East. From Northern Europe three 8000 TEU versus plus one 2,500 TEU unit per week would be required.<sup>37</sup>

Generally, determinants of transport costs on individual routes and for individual shipments not only depend on the global freight level and trade imbalances, but also, inter alia, on the type and value of the commodity, the volume of the individual shipment, the level of competition on a given route, alternative modes of transport, distance, geographic location, and, very importantly, also on port costs and productivity.<sup>38</sup>

All of the above, however, cannot explain the huge cyclical fluctuations of freight rates which we observe in the shipping industry.

### Is there a "pig cycle" in the shipping industry?

The shipping industry has traditionally been a "boom-and-bust" industry, i.e. an industry where periods of high earnings are followed by periods of high losses, and vice versa. The main reason for this cyclical movement is the time it takes to adjust supply to changes in demand.

In Economics, students tend to be taught that prices in certain industries are prone to behave like a "pig cycle".<sup>39</sup> According to this concept, the production of new output responds to changes in price – but only after a long time lag, and this time lag is itself the cause of future price changes. For the case of pork meat, for example, it historically lasted one year between the breeding of piglets to the moment they can be sold as pork meat. If the price for pork meat is high, producers start "ordering" many piglets. Once these are grown up, there is an oversupply of pork meat, and the price drops. That year, producers will not "order" any new piglets. Ideally new container vessel additions would arrive in a steady flow, but in practice, investment in new vessel capacity appears to follow the pig-cycle, with intensive new activity at the peak of the highly profitable boom period, only to come online at the height of the bust.

At present, order books for container ships at shipyards in the Republic of Korea, and also Japan, China and Europe are full. Orders for new containerships taken in today are usually for delivery in 2006 and 2007.<sup>40</sup> Ship yards are not only busy building new container ships, but also dry bulk vessels to cover growing demand for coal, grain and iron ore shipments, and oil tankers, many of which need to be replaced with new double-hulled vessels due to new environmental standards. One particular component of the "pig cycle" in shipping appears to be

<sup>&</sup>lt;sup>35</sup> Lloyds Shipping Economist, January 2004, page 22.

<sup>&</sup>lt;sup>36</sup> Dyna Liners, 14 May 2004.

<sup>&</sup>lt;sup>37</sup> Dyna Liners, 9 April 1004.

<sup>&</sup>lt;sup>38</sup> United Nations ECLAC, FAL Bulletin 191, Santiago de Chile, 2001. See also the article "Port Efficiency, Maritime Transport Costs and Bilateral Trade" under "Publications" in this issue of the Transport Newsletter.

<sup>&</sup>lt;sup>39</sup> The theory of the Pig Cycle was elaborated by R. Coase and R.F. Fowler, in: "Bacon Production and the Pig-Cycle in Great Britain", 2 Economica (n.s.) 142-147 (1935); The Pig-Cycle: A Rejoinder, 2 Economica (n.s.) 423-428 (1935); and "The Pig-Cycle in Great Britain: An Explanation", 4 Economica (n.s.) 55 (1937).

<sup>&</sup>lt;sup>40</sup> Container Intelligence Monthly, Volume 6, No.5, May 2004, Clarkson Research Studies.

the price of steel, which contributes to higher prices for vessels and containers. This "effect won't go away even if the steel price drops now because adjustment will take time".<sup>41</sup>

Figure 3 shows the growth rates of supply and demand in container shipping. Supply does not immediately follow demand, but fluctuates anti-cyclical. In 2003, demand growth reached a peak with +11%, while at the same time supply grew by only 7%. In other words, demand grew 57% faster than supply. In 2001, the situation was the reverse: Demand almost stagnated, but ships that had been ordered in previous years were still being delivered. The differences between growth rates for demand and supply as shown in Figure 3 are clearly moving very closely to shifts in freight rates as illustrated in Figure 1 above. Given the present order book and forecasted demand growth, only in 2005 will the supply of new container carrying capacity be again in line with demand. Until then, it can certainly be expected that charter and freight rates will not significantly decline.

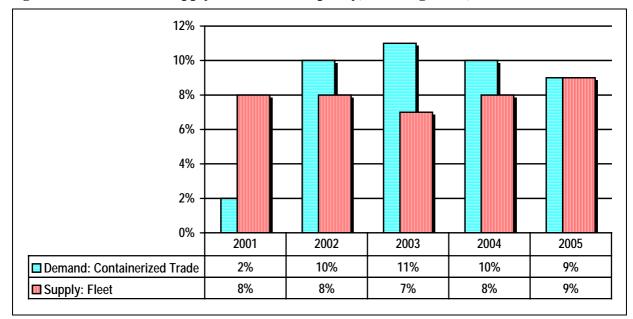


Figure 3: Demand and supply of container capacity, annual growth, 2001 – 2005 (forecast)

Source: Container Intelligence Monthly, Volume 6, No.5, May 2004, Clarkson Research Studies.

The explanation for today's high freight rates dates back to 2001 and beginning of 2002, when freight rates were very low, and the supply of vessel capacity grew faster than demand. Carriers' expectations concerning future earnings were extremely pessimistic in view of developments in Iraq, discussions about maritime security, and low trade forecasts. As a consequence, relatively few container vessels were ordered for delivery in 2003. Last year, however, Chinese exports grew faster than expected, leading not only to demand for vessels to transport full containers, but also for vessel capacity to move the empties back from Europe and North America.

As this article is being written, shipping lines are continuing to order vessels "in spite of warnings from analysts and brokers that 2006 will see returns fall as the supply/demand pendulum swings in favour of shippers".<sup>42</sup> Companies though appear to be optimistic. Maersk-Sealand, for example, "stated not to be sharing various analysts' expectations that the container trades will slacken as from somewhere in 2005 onwards. APL recently dismissed the likelihood

<sup>&</sup>lt;sup>41</sup> Johnny Lau, of Worldwide Shartex International Freight Company, as quoted in CI-Online on 13 May 2004.

<sup>&</sup>lt;sup>42</sup> www.ci-online.co.uk on 13 April 2004.

of sharply dropping freight rates that year. Coscon forecasts two, and Evergreen expects even six more strong years of demand for container shipping."<sup>43</sup>

Curiously, the high global freight rates at the beginning of 2004 coincide with record high pork prices in most of Asia, which may be a literal example of a "pig cycle". In the Philippines, for example, "many consumers are shifting to fish and vegetables due to the high prices of pork".<sup>44</sup> Most global shippers, however, do not really have that choice.

Jan Hoffmann, Economic Affairs Officer, Transport Section, UNCTAD. jan.hoffmann@unctad.org

# **Containerized Trade Forecast**

Containerized trade, measured in TEU (twenty foot equivalent units), is forecasted to grow by an average annual rate of 5.32% between 2003 and 2025, according to GlobalInsight.<sup>45</sup> This compares to a somewhat higher growth rate of 6.27% between 1995 and 2003. In that year, global containerized trade reached 656,665 TEU.

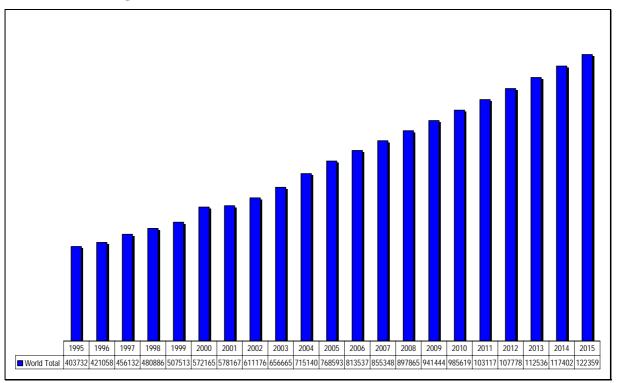


Figure 4: Containerized world trade, 1995 – 2015 (forecast)

Source: GlobalInsight, <u>Robert.West@globalinsight.com</u>

<sup>&</sup>lt;sup>43</sup> Dyna Liners, 30 April 2004.

<sup>&</sup>lt;sup>44</sup> "Price of pork reaches P150 per kilogram", <u>www.inq7.net</u>, 7 March 2004.

<sup>&</sup>lt;sup>45</sup> Data received in May 2004 from <u>Robert.West@globalinsight.com</u>.

# **World Maritime University**

When the World Maritime University (WMU) was established in Malmo, Sweden, in 1983, it was created with the future in mind. It was foreseen that highly-trained people from developing countries would be needed to staff national maritime administrations and ports, to operate and manage shipping enterprises and to deal with safety and the environment. Experience has proved that this vision was completely accurate. In just over two decades, the University has become a global forum for teaching, giving students from the developing regions direct and extensive access to the most modern technologies and methods in marine transportation used in the industrial world.

WMU was established by the International Maritime Organization (IMO) to educate senior professionals from the maritime world. The demand for highly qualified maritime personnel is higher today than ever it has been, both from industry and maritime administrations. The steady growth in world trade and transportation, and rapid technological changes in shipbuilding and communications systems have put new and higher demands on maritime personnel. WMU educates and trains qualified people from countries around the world so that they can meet the needs of the global community.

Over the years, the University's portfolio of programmes has grown and responded to the changing needs of the international arena. The University's core activity is its 17-month Master of Science programme in Maritime Affairs, which runs over four semesters. This provides the vital foundations of the subject to all students, and then allows them to go on to specialise in one of six areas:

- Maritime Administration
- Maritime Safety & Environmental Protection
- Integrated Coastal and Ocean Management
- Maritime Education & Training
- Port Management
- Shipping Management

In the final semester, students can extend their knowledge into other areas by selecting elective subjects to reflect the professional demands they will face after graduation. Students who already have a relevant postgraduate qualification can apply for advanced standing (credit transfer) to allow them to join the third semester of the programme.

The University also offers a joint PhD programme in maritime or international commercial law with the University of Wales Swansea, and is currently developing its own professional doctorate in maritime administration. This year will see the first students joining the new Master of Science programme in International Transport & Logistics, which is delivered in Shanghai, but primarily taught by WMU staff. These new programmes have been carefully designed to extend WMU's high-calibre professional education to a new and thriving clientele, and so meet even more of the maritime sector's demand for specialised professionals.

WMU actively encourages the enrolment of women, and is assisted by fellowship donors who support the promotion of women in non-traditional roles. The University has succeeded in meeting its target of women making up 25% of the total enrolment each year.

The University owes its continued existence to a very dedicated core group of external donors, who contribute to the institution's operating costs and also provide a number of fellowships for students. The main donor to the operating budget is Sweden, the host country, and support is received from a wide range of countries and institutions, including the Nippon Foundation and the Ship & Ocean Foundation of Japan, the Government of Norway, the International Transport Worker's Federation, the Government of Canada, the Government of Denmark, the Government of the United Kingdom, INMARSAT Ltd, the Government of France and the Government of the Republic of Korea. Although a steady proportion of students is funded by employers or governments, fellowships for the MSc programme in Malmö are donated each year by a wide range of governments and organisations. These fellowships may cover the annual tuition fee (US\$ 12,000 per annum) or both the tuition fee and living and accommodation expenses (US\$ 25,000 per annum).

The return of WMU graduates to their respective countries to positions of leadership in their administrations significantly strengthens the national and regional capacities to participate in their global responsibilities for safer seas and cleaner oceans. By the end of this year, over 2,000 students from more than 140 countries will have graduated from WMU, but what essentially distinguishes the impact of this institution is the calibre of its students, all of whom are mature students in mid-career at home in their respective countries. The University builds on their experience by providing state-of-the art professional education: the consequences of this are far reaching for a world which relies on ships to provide the safest, cheapest and most reliable means of transportation. One of the most notable achievements of WMU is the establishment of a global network of qualified maritime experts, unique in its scope and its nature, which links the graduates of the developing regions to a "super-highway" of technical advice and expertise.

WMU works in partnership with other universities and organizations world-wide, including UNCTAD, to ensure that standards remain high, to take its students, its graduates, and its world-wide impact through to the next millennium.

For more information about applying to the programmes offered by the World Maritime University, please consult the web site (<u>www.wmu.se</u>), or contact the Registry for an information pack (<u>info@wmu.se</u>)

# The TrainForTrade Port Training Programme

The Human Resources Development Section of UNCTAD's Division for Services Infrastructure for Development and Trade Efficiency with the assistance of the Transport Section and the Trade Logistics Branch, has been implementing the TrainForTrade port training programme for over 2 years in developing countries. A pilot phase of the programme was run from 1998 to 2001 in 3 West African port communities (Benin, Gabon and Senegal).

Based on the positive results recorded by both public and private companies in these port communities an independent evaluation (2001) by port experts recommended the extension of the programme to other port communities of Africa.

In the framework of regional cooperation and network development, UNCTAD organised in 2002 (Porto, Portugal) a meeting to define its new port training capacity development strategy. This meeting was attended by forty-six representatives of twenty-two developing countries (Angola, Benin, Brazil, Cape Verde, Cambodia, Cameroon, Congo, Côte d'Ivoire, Gabon, Gambia, Ghana, Guinea-Bissau, Guinea, Kenya, Mauritius, Mozambique, Namibia, Sao Tome and Principe, Senegal, South Africa, Tanzania, Togo and Tunisia) and twenty-one representatives of seven developed countries that are the partners in the programme (Belgium,

France, Netherlands, Norway, Portugal and Spain). Action plans for the implementation of the TrainForTrade port training programme were prepared with a view of developing the three linguistics networks (French, English and Portuguese).

Extension of the TrainForTrade programme has been made for other French-speaking countries of Africa (Cameroon, Guinea, Togo and Tunisia), as well as in some Portuguese-speaking countries of Africa (PALOP) like Angola and Cape Verde. Furthermore development is in progress for the English-speaking network of the programme for which a first training of trainers session was conducted in Ghent (Belgium) in 2003 for thirteen participants from Cambodia, Ghana, Kenya, Mauritius, Nigeria, South Africa and Tanzania.

Following the training of trainer's phases, national deliveries of the programme are being organized every year to provide port managers with management tools and techniques to improve their performance inside the port community for the benefits of the port and maritime sector as a whole.

Recently (March 2004) in Dakar (Senegal) and Douala (Cameroon) the *first promotion* of participants' from the port community have presented their theses (assessment on a port related subject) before a panel (jury) of port experts coming from the other ports member of the TrainForTrade network. Upon satisfactory completion of their training session and their theses they were granted the Port Certificate attestation. Similar events will be conducted in the other ports before end of second semester 2004.

Cambodia has already started implementing the port training programme component of the TrainForTrade activities involving capacity building for other trade related issues like competition policies, trade development and environment, investments agreements, etc. in the context of a regional technical assistance project including Laos. A total of 9 participants' from Sihanoukville Autonomous Port and 9 other participants from Phnom Penh Port have been benefiting from the programme since the beginning of 2004.

So far, a total of 310 port operators have been trained in their respective port communities with the TrainForTrade port training programme.

UNCTAD's Transport Section is closely collaborating with the TrainForTrade programme as regards the teaching and updating of training materials.

For more information please consult the following link: <u>http://www.unctad.org/trainfortrade</u> or contact Mark Assaf at <u>mark.assaf@unctad.org</u>.

# **International Port Training Conference**

In the previous issue of the Transport Newsletter, we wrote about "Port training in modular form", which was a topic of last year's "International Port Training Conference" (IPTC). In this issue, we provide more general background information about the IPTC.

### Historical background

The IPTC started as an ad hoc meeting of experts in 1970. The initiative for holding this meeting was taken by the former Port Training School for Adults in Rotterdam. The meeting was organized to review progress made in vocational training of port workers then known as Dockers. As experience in this field was then limited, it was decided to continue holding the conferences biannually, hosted alternatively by European countries active in port worker training. The subsequent seventeen meetings promoted and organized by an unpretentious number of enthusiastic persons of the above Port Training School supported by persons of other European countries who had commenced vocational training for dockworkers. These persons

believed in the advantages of the conference because a) it provided a forum for learning developments in the field of port training, b) it allowed contacts to be made between experts in this new field, c) it created awareness for the need of portworker training in other countries, d) it could be held at a low cost, and e) it provided information for countries wishing to introduce vocational training for dockworkers.

Most of the work done for the IPTC is carried out voluntarily. Since it was first held, lecturers deliver papers at no cost to the IPTC, conference fees are not levied and the host countries bear the costs for the realization of the conference. Lecturers and participants pay their travel and accommodation expenses. The IPTC is guided by an eight-member Steering Committee and has no financial means at its disposal. The above Shipping and Transport College of Rotterdam provides the much-needed administrative support and a modest financial one depending on urgent immediate requirements. The Secretariat of the IPTC works on a voluntarily basis.

### Current developments:

Methods of transport have changed significantly since the first IPTC was held. Ports are now acknowledged as being an integrated part of the transport and logistics chain. Important global terminals have been developed and containerization has overtaken conventional cargo handling. The job profile of the former dockworker has gradually been replaced by a set of competencies required by port workers employed by terminals using innovative technologies. As a result, port work is no longer a unique vocation but one progressively needing new competencies similar to many others now required in the world transport and logistic industries. Besides, the typical dockworker training schools have undergone substantial changes to maintain their recognition as competent institutions of learning. Accordingly, trainers need new competencies to meet the demand of training services now required by the above industries. Because of the growing awareness of the similar competencies required in these industries, the benefit of offering integrated flexible training services for these industries is recognized.

Experiences gained by companies and training colleges show that flexible courses are better prepared when drafted on the basis of competencies needed for a given function. As noted, it is also accepted that many functions in terminal operations and in the world of transport have various competencies in common. By packaging the training requirement to correspond them to these common competencies, applicable modules of learning can be designed. These modules of learning can be adapted for different target groups requiring similar competencies. They can also easily be made suitable for instruction in new competencies that are required. Also, a system for certification could be established corresponding to one or more packages of learning modules. This would allow an employee to advance in his/her career by successfully completing credits decided by the employer for modules of learning he/she requires before a promotion may be considered. Such a system could have a twofold objective; certification for (harmonized) standards in the field of safety and security coupled to certification procedures for career advancement in benefit of both the employer and the employee.

Training of port personnel is currently within the action programmes of several international organizations such as the ILO, IMO and UNCTAD. Unfortunately, there is no effective coordination between these organizations. Since the ISPS Code has been adopted, IMO has now decisive recognized responsibilities in the port sector. Perhaps the time has come for a decision on the recognition of one leading international organization for training and certification of port personnel. In this respect, the International Labour Organization could consider establishing a "Joint Port Commission" resembling the Joint Maritime Commission (JMC) established in 1920. Such a joint port commission could ensure that the concerns of global terminal operators and Workers' representatives be taken into consideration by IMO

when reviewing their training and certification. As an alternative to the proposed joint port commission, consideration could be given to the creation of an ad hoc committee on ports at ILO.

Minimum qualifications of port personnel are not laid down in an international instrument. In contrast, qualifications of personnel manning ships are verified by agreements reached at international level. Should not qualifications of port personnel be likewise subjected to similar validation procedures as in force for seafarers? Should not a data bank be developed under auspices of IMO on minimum competencies required by port personnel? Should this data bank not be prepared using the extensive experience gained in identifying the minimum seafarers' competencies required as recorded in the STCW Convention?

### Proposed subjects to be discussed at the 18th IPTC, Portugal, May 2005

The International Port Training Conference has reviewed a number of these issues at recent conferences. The conclusions reached are reflected in their Summary of Proceedings. With the coming into force of the ISPS Code on 1 July 2004 the discussion on the above questions may again become relevant. The 18th International Port Training Conference should consider discussing the above issues. These should be reviewed with the assistance and support of organizations providing guidance to and or responsible for port operations such as the UN Organizations active in the port industry, the I.A.P.H, global terminal operators, training providers and Workers' Federations dedicated to conditions of life and work of port personnel.

Bartolome de Boer, Secretary, International Port Training Conference. <u>chasqui@wxs.nl</u>.

# **Upcoming Events**

# UNCTAD Experts Meeting on "Design and Implementation of Transit Transport Arrangements" in Geneva, 24–26 November 2004

The objective of the Expert Meeting is to review the necessary institutional arrangements, the use of management information systems along supply chains, the conditions required for facilitating transit arrangements and examples of successful transit arrangements in developing countries. In doing so, consideration will particularly be given to the use of transport documents and their electronic alternatives, electronic means to simplify procedures, necessary conditions for promoting logistic services and multimodal transport under one contract, harmonization of legal framework, commitments in GATS in logistics services, operational systems for transit monitoring, enhancing transport security and joint border-crossing control facilities.

Landlocked developing countries are confronted with a range of special constraints that limit their full participation in a global economy. In addition, transit operations involving coastal countries are rapidly gaining in importance, both in global and regional trades. The lack of territorial access to the sea make them dependent on transit through neighbouring countries and their transport policies and facilities. Additional border crossings and long distances from world markets significantly increase the total costs of their transport services. High transport costs curtail the competitiveness of landlocked developing counties and the volume of their trade.

Establishment of efficient transit transport systems will depend not only on the cooperative arrangements between landlocked developing countries and their neighbours and on multilateral agreements, but also on the infrastructure, facilities and conditions along the transit route. Transit operations are an indispensable element of further regional integration among developing countries. Transit countries, landlocked countries, donor countries and multilateral institutions need to explore the establishment of basic infrastructure required for multimodal

transport in order to help reduce the transit costs of landlocked developing countries and make their products more competitive in international markets. While the general problems of landlocked and transit countries have been discussed in numerous fora resulting in the adoption of various resolutions and action plans, there is a need to consider, in concrete terms, how best the emerging technologies and developments (such as ICT, multimodal transport and logistic services) can be used to improve transit transport. Trade to and from landlocked countries tend to involve two or more modes of transportation such as sea and land transport. Due to the high risk associated with the land-leg of transport, and the absence of appropriate legal frameworks in relation to such transportation, international carriers do not, in many cases, offer one contract to cover the entire transport from origin to destination with one party taking responsibility throughout. Multimodal transport under one contract and with one party being responsible for the entire transport operation will significantly improve the situation for traders in developing countries.

For further information contact José Rubiato, Chief, Transport Section, TLB, SITE, UNCTAD at <u>jose.rubiato@unctad.org</u>.

### **Terminal Operations Conference in Chile**

From 9-11 November 2004, the conference *TOC2004 Americas* will take place in Santiago de Chile. The conference will have a special focus on port development and operations in Latin American and Caribbean ports. Among the planned agenda items are "Liner strategies to serve South America's West and East Coasts", "Caribbean transhipment – too many facilities?", "Understanding the new role for public port authorities", "Vessel, quay and yard productivity – benchmarking Latin America against other regions" and "Port security – ISPS four months on".

For further information visit <u>http://www.toc-events.com</u>

# **Publications**

### **Port Efficiency, Maritime Transport Costs and Bilateral Trade**

By Ximena Clark (World Bank), David Dollar (World Bank), and Alejandro Micco (Interamerican Development Bank), Washington. Version of February 2004.

Recent literature has emphasized the importance of transport costs and infrastructure in explaining trade, access to markets, and increases in per capita income. For most Latin American countries, transport costs are a greater barrier to U.S. markets than import tariffs. The paper investigates the determinants of shipping costs to the United States with a large database of more than 300 000 observations per year on shipments of products aggregated at six-digit Harmonized System level from different ports around the world. Distance, volumes and product characteristics matter. In addition, the paper finds that ports efficiency is an important determinant of shipping costs. Improving port efficiency from the 25th to the 75th percentile reduces shipping costs by 12 percent and having "bad ports" is equivalent to being 60% farther away from markets for the average country. Inefficient ports also increase handling costs, which are one of the components of shipping costs. Reductions in country inefficiencies associated to transport costs from the 25th to 75th percentiles imply an increase in bilateral trade of around 25 percent. Finally, the paper tries to explain variations in port efficiency and finds that they are linked to excessive regulation, the prevalence of organized crime, and the general condition of the country's infrastructure.

For further information visit <u>http://www.nber.org/books/IASE11-03/clark-et-al2-28-04.pdf</u> or contact Alejandro Micco at <u>alejandromi@iadb.org</u>

### **Maritime Economics and Logistics**

The journal *Maritime Economics and Logistics* (MEL) is a quarterly publication for peerreviewed research and policy perspectives of direct relevance to economists, researchers, academics and those in professional practice with an interest in maritime economics, maritime policy, transport economics and applied economics. The first quarter issue of 2004 had 91 pages and included the following articles: "Market Efficiency in the Second-hand Market for Bulk Ships", "Evaluation of the Economic Impact of Proposed Non-Indigenous Species Control Measures for the St Lawrence Seaway", "A Competitive Analysis of Chinese Container Ports Using the Analytic Hierarchy Process", "An Alternative Approach to Efficiency Measurement of Seaports", and "An Application of Analytic Hierarchy Process on Transhipment Port Selection: A Global Perspective".

For further information visit <u>http://www.palgrave-journals.com/mel/</u>

# **Container Terminal Development and Management: The Sri Lanka Experience** (1980-2002)

A report by Ravindra Galhena. The report forms part of the series "UNCTAD Monographs on Port Management", prepared for UNCTAD in collaboration with the International Association of Ports and Harbors (IAPH). An excerpt from the last chapter:

"There is no alternative to having the required capacity ahead of demand if the port wishes to attract new trans-shipment volumes. Achieving an acceptable level of crane/berth productivity and maintaining the required quality of service are key factors for the success of a container hub port. To address the operational shortcomings, the following might be adapted as strategies and tactics to replicate Colombo's past success:

- Make rapid decisions on the new container development projects and embark on them immediately. This entails working on proper and realistic time frames and making the capacity available ahead of demand;

- Do a thorough study (in SLPA-controlled terminals) to find out the causes of low productivity and inefficiencies, and address those issues on an urgent basis to ensure improved vessel turnaround. Demotivation and unionization of workers, lack of vision and focus of the top management, lack of commercialization, bureaucracy, red tape and politicization are some of the factors contributing to these problems. Arrangements are already made to improve operating conditions by effecting necessary technical improvements such as gantry crane boom extensions to some cranes from 16 to 18 boxes across and dredging the harbour entrance channel, basin etc.

- Market the facilities effectively at the right price when the port is ready to offer a quality product in all aspects. Also Colombo, should continue to establish Terminal Services Agreements with the main customers, offer them suitable rebates and develop a captive clientele.

- Be vigilant about developments in the industry and make suitable arrangements to seize new opportunities and counter new threats."

*The complete document UNCTAD/SHIP/494(18) can be downloaded under* <u>www.unctad.org/en/docs//ship49418\_en.pdf</u>