## UNCTAD Transport Newsletter



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## **Editorial**

At a time of increasing concerns about energy security and of multiple global crises, including the global financial crisis and the food and water crises, which are severely impacting our ability to achieve the Millennium Development Goals (MDGs), climate policy action remains an urgent priority and a major challenge for the international community. Climate change poses a potentially permanent and serious threat to human development and prosperity, with implications for water and food security, human health, biodiversity, migration, global trade and security.

The three-day UNCTAD Expert Meeting on Maritime Transport and the Climate Change Challenge (Geneva, 16–18 February 2009) covered issues such as climate change impacts and challenges, greenhouse gas (GHG) emissions from international shipping and control, approaches to mitigation and adaptation, and cross-cutting issues such as energy, technology and financing. The meeting provided a unique platform for fruitful and timely informal discussions among experts from a variety of public and private sector backgrounds. A key contribution lay in the fact that it allowed for a broad analysis of the potential implications of the climate change challenge for the maritime industry and helped participants gain a better understanding of the various maritime industry approaches to mitigation as well as the urgent need for an increased focus on climate change impacts and adaptation (for more details, see page 5). On a related issue, we also report on the World Ports Climate Initiative launched by the International Association of Ports and Harbours (page 28).

Two articles in this issue look at maritime transport issues, notably the linkages between the global economic crisis and shipping (page 10) and liner shipping connectivity in Africa and in South America (page 19).

In the area of trade facilitation, several articles provide updates on the Automated System for Customs Data (ASYCUDA) (page 8), the twice yearly meeting of the Global Facilitation Partnership (page 9), Saint Lucia's National Trade Facilitation Task Force (page 24) and the WTO Trade Facilitation Self-Assessment in Afghanistan (page 25).

We also provide information on recent and upcoming events and publications of interest for those working on trade and transport facilitation and development.

For feedback, comments and suggestions for our next UNCTAD Transport Newsletter (second issue 2009), please contact Jan Hoffmann at jan.hoffmann@unctad.org before June 2009.

The Trade Logistics Branch Team, Geneva, March 2009



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## UNCTAD Expert Meeting: Maritime Transport and the Climate Challenge

## UNCTAD Multi-year Expert Meeting on Transport and Trade Facilitation: Maritime Transport and the Climate Change Challenge, 16–18 February 2009, Geneva

About 180 delegates from 60 countries, 20 organizations (United Nations agencies, intergovernmental and non-governmental) and representatives from the international shipping and port industries participated in the UNCTAD Multi-year Expert Meeting on Transport and Trade Facilitation: Maritime Transport and the Climate Change Challenge, held on 16–18 February 2009 in Geneva. The three-day meeting offered experts from a broad range of backgrounds a unique platform for fruitful and substantive debate on the potential implications of the climate change challenge for the maritime industry. Discussions at the meeting focused both on GHG emissions and climate change mitigation options, as well as on the potential impacts of climate change factors on maritime transport supply chains and their broader economic, social and developmental implications, which are yet to be better understood and adequately addressed.

The technical level of the expert discussions helped gain a better understanding of the various maritime industry approaches to mitigation, the evolving regulatory and institutional framework with GHG emissions dealing from the international maritime sector and the extent of potential climate change impacts on maritime transport infrastructure, in particular in coastal zones and low-lying areas. Experts highlighted the urgent need to reach agreement in the ongoing negotiations on a regulatory regime for GHG emissions from international shipping. At the same time, experts noted with great concern that so far, insufficient attention has been paid to the potential impacts and implications of climate change for transportation systems, and in



particular for ports, which are key nodes in the supply chain and vital for global trade. In this context, the central role of technology and finance was highlighted, as well as the need for international cooperation between scientists and engineers, industry, international organizations and policymakers in relation to the preparation and design of adequate adaptation measures.

Key issues raised at the meeting are highlighted in the extract from the Chair's conclusions below:

(a) The available scientific evidence suggested that growing concentrations of GHG in the atmosphere had already resulted in significant climatic changes, which were predicted to increase in the future. The scale of the global challenge was enormous and, as climate change accelerated, there was an increasingly urgent need for action;

(b) Although predictions based on current trends already suggested an enormous challenge, it must be stressed that there was an inherent degree of uncertainty associated with those predictions. Natural systems were complex and non-linear, and there was a very real risk that growing GHG concentrations could trigger various feedback mechanisms that would drive climatic changes and their consequences to levels that were extremely difficult to manage. From a risk-management perspective, it would be unwise to wait for perfect scientific predictions concerning the response of the non-linear natural system before taking action. In view of the potential very substantial monetary and non-monetary costs of climatic change, particularly the very worrisome consequences of "tipping points"/abrupt climatic changes,

inaction and business-as-usual approaches were not viable options. Dealing with the climate change challenge was a priority, which should not be undermined by other concerns, including the current global economic and financial constraints;

(c) Time-frame was a real concern. Current trends in terms of energy consumption and carbon path suggested that if no action were taken within the following two years, including relevant investment decisions which would determine the type of technologies that would be locked in, the world would forever miss the opportunity to stabilize emissions at "manageable" levels along either the 450 ppm or the 550 ppm  $CO_2$  equivalent scenarios. It was crucial that the world be informed very soon of which scenario would be realistically achievable. This information was of the essence for adaptation planning;

(d) Despite the current unfavourable economic conditions, projected growth in international trade suggested that GHG emissions from shipping would continue to increase, unless effective regulatory, technical and operational measures were agreed and implemented without delay. Thus, there remained an urgent need to address GHG emissions from the maritime transport sector and to step up mitigation efforts. In view of the global dimension of international maritime transport and the climate change challenge, a global and concerted solution was urgently required. To this end, negotiations towards regulation of  $CO_2$  emissions from international shipping should be pursued with all due speed;

(e) Various technical, operational and market-based mitigation measures were currently under consideration under the auspices of MEPC [Marine Environment Protection Committee] at IMO [International Maritime Organization]. While the reduction potential and the effectiveness of each measure were yet to be fully established, there remained a need to improve the understanding of the respective merits of different options and to assess the potential implications of the proposed mitigation measures for global trade and market distortions. UNCTAD was encouraged to make use of its expertise and conduct relevant work in this area, especially regarding the trade and development of developing countries. There was also a need to ascertain the added value of these proposals in terms of energy efficiency to be achieved by the world fleet and their impacts on international shipping;

(f) The meeting was an eye-opener in that it helped raise awareness about the importance of climate change impacts and adaptation in relation to maritime transport systems. While international maritime transport was responsible for around 3 per cent of global  $CO_2$  emissions from fuel combustion, it was important to note that more than 80 per cent of global trade (by volume) was carried by sea, from port to port. Given the potential impacts and implications of climate change for transportation systems, and in particular for ports – key nodes in the supply chain, and vital for global trade – maritime transport should be seen much less as a culprit than as a victim. Thus, increased focus on responding to the challenge was important for the long-term prospects of the maritime transport sector and, more generally, global trade. Planning for the already-predicted impacts should be pursued without delay;

(g) Further studies were required to improve the understanding of potential climate change impacts for the maritime transport sector and the hinterland. For ports and transport infrastructure in coastal zones, especially in developing countries, appropriately funded, well-targeted vulnerability studies based on adequate data – as well as better data and dissemination of existing information – were required to assess potential climate change impacts and to develop appropriate adaptation responses;

(h) Studies on the vulnerability of the maritime industry to the impacts of climate change would strongly benefit from the availability of information on climate variability and change both at the global and regional scales. Efforts to develop a system to provide such information should be encouraged and supported;

(i) Scientific research based upon accurate and relevant data was essential for better predictions of climatic impacts on maritime transport and coastal infrastructure, especially in

more vulnerable regions such as SIDS [small island developing states] and low-lying areas. In this respect, there was an important need for cooperation among scientists and engineers, industry, international organizations and policymakers to ensure that up-to-date relevant information on climate change impacts and adaptation measures was available, widely disseminated and taken into account by policymakers, transportation planners and development strategists;

(j) Further awareness-raising, knowledge sharing, education and information dissemination was needed. The intention to pursue the possibility of including a compulsory subject on climate change in the undergraduate curriculum at the Cass Business School of City University, London – as well as a series of lectures for postgraduate students – was a step in this direction. As noted by experts, other approaches in this respect could include capacity-building and technical assistance initiatives, especially with a view to helping developing countries and the most vulnerable gain an improved understanding of the climate change challenge from a maritime transport perspective to ensure that they were better prepared to cope with its various effects;

(k) Assessing the costs of climate change impacts on ports and, more generally, supply chains, was seen as important. Understanding the implications for trade and development especially for developing countries needed to be enhanced and relevant studies should be carried out;

(1) Climate change mitigation in maritime transport and the need to adapt to climate change impacts posed a particular challenge for geographically disadvantaged landlocked countries with significant population, especially for their already volatile trade and development prospects. In that context, further attention should be focused on the impact of potential mitigation measures and adaptation requirements for the trade and development prospects of landlocked developing countries, as well as LDCs [least developed countries]. In that context, financial and technical assistance, as well as capacity-building, were important;

(m) Adequate funding was paramount for successful climate action in maritime transport and the wider supply chain, in particular for adaptation purposes. In that context, it was important to explore ways in which financial resources could be generated as part of mitigation efforts in relation to maritime transport and ensure that any proceeds were reinvested within the industry for climate change action, in particular for the purposes of effective adaptation, especially in developing countries;

(n) Taking advantage of existing technology and development of new technologies would go a long way in helping address the climate change challenge in maritime transport. For developing countries, being able to access and benefit from such technologies and advances would be crucial;

(o) The international shipping and port industries were already active in addressing the climate change challenge and were committed to stepping up their efforts to ensure that broader climate change implications for maritime transport were taken into account. In that respect, indications by representatives of the global port industry of their willingness to explore the possibility of including considerations on impacts and adaptation in work under the World Ports Climate Initiative constituted an important step in the right direction;

(p) It was felt that it would be useful to preserve some continuity to these deliberations and plan for a follow-up meeting in a year's time to assess progress with respect to the key issues raised and take stock of achievements made, as well as reflect on potential next steps.

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 $\underline{www.unctad.org/Templates/meeting.asp?intItemID=1942\&lang=1\&m=15862\&info=outcome.$ 

## **ASYCUDA updates**

#### Herat Customs in Afghanistan

The ASYCUDA component of the Emergency Customs Modernization and Trade Facilitation Project (ECMTFP), financed by the Afghan Government through a World Bank loan, took a further important step towards the main objectives of Afghanistan Customs Department's reform and modernization program with the implementation of the ASYCUDA Declaration Process System (DPS) in one of the major customs offices in Afghanistan. The first operational day for ASYCUDA DPS implementation in Herat Customs House was 28 March 2009.

The uses the Single system Administrative Document (SAD) declaration for import and export; thus the entire customs process for a declaration is automated and electronically available to both the traders/brokers and the customs officers. All customs declarations are submitted in electronic format by the customs brokers (100 per cent DTI, Direct Trader Input).



The previously used numerous copies and forms have been replaced by the electronic version of the SAD. The processing of customs export and import declarations has been reduced from 14 steps and signatures to three. The customs brokers pay the customs duties and taxes in the Afghan National Bank (ANB) subsidiaries, which are connected to the customs ASYCUDA system (automatic electronic confirmation of payments). The customs brokers have the possibility to use the ASYCUDA prepayment option, thus avoiding the need to physically go to the ANB offices. A total of 90 brokers and traders as well as 120 customs officers were trained prior to the system start-up. The system is further being supported by ample computer hardware, satellite connectivity with other customs offices, and generators for power backup. The ASYCUDA DPS is so far implemented in the Kabul, Jalalabad and Herat Customs Houses as well as in the Kabul Airport Customs Office. The ASYCUDA transit system is implemented in the Torkham, Nangrahar, Kabul, Islamqala, Herat, Torghundi, Hairatan and Balkh customs offices. All the above locations are connected with each other and customs headquarters and being monitored remotely through our installations at customs headquarters.

Wakman Shagiwal, Director of ASYCUDA Department, Afghan Customs, Ministry of Finance, Kabul, <u>wakmanshagiwal@yahoo.com</u>

#### UNCTAD Trade Facilitation Mission to the Russian Federation

From 8 to 12 December 2008, an UNCTAD delegation visited Moscow to discuss future areas of cooperation on trade facilitation in the light of UNCTAD XII decisions. The UNCTAD delegation had constructive consultations with the Russian Ministry of Economic Development, the Federal Customs Service, the Chamber of Commerce and Industry and with the secretariat of the Euro-Asian Economic Community (EurAsEC). The participants agreed to continue studying the assistance that UNCTAD in general, and the ASYCUDA programme in particular, could provide to the countries in the region in the integration of their economies in transition.

#### Senegal

During the first week of November, Mr. Bruno Favaro of the ASYCUDA programme was invited to the Single Window Conference in Dakar (Senegal), where he introduced the ASYCUDA Single Window concept which will be the centrepiece of the ASYCUDA millennium version.

#### Jordan and the Syrian Arab Republic

A delegation of the National Board of Revenue of Bangladesh visited Jordan and the Syrian Arab Republic from 15 to 23 December 2008 to gather first-hand experience and technological know-how on the automation of customs procedures using ASYCUDAWorld (the latest version of the automated customs processing application developed by UNCTAD). The delegation was impressed by ASYCUDAWorld and the depth of knowledge and system ownership acquired by Jordan and Syrian Arab Republic customs authorities.

www.asycuda.org

## **GFP Meeting**

*"Implementation of Trade Facilitation measures – Tools, approaches and concerns"* A Global Facilitation Partnership (GFP) bi-annual meeting, 3 March 2009, jointly organized by the UNECE and UNCTAD in Geneva



The meeting was held against the background of the ongoing Doha Round of negotiations, in which the trade facilitation aspect progressed significantly. The meeting was structured around the importance of trade facilitation issues and the related debates that have preoccupied negotiators and practitioners. To set the background, subregional and country perspectives of trade facilitation and its role in trade development and competitiveness were discussed in the first session. The speakers underlined the importance of business communities taking an active role in trade facilitation implementation.

In the ensuing sessions, representatives from the private sector presented their cases, expressing their interest in the trade facilitation process. The meeting was also informed of the existing tools and assistance that are available from the GFP's core partners to assist with the trade facilitation implementation process. Attending the meeting were more than 50 participants representing various stakeholders in the key areas of trade facilitation. During the discussions, the following issues were suggested for further actions and follow-up by the GFP partners:

(a) Provide a regular platform for consultations between the public and private sectors on trade facilitation and other related issues;

(b) Cultivate and build on the dual roles of the private sector as main beneficiary and major implementer of trade facilitation in improving its compliance responsibilities;

(c) Continue to strengthen the work on customs-related issues by taking into account other key aspects affecting cross-border door-to-door movement of goods;

(d) Develop tools towards the implementation of potential future WTO trade facilitation commitments;

(e) In consultation with business communities and drawing from lessons learned through country experiences, provide advice on existing good trade facilitation practices as well as their related obstacles;

(f) Facilitate more coordination between country beneficiaries and agencies at the national level vis-à-vis external donors;

(g) Address capacity gaps in the information and communication technologies (ICT) area, particularly the e-segment of trade facilitation;

(h) Strengthen the political will towards customs reforms that do not exclusively depend on the availability of resources or capacities.

Documentation and presentations of the meeting are available online at: <u>www.unctad.org/Templates/Meeting.asp?intItemID=2068&lang=1&m=17015&year=2009&month=3</u> Bismark Sitorus, Trade Logistics Branch, DTL, UNCTAD, <u>bismark.sitorus@unctad.org</u>, and Serguei Kouzmine, Trade Facilitation Unit, TDTD, UNECE, <u>serguei.kouzmine@unece.org</u>.

## **The Global Economic Crisis - Linkages to Shipping**

Maritime transport can help in providing a better understanding of the wide impact of the global economic crisis on trade and development.<sup>1</sup>

1) Demand for maritime transport services. The price of chartering different specialized ships may be seen as an indicator of the demand and supply of transport services for different commodities, and the deployment of ships is an indicator of trade flows on specific routes.

2) The shipping industry. Those countries that are home to maritime transport-related businesses may be particularly strongly affected by the economic crisis because of the double exposure to a decline in trade in goods and in shipping services.

**3)** Trade Costs. These are a consequence of both demand and supply and have the effect of altering trading patterns which will also produce winners and losers.

#### 1. Demand for maritime transport services

The price of chartering different specialized ships is an indicator of the demand/supply balance for different shipping services, and the deployment of ships is an indicator of trade flows on specific routes. Below, we present long-term trends in the three main shipping sectors: dry bulk, containerized goods and tankers.

#### Dry bulk shipping

The demand for dry bulk carriers can be a good indicator of industrial production and economic growth, as the traded commodities are used as raw materials and energy supply in industrial production. In this context, the Baltic Exchange Dry Index (BDI) has recently received a lot of public attention following, inter alia, an article in Slate magazine in 2003, titled "The best economic indicator you've never based of?<sup>2</sup> The BDI



indicator you've never heard of".<sup>2</sup> The BDI is a composite of four indices covering different vessel sizes of dry bulk ships (ships that specialize in carrying raw materials such as iron ore, grains and coal).

However, when interpreting the data from the BDI, care has to be taken to also consider the supply side. The BDI as a compendium of charter rates reflects not only changes in demand for raw materials but also changes in the supply of shipping capacity. This contributes to the fluctuations of the BDI, and thus reduces the usefulness of the BDI as a "leading indicator" for industrial production. In fact, observing the development of the BDI and its increased volatility over recent years (see also Figure 1 below), it is perhaps no longer the excellent indicator that it was during the period 1985–2002. Possible reasons for the increased fluctuations in the BDI include the following:<sup>3</sup>

(a) There exists a general shipping cycle, which is independent of demand. Shipowners order new vessels when times are good, yet delivery takes place two to three years later. At the end of March 2009, "About 17.3m dwt [deadweight] of bulk carriers, or 9% of the global fleet, is now idle".<sup>4</sup> Even if demand were to pick up now, the surplus of capacity would still prevent charter rates from returning to the high levels of 2008. The order book for new dry bulk ves-

<sup>&</sup>lt;sup>1</sup> See also the two articles on "Declining freight rates: Opportunities and challenges for developing economies" and "Boom and bust in shipping" in UNCTAD (2008). *Transport Newsletter*. 41. Fourth Quarter.

<sup>&</sup>lt;sup>2</sup> *The Shipping News* (2003). The best economic indicator you've never heard of. 24 October. http://www.slate.com/id/2090303/.

<sup>&</sup>lt;sup>3</sup> See also UNCTAD (2008). *Transport Newsletter*. 41. Fourth quarter.

<sup>&</sup>lt;sup>4</sup> Lloyd's List (2009). 23 March.

sels in February 2009 comprised 3,387 vessels representing 70 per cent of the existing fleet in tonnage terms.<sup>5</sup>

(b) In the longer term, charter rates need to cover average total costs, while in the short term they only need to cover variable costs – and the proportion of the latter has gone down. New technologies and vessels are more expensive, while requiring lower expenditures for fuel or manning. Small variations in demand thus lead to larger variations in prices.

(c) The BDI appears to be increasingly influenced by market players who are not themselves providers or users of shipping capacity. An indicator of this trend is the growth in forward freight agreements (FFAs). In 2005, the volume of physical trade was twice the (financial) volume of FFAs, while in 2008 the volume of FFAs was 10 per cent above the volume of physical trade.<sup>6</sup>



Figure 1. Baltic Dry Index (BDI), 4.1.1985 to 25.2.2009

Source: The Baltic Exchange, <u>www.balticexchange.com</u>, copyright Baltic Exchange 2009.

#### Manufactured goods

Manufactured goods are mostly shipped by container carriers or specialized vessels such as car carriers. Similar to the BDI for dry bulk vessels, there exist indices that capture the cost of chartering container ships, e.g. the Hamburg Index (HIX), which quotes container ship time charter rates based on data from some 30 Hamburg-based brokers published by the German Shipbroker Association.<sup>7</sup> According to the HIX, for different container ship types the charter rate declined by between 24 and 75 per cent between February 2008 and February 2009.<sup>8</sup> Figure 2 shows the charter rates for three representative types of container ships up to February 2009. The costs of chartering a container ship obviously have a bearing on the freight rates charged by shipping companies to shippers for the transport of individual containers. By way of example, in early 2009 some shipping lines are quoting an all-in rate of \$250 for shipments from China to Dubai compared with about \$1,000 per TEU three to four months earlier.<sup>9</sup>

<sup>&</sup>lt;sup>5</sup> Clarkson Research Services (2009). Dry bulk trade outlook. February.

<sup>&</sup>lt;sup>6</sup> Stables I (2008). Freight investors services. Presentation made in Bejing. December. <u>www.balticexchange.com</u>. <sup>7</sup> www.vhss.de.

<sup>&</sup>lt;sup>8</sup> Dynamar (2009). Dynaliners, annex 08A/2009. 25 February.

<sup>&</sup>lt;sup>9</sup> Lloyd's List (2009.). 10 February.



Figure 2. Container ship Time Charter Rates (\$/day)

Source: Clarkson Research Services (2009). Container Intelligence Monthly. March. Note: "teu" stands for a twenty-foot equivalent unit (container); "grd" is a vessel with its own gear (cranes) and "g'less" are ships that do not carry their own cranes.

However, just as in dry bulk shipping, the global downturn in container ship charter rates is attributable not only to the downturn in demand, but also to an oversupply of shipping capacity. Today's tonnage on order in the world's shipyards amounts to almost 50 per cent of the existing container-carrying capacity, and already today 11 per cent of the container ship fleet is reported as "idle" or "laid up".<sup>10</sup>

Furthermore, freight rates for shipments of containers on specific different routes depend on numerous factors that are not necessarily related to the global economic crisis. Instead, they may be linked to a country's port characteristics, trade imbalances, economies of scale, competition levels or even specific issues related to security or pirate threats.



<sup>&</sup>lt;sup>10</sup> Containerisation International On-line, 28 February 2009 estimates eight per cent, while *Journal of Commerce* 27 February 2009 reports 8.8 per cent; both sources state that the percentages are increasing.

The global economic crisis does have an impact on the deployment of the container vessel fleet, and also on port traffic volumes: data on the routing and deployment of container ships provides some insights into the impacts of the global economic crisis on different regions. Although the global container ship fleet continues to grow in line with new deliveries, ships are increasingly being withdrawn from service and others are redeployed on different routes. Comparing fleet deployment in February 2009 with mid-2008 for selected countries in different regions shows how container-carrying capacity is being withdrawn: Chile is down 22 per cent, Barbados -33, Angola -13, the United Republic of Tanzania -8, India -2, China -5 and Fiji -3 per cent.<sup>11</sup> Data on port traffic provides additional information on the downturn in containerized trade. Year-on-year data for January 2009 and 2008 port traffic shows the world's largest container port Singapore to be down by 19 per cent; Hong Kong (China) -23 per cent, Long Beach, United States -14 per cent and Le Havre, France -25 per cent.<sup>12</sup>

As regards trade in vehicles, the economic crisis had led to a downturn in demand, resulting in a surplus in specialized car carriers, which are now being used as storage for unsold cars (see Box 1).

Box 1. Toyota charters vessel to store unsold cars

The car manufacturer Toyota has so many unsold cars it has had to charter a ship to store them. The company reported on 25 February 2009 that it had chartered a 2,500-capacity vessel which will simply stand idle in port in Malmö, Sweden. "We have space for 12,500 cars in Malmö, which acts as a distribution centre for all the Nordic countries," said Toyota spokesman Etienne Plas. "But we have run out of space. We need the ship to store cars while they are waiting to be delivered. Hopefully we won't need it for that long."

Toyota, which is expected to report its first ever loss this year, saw exports drop almost 60 per cent in January. Wallenius Wilhelmsen operates a fleet of 166 vessels shipping cars around the world. The company warned in January 2009 that it would be forced to scrap dozens of vessels. The sales slump would have a "strong negative impact" on profits this year, the company said. Belgium's Zeebrugge port, Europe's main distribution hub and one of the largest car terminals in the world, saw volumes fall in 2008 for the first time in a decade.

Source: Lloyd's List (2009). 25 February.

#### Crude oil and products

The charter rates for tankers are at historically low levels too, albeit not from a record boom as had happened in the dry bulk sector. The economic crisis has led to reduced demand for energy, which contrasts with a carrying capacity increase of about 13 per cent forecasted for 2009.<sup>13</sup>

The following two figures illustrate the trend over the last 10 years for crude oil tankers ("dirty tanker",

Figure 3) and for product tankers such as diesel, gasoil, or kerosene ("clean tanker", Figure 4).



<sup>&</sup>lt;sup>11</sup> UNCTAD connectivity database, derived from Containerisation International On-line.

<sup>&</sup>lt;sup>12</sup> Containerisation International On-line (2009). 20 February.

<sup>&</sup>lt;sup>13</sup> Lloyd's List (2009). 24 February.



Figure 3. Baltic Exchange Dirty Tanker Index (BDTI) 4.1.1985 to 25.2.2009

Source: The Baltic Exchange, <u>www.balticexchange.com</u>, copyright Baltic Exchange 2009.



Figure 4. Baltic Exchange Clean Tanker Index (BCTI) 4.1.1985 to 25.2.2009

Source: The Baltic Exchange, <u>www.balticexchange.com</u>, copyright Baltic Exchange 2009.

#### 2. Supply: the components of the maritime business

The backbone of global merchandise trade, maritime transport itself is probably the most globalized industry. A typical trade transaction may easily involve providers of goods and services from 20 different countries. As an example: a container, made in China and filled with goods from Nepal, is exported through a port in India; the port is operated by a concessionaire from Dubai, using cranes assembled in Malaysia and software developed in Belgium; the container ship built in the Republic of Korea is owned by a German investment fund, managed by a company headquartered in Cyprus, operated by a Danish carrier, flagged in Panama, certified by a classification society from the United States and crewed with Philippine nationals,

applying global employment conventions from the International Labour Organization; the shipping agent in the port belongs to a Norwegian network while the freight forwarder is Swiss and the ship's Protection and Indemnity Club from the United Kingdom; en route to the Netherlands, the ship fights pirates off the coast of Somalia, pays canal dues in Egypt, and bunkers fuel in Spain; it implements global IMO rules to avoid an oil spill in France.



In order to understand which companies and countries will be mostly affected by the economic crisis, as far as the downturn in demand for shipping services is concerned, we present below a brief overview of where some sectors of the industry are located and their global importance as regards market share.

#### Liner fleet

Together, the 20 leading carriers account for about 70 per cent of the total container capacity deployed (see Table 1). Four of the top 10 carriers are based in Europe – including the three largest companies – and six are based in Asia. Operators tend to charter a large proportion of their vessels, which are often owned by "non-operating" owners. The ownership of container ships is less concentrated than its operation. The three largest owners of container ships are "operating" owners, i.e. carriers, notably Maersk, MSC and Evergreen, followed by two non-operating owners from Germany. The largest non-operating owner currently is C-P Offen, controlling 90 ships with a total capacity of 355,000 TEU as of February 2009.<sup>14</sup> In Europe, the ownership and operation of vessels tends to be more split between different companies than in Asia, where companies own a relatively larger proportion of their operated fleet. Among developing economies, the major owners of container ships are based in China, followed by Taiwan Province of China, Singapore, the Republic of Korea, Hong Kong (China), Malaysia, Turkey, United Arab Emirates, and the Islamic Republic of Iran.<sup>15</sup>

#### Dry bulk fleet

The control of the world fleet of dry bulk carriers by owners from developing economies includes China with a fleet of 42,973m dwt, followed by the Republic of Korea, Hong Kong (China), Taiwan Province of China, Turkey, India, Singapore, the Islamic Republic of Iran, the United Arab Emirates, Viet Nam, Croatia and Thailand.<sup>16</sup>

<sup>&</sup>lt;sup>14</sup> Clarkson Research Studies (2009). March.

<sup>&</sup>lt;sup>15</sup> For detailed data see UNCTAD (2008). Review of Maritime Transport.

<sup>&</sup>lt;sup>16</sup> For detailed data see UNCTAD (2008). Review of Maritime Transport.

Rank	Company	Ships	TEU	Market	Combined	Order	Order	Order	Average	Average
				share	market	book	book	book	vessel	vessel
				TEU	share TEU	TEU	TEU as	ships	size fleet	size
							per cent			order
							of fleet			book
1	Maersk Line	440	1772545	12.4%	12.4%	304489	17%	56	4029	5437
2	Mediterranean Shipping Co SA	423	1463162	10.3%	22.7%	490766	34%	47	3459	10442
3	CMA CGM SA	290	883818	6.2%	28.9%	600904	68%	69	3048	8709
4	Evergreen Line	182	630229	4.4%	33.3%	0	0%	0	3463	na
5	Hapag-Lloyd AG	132	496724	3.5%	36.8%	122500	25%	14	3763	8750
6	Cosco Container Lines Ltd	154	491481	3.4%	40.2%	444752	90%	59	3191	7538
7	APL Ltd	129	474453	3.3%	43.5%	132232	28%	17	3678	7778
8	China Shipping Container Lines Co Ltd	119	420562	2.9%	46.5%	167596	40%	23	3534	7287
9	Mitsui OSK Lines Ltd	107	376501	2.6%	49.1%	109410	29%	19	3519	5758
10	Orient Overseas Container Line Ltd	93	365240	2.6%	51.7%	128912	35%	20	3927	6446
11	NYK Line	82	356512	2.5%	54.2%	84600	24%	16	4348	5288
12	Hanjin Shipping Co Ltd	78	350274	2.5%	56.6%	240495	69%	26	4491	9250
13	Kawasaki Kisen Kaisha Ltd	99	310251	2.2%	58.8%	167356	54%	35	3134	4782
14	Yang Ming Marine Transport Corp	84	304564	2.1%	61.0%	178809	59%	29	3626	6166
15	Zim Integrated Shipping Services Ltd	82	251747	1.8%	62.7%	289010	115%	40	3070	7225
16	Hyundai Merchant Marine Co Ltd	58	245323	1.7%	64.4%	34400	14%	4	4230	8600
17	Hamburg Sud.Dampfschifffahrts-Ges.KG	78	239585	1.7%	66.1%	100470	42%	18	3072	5582
18	Pacific International Lines Pte Ltd	80	159337	1.1%	67.2%	69308	43%	22	1992	3150
19	United Arab Shipping Co (SAG)	47	152864	1.1%	68.3%	145728	<b>9</b> 5%	15	3252	9715
20	Compania Sud Americana de Vapores	57	144481	1.0%	69.3%	131739	91%	21	2535	6273
21	Wan Hai Lines Ltd	72	127545	0.9%	70.2%	51324	40%	18	1771	2851
22	CSAV NORASIA	31	126692	0.9%	71.1%	0	0%	0	4087	na
23	Islamic Republic of Iran Shipping Lines	45	92191	0.6%	71.7%	47080	51%	16	2049	2943
24	MISC Berhad	27	89731	0.6%	72.4%	0	0%	0	3323	na
25	Safmarine Container Lines NV	51	87583	0.6%	73.0%	9634	11%	6	1717	1606
	Subtotal Top 25 carriers	3040	10413395	73.0%	73.0%	4051514	39%	590	3425	6867
	All others	6384	3853368	27.0%	27.0%	2172727	56%	770	604	2822
	World TOTAL	9424	14266763	100.0%	100.0%	6224241	44%	1360	1514	4577

Table 1. Twenty-five leading service operators of container ships in January 2009

Source: UNCTAD secretariat, based on Containerisation International On-line.

#### Oil tanker fleet

Owners from China control the largest oil tanker fleet (19,426m dwt), followed by Singapore, Saudi Arabia, Hong Kong (China), the Russian Federation, the Republic of Korea, India, Malaysia, the Islamic Republic of Iran, the United Arab Emirates, Taiwan Province of China, Kuwait, Turkey, Indonesia and Brazil.<sup>17</sup>

#### Ship construction

The top ten container shipyards are located in Asia, specifically in the Republic of Korea, Taiwan Province of China, China and the Philippines.<sup>18</sup> The world's four largest shipyards are located in the Republic of Korea and almost two thirds of container ships are being built in this country in addition to approximately 40 per cent of large tankers. Japan is the largest single builder of bulk carriers, followed by the Republic of Korea, China and Taiwan Province of China.

#### **Classification societies**

The ten largest classification societies are also the ten members of the International Association of Classification Societies (IACS). Together, they have a market share of approximately 85 per cent. The companies are from China, France, Germany, Italy, Japan, Norway, the Republic of Korea, the Russian Federation, the United Kingdom and the

<sup>&</sup>lt;sup>17</sup> For detailed data see UNCTAD (2008). *Review of Maritime Transport*.

<sup>&</sup>lt;sup>18</sup> Clarkson Research Studies (2009). March.

United States.<sup>19</sup> A still-growing world merchant fleet (even if idle) means more business for classification societies.

#### P&I Clubs

Most of the major Protection and Indemnity (P&I) clubs are based in the United Kingdom; others are located in Scandinavia, Asia and North America. Together, the major P&I Clubs form the International Group of P&I Clubs which has a market share of around 95 per cent of the world's fleet.<sup>20</sup> Apart from revenue from calls (premiums) P&I Clubs traditionally derived substantial income from investments, but due to share values declining worldwide this revenue stream has dried up. As most P&I Clubs are mutually operated, members (shipowners) will be more likely asked to contribute additional funds.

#### Seafaring

The largest provider of seafarers by far is the Philippines, with 28 per cent of the world's crew, followed by the Russian Federation, Ukraine, China, India, Indonesia and Poland.<sup>21</sup> The Philippines has instituted a weekly reporting system as it tries to gauge the impact of the global economic slump. Around 270,000 Filipino seafarers are deployed on international trading ships and crew layoffs could have a major impact on the economy. Seafarers accounted for one fifth of the \$16.4 billion in remittances that were sent home to the Philippines by workers overseas in 2008.<sup>22</sup>

#### Ship scrapping

Effectively, 99% of world ship scrapping (i.e. the recycling of old ships) takes place in Asia. The largest market share is that of Bangladesh, followed by India, China, Pakistan and Turkey.<sup>23</sup> Ship scrapping is one of the few shipping related business that appears to benefit from the economic crisis. More than 7.5m dwt of vessels were scrapped in 2008, compared with 4.8m in 2007 and 7.4m in 2006.<sup>24</sup> "The ship recycling industry is now experiencing its largest growth period in history, after the financial crisis saw rates for many vessel types collapse. With a three-fold increase expected in ship scrapping globally this year, and more than 1,000 ships destined for the breakers' yards, there are now fears that existing yards cannot handle the workload."<sup>25</sup> However, scrap yards with large stockpiles of steel have also been victim to the downturn in steel prices which have fallen from more \$700 a ton in 2008 to around \$200.

#### Implications for developing countries providing maritime transport-related services

Apart from the South and East Asian countries involved in ship recycling, several developing and transition economies will be severely impacted by the downturn in demand for shipping services. Shipbuilding countries such as the Republic of Korea, China and Viet Nam will be abruptly affected by a cancellation of existing orders and the drying up of new orders. Economies providing port services such as China, Hong Kong (China), Malaysia and Singapore, especially for container traffic, will see a substantial reduction in volumes. Countries that generate foreign exchange through the remittances of seafarers such as the Philippines and Ukraine will also suffer.

The strongest impacts will probably be on those economies that also have control over large fleets. The top five shipowning developing economies are China, Hong Kong (China), Taiwan Province of China, the Republic of Korea and Singapore. Taking into account containerized, dry bulk and tanker tonnage, these three economies control around 17 per cent of the world's merchant fleet. In particular the Republic of Korea with its large fleet of dry bulk carriers,

<sup>&</sup>lt;sup>19</sup> <u>http://www.iacs.org.uk</u>.

<sup>&</sup>lt;sup>20</sup> <u>http://www.igpandi.org</u>.

<sup>&</sup>lt;sup>21</sup> BIMCO/ISF manpower 2005 update. London.

<sup>&</sup>lt;sup>22</sup> Lloyd's List (2009). 24 February.

<sup>&</sup>lt;sup>23</sup> Mikelis N (2007). A Statistical Overview of Ship Recycling. IMO.

<sup>&</sup>lt;sup>24</sup> Lloyd's List (2008). 11 November.

<sup>&</sup>lt;sup>25</sup> Lloyd's List (2009). 26 February.

container ships and oil tankers as well as substantial container traffic volumes and shipbuilding yards is set to be among the countries most severely affected by the economic crisis.

#### 3. Trade Costs

While those who provide shipping and related services suffer from low freight rates, shippers (i.e. importers and exporters) benefit from the reduction of transaction costs. Until mid-2008, high freight rates, a shortage of shipping supply and congestions in ports were increasingly considered as obstacles and bottlenecks to further growth of trade. Today, transport costs for shippers have been significantly reduced. As can be seen in Figure 5, in October 2008 it cost an exporter or importer around \$3 to move one ton of dry bulk cargo 1,000 miles in a small "Handymax" vessel – down from \$16 eight months prior. However, the volatility of transport costs increases the risks to traders and suppliers of transport services, who can do rather little against the fluctuations in freight costs.

Figure 5. Transport costs for dry bulk cargo, \$ per ton per 1,000 miles



Source: Clarkson Research Services (2009). Dry bulk trade outlook. March. Note: H.max stands for Handymax; P'max for Panamax and Cape for Capesize.

Figure 5 also illustrates the importance of economies of scale in international transport – unit costs are much lower on larger vessels (such as Capesize) than on smaller vessels (such as Handymax). Similar differences exist for containerized trade and tankers, and economies of scale also apply to ports and other transport services and infrastructure. A country that trades more will – *ceteris paribus* – benefit from lower transport costs, and lower transport costs help enhance the competitiveness of the country's foreign trade.

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## Liner Shipping Connectivity in Africa and in South America

Countries' access to world markets depends largely on their transport connectivity, especially as regards regular shipping services for the import and export of manufactured goods. UNCTAD's Liner Shipping Connectivity Index (LSCI) aims at capturing a country's level of integration into global liner shipping networks.<sup>26</sup> Globally, China leads the LSCI ranking (with an LSCI value of 137 in 2008), followed by other Asian and European countries.

Africa and South America present some similarities as regards their connection to global shipping networks. In both regions, the main shipping routes are "North–South" routes: they connect the regions' countries with their trading partners in North America, Europe and Asia, passing along the respective coasts of the continents. Furthermore, both regions are linked to "East–West" routes through major transhipment centres that are located at the respective geographical corners; in Africa, these are mostly ports in Morocco, Egypt and South Africa, while for South American countries the major transhipment centres are located in Panama (Central America) and in MERCOSUR, where the ports of Buenos Aires, Montevideo, Santos and Rio de Janeiro cater for most of the trade generated on the east coast.

Normally, a transhipment operation in a third country's port implies higher costs and longer delivery times as compared to direct port-to-port services between two trading partners – if such direct services exist. As port operations in transhipment centres are improving, they ultimately benefit not only their own country's importers and exporters, but also contribute to the promotion of intra-regional South–South trade, especially on those routes where trade volumes are currently not large enough to commercially justify a direct shipping service.

#### Africa

For most African countries, the LSCI records values far below the world average. The bestconnected countries in Africa are Egypt, Morocco and South Africa (see Table 2 for African countries' LSCI for 2004–2008).

For Egypt, as of January 2009, there are 47 international shipping companies that provide regular services to Egyptian container ports; they employ 405 ships, including vessels with a carrying capacity of up to 9,580 twenty-foot containers (TEU). Egypt benefits from its geographical position and the Suez Canal, which forms part of the world's busiest shipping route, connecting Europe and Asia. Thus, several terminals have been developed by private sector investors who provide services to shipping lines that redistribute cargo to other Mediterranean and African destinations. As a consequence, Egypt's traders benefit from direct shipping links to 59 trading partners – more than any other African country, and more than twice the region's average of 24 direct connections. Nine of Egypt's 59 direct connections are to other countries of the continent, notably in Eastern and Northern Africa.

As regards Morocco's ports, they attract only 18 companies, but these employ larger ships – up to 11,000 TEU carrying capacity. Morocco, too, benefits from its geographical position, and has seen a surge in its shipping connectivity in 2008, after a new specialized transhipment facility was inaugurated in Tangier. Tangier connects major East–West and North–South shipping routes, including those connecting Europe with South America and with Western Africa. This improved connectivity should ultimately also benefit Moroccan importers and exporters who have access to more destinations with direct shipping services, and who may benefit from lower shipping costs resulting from the economies of scale achieved with larger vessels.

<sup>&</sup>lt;sup>26</sup> The five components which constitute the index are: (a) number of ships; (b) the container-carrying capacity of those ships; (c) the maximum vessel size; (d) the number of services; and (e) the number of companies. The data is derived from Containerisation International On-line. For further details see also UNCTAD (2008). *Review of Maritime Transport*.

South Africa has six ports that attract 30 companies providing regular services. South Africa, too, benefits from its geographical position, as it caters not only to regional trade, but also to some shipping services that connect South America with Asia. The ships on these routes tend to be smaller than on the main East–West routes – the largest ship calling at a South African port in January 2009 had a 6,742 TEU carrying capacity. South Africa has the largest number of intra-regional maritime connections in Africa; international carriers provide direct services to 21 other African countries.

Other countries in Southern Africa, too, have seen improvements in their connectivity, notably Mauritius, providing transhipment services, and Namibia, where investments in the port of Walvis Bay aim at attracting cargo from a wider hinterland, including Botswana and Zambia. The Comoros and Seychelles, on the other hand, have seen their connectivity worsen in recent years.

Country	LSCI - Wo	rld ranking	LSC	LSCI - Connectivy index values		lues	Direct country connections, 2008			
	2004	2008	2004	2005	2006	2007	2008	Number of	Number	Per cent
								connections	with Africa	with Africa
Algeria	74	97	10.0	9.7	8.7	7.9	7.8	28	4	14%
Angola	76	81	9.7	10.5	9.5	9.9	10.2	30	13	43%
Benin	73	72	10.1	10.2	11.0	11.2	12.0	25	13	52%
Cameroon	69	76	10.5	10.6	11.4	11.7	11.0	30	15	50%
Cape Verde	153	142	1.9	2.3	2.8	2.5	3.6	9	4	44%
Comoros	105	116	6.1	5.8	5.4	5.5	5.2	11	7	64%
Dem. Repub. of the Congo	142	145	3.0	3.0	2.7	2.7	3.4	8	8	100%
Congo	87	74	8.3	9.1	9.1	9.6	11.8	28	12	43%
Cote d'Ivoire	50	58	14.4	14.5	13.0	15.0	16.9	40	18	45%
Djibouti	98	79	6.8	7.6	7.4	10.5	10.4	33	8	24%
Egypt	16	16	42.9	49.2	50.0	45.4	52.5	59	9	15%
Equatorial Guinea	127	134	4.0	3.9	3.8	3.4	3.9	20	11	55%
Eritrea	138	146	3.4	1.6	2.2	0.0	3.3	3	1	33%
Gabon	81	87	8.8	8.8	8.7	8.6	8.9	29	14	48%
Gambia	119	119	4.9	6.1	4.8	4.7	5.0	18	8	44%
Ghana	58	53	12.5	12.6	13.8	15.0	18.1	42	18	43%
Guinea	104	103	6.1	6.9	8.7	8.5	6.4	26	14	54%
Guinea-Bissau	152	115	2.1	5.2	5.0	5.1	5.3	6	3	50%
Kenya	84	77	8.6	9.0	9.3	10.9	10.9	28	9	32%
Liberia	113	127	5.3	6.0	4.5	4.5	4.3	9	6	67%
Libyan Arab Jamahiriya	114	113	5.3	5.2	4.7	6.6	5.4	24	3	13%
Madagascar	96	95	6.9	6.8	8.3	8.0	7.8	19	12	63%
Mauritania	112	93	5.4	6.0	6.2	7.9	7.9	18	9	50%
Mauritius	54	55	13.1	12.3	11.5	17.2	17.4	34	14	41%
Morocco	78	33	9.4	8.7	8.5	9.0	29.8	40	14	35%
Mozambique	99	89	6.6	6.7	6.7	7.1	8.8	27	13	48%
Namibia	102	75	6.3	6.6	8.5	8.4	11.1	19	11	58%
Nigeria	56	51	12.8	12.8	13.0	13.7	18.3	40	17	43%
Sao Tome and Principe	159	154	0.9	1.3	1.6	1.6	2.5	11	5	45%
Senegal	72	54	10.1	10.1	11.2	17.1	17.6	29	17	59%
Seychelles	120	123	4.9	4.9	5.3	5.3	4.5	4	3	75%
Sierra Leone	107	120	5.8	6.5	5.1	5.1	4.7	14	6	43%
Somalia	140	147	3.1	1.3	2.4	3.1	3.2	3	1	33%
South Africa	32	35	23.1	25.8	26.2	27.5	28.5	52	21	40%
Sudan	95	112	6.9	6.2	5.7	5.7	5.4	12	4	33%
United Republic of Tanzan	ia 90	78	8.1	8.6	8.7	10.6	10.5	23	7	30%
Togo	71	71	10.2	10.6	11.1	10.6	12.6	31	16	52%
Tunisia	83	99	8.8	7.6	7.0	7.2	7.0	16	3	19%

Table 2. Indicators of African countries' connectivity in liner shipping

Source: UNCTAD secretariat, on the basis of data provided by Containerisation International On-line.

In Western Africa, most countries have seen their shipping connectivity improve over the last years, including Côte d'Ivoire after a downturn in 2006. In particular Senegal has significantly improved its access to shipping services since 2005, when additional companies started to

introduce new services, doubling the largest vessel size between 2006 and 2007, when the Dubai-based port operator DP World won the concession to operate the existing container terminal and build a new facility in Dakar. In Eastern Africa, Djibouti, Kenya and the United Republic of Tanzania have all seen important connectivity improvements between 2006 and 2007, while Sudan has experienced a slow but steady decline since 2004.

As regards the five components of the LSCI, it is interesting to note that, globally and in Africa, the total number of ships per country, their TEU capacity deployed and the average maximum ship size have all increased since 2004. In contrast, liner services and companies have decreased. By way of example, in Egypt, the number of international companies providing services to the country's ports has dropped from 61 in 2004 to 47, and in South Africa there are now 30 companies, down from 38 in 2004. This trend raises concerns about the impact of the continuing process of concentration in liner shipping, especially for countries with a low connectivity, where a further decline in the number of service providers may give rise to oligopolistic or monopolistic market structures. Eritrea, Seychelles and Somalia, for example, only record services from one single international shipping line; Liberia receives two providers, and Cape Verde and Sierra Leone are served by three liner companies.

Africa's intra-regional liner shipping connections are largely determined by the shipping lines' routes that connect African countries with Europe and Asia, and – to a lesser extent – the American continent. West African ports are very well connected to Europe, but not to Eastern African or Northern African countries; for example, there are no direct shipping services between Côte d'Ivoire and Kenya or Algeria, while there are 15 shipping companies that provide regular shipping services between Côte d'Ivoire and Ghana. By the same token, 12 companies provide direct services between Mombasa in Kenya and Dar es Salaam in the United Republic of Tanzania, while neither of these two ports counts on any direct service with the western or northern seaboard of Africa. Thus, maritime trade between African countries that lie on the same North–South route benefits from relatively frequent services, while seaborne trade between opposite coasts of the Africa continent depends on transhipment services, mostly via Europe or South Africa.

#### **South America**

Table 3 presents February 2009 data for the LSCI components for South American countries as well as Panama. Of the nine countries covered in the table, Panama receives the largest vessels and total container-carrying capacity in TEU. It is interesting to note that Panama also recently started to receive post-Panamax vessels, i.e. ships that are too wide to pass through the Panama Canal with its current dimensions. Maersk's AC1/2 service employs ships such as *Maersk Kyrenia* with 6,978 TEU on the route Asia–Mexico–Panama (Balboa)–Asia.

On the east coast of South America, Brazil receives services from the largest number of shipping companies (31), employing a total of 274 container ships of 140 services from and to the country's ports. Argentina receives services from 24 carriers and Uruguay from 16. On the west coast, there are 24 carriers providing services to Peru, followed by Chile (21) and Ecuador (17). The vessel size on the east coast is on average 40 per cent larger than on the west coast.

Although for 2009 the LSCI will only be generated in July, we can already observe some trends based on the February 2009 data of the LSCI components (see Table 5). The majority of the region's countries are affected by the economic crisis, recording a drop in the number of ships employed on services from and to its ports. Chile, Colombia, Ecuador and the Bolivarian Republic of Venezuela today receive between 5 and 12 per cent fewer vessels than in July 2008. The largest decline has taken place in Uruguay, as the port of Montevideo has lost several services to Buenos Aires. Argentina and Peru have seen improvements in their connectivity.

Country	Number of ships	TEU	Companies	Services	Maximum ship size	Average ship size
Argentina	174	515'524	24	93	5'926	2'963
Brazil	274	742'899	31	140	5'926	2'711
Chile	121	278'543	21	51	4'294	2'302
Colombia	193	359'753	27	86	4'294	1'864
Ecuador	71	125'685	17	36	4'294	1'770
Panama	242	798'140	24	98	6'978	3'298
Peru	125	262'146	24	55	4'255	2'097
Uruguay	79	229'777	16	49	5'905	2'909
Venezuela (Bolivarian Republic of)	122	210'493	27	62	4'050	1'725

 

 Table 3. Liner shipping services from and to South American countries and Panama, February 2009

Source: Containerisation International On-line. Note: "Services" includes slot charters.

Between 2004 and 2008, all of the countries covered in Table 4 have seen their LSCI improve except Panama, although it continues to be one of the best connected countries of the region. Since 2005 Brazil has registered the largest LSCI, as Panama has seen its connectivity constrained by the limitations of the current dimensions of the Panama Canal.

Table 4. Development of the LSCI of South American countries and Panama,2004–2008

Country	2004	2005	2006	2007	2008
Panama	32.1	29.1	27.6	30.5	30.4
Brazil	25.8	31.5	31.6	31.6	30.9
Argentina	20.1	25	25.6	25.6	25.7
Colombia	18.6	19.2	20.5	21.1	21.6
Venezuela					
(Bolivarian					
Republic of)	18.2	19.9	18.6	20.3	20.5
Uruguay	16.4	16.6	16.8	21.3	22.9
Chile	15.5	15.5	16.1	17.5	17.4
Peru	14.8	15	16.3	16.9	17.4
Ecuador	11.8	12.9	14.2	14.3	13.2

Source: UNCTAD Transport Newsletter, various issues.

As shown in table 6, the ports of Brazil are directly connected to 48 other countries, including 15 in Africa. The Bolivarian Republic of Venezuela has 46 direct connections, including 13 to the Caribbean. Colombia and Panama are the only countries of the region with direct services to the Pacific region (Oceania), while at the same also being the only countries without direct connections to Africa.

As regards direct connections with Asia, it is worth noting that the east coast of South America is directly connected to a larger number of countries than the west coast. This is due to the larger trade volumes, and also the geographical distance: the east coast is closer to the majority of Asian countries than the west coast; for example, the distance between Santos, Brazil and Singapore is 8,996 nautical miles compared to 10,746 nautical miles between Guayaquil, Ecaudor and Singapore.

The west coast has also the option to trade with Asia via transhipment centres in Panama or North America, while for the east coast such alternatives are usually not viable and direct services are often the only option. This, too, partly explains the broader geographical spread of direct links from the east coast as compared to the west coast.

Country	Ships	TEU	Companies	Services	Maximum ship size	Average ship size
Argentina	7%	12%	0%	-1%	7%	4%
Brazil	1%	9%	3%	-1%	7%	7%
Chile	-5%	-5%	0%	-2%	23%	0%
Colombia	-9%	-6%	-10%	-2%	23%	3%
Ecuador	-7%	-8%	13%	13%	39%	-1%
Panama	-2%	-2%	0%	1%	15%	-1%
Peru	5%	5%	4%	2%	22%	0%
Uruguay	-29%	-33%	-20%	-26%	6%	-5%
Venezuela (Bolivarian Bopublic of)	400/	70/	70/	4.00/	22/	00/
Republic of)	-12%	-7%	-7%	-16%	0%	6%

Table 5. Development of the LSCI components of South American countries and Panama, July 2008–February 2009

Source: UNCTAD secretariat, on the basis of data provided by Containerisation International On-line.

Tumber of countries, sury 2000										
	Country	Africa	Asia	Europe	North America	Oceania	Caribbean	Central America	South America	Total
	Argentina	9	7	8	1		2	1	6	34
	Brazil	15	11	9	1		4	2	6	48
	Chile	2	5	8	2		4	5	8	34
	Colombia		5	9	2	2	9	6	6	39
	Ecuador	2	5	9	2		4	3	6	31
	Panama		6	7	2	4	8	4	7	38
	Peru	3	6	8	2		4	5	8	36
	Uruguay	6	6	7	1		2		6	28
F	Venezuela (Bolivarian			4.0			10			40
F	(to Silduqey	6	3	10	2		13	4	8	46

Table 6. Direct connections with with countries in different regions. Number of countries July 2008

Source: UNCTAD, based on data from Containerisation International

#### Some global trends

Between 2008 and early 2009, the container-carrying capacity of the largest container vessels has further increased. With 13,800 TEU the new MSC Daniela is larger than the 12,508 TEU vessels of *Maersk*, the largest ships in mid-2008.

As regards the other components of the LSCI, however, the global economic crisis has already had a measurable impact: the average number of ships, the TEU capacity deployed and the number of services per country have all gone down for the first time since 2004, when UNCTAD started monitoring these figures. Already since 2005 the number of carriers dropped as the mergers and acquisitions among shipping companies impacted the level of competition on numerous trade routes.

The countries that are best connected to the global shipping networks tend to be those that (a) are large traders themselves; (b) benefit from their geographical position; and (c) enhance their competitiveness through infrastructure investments, port reforms and trade facilitation.

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## Saint Lucia's National Trade Facilitation Task Force visits Port Castries

Members of the Trade Facilitation Task Force of Saint Lucia met for their first team building activity on 19 March 2009. The activity received support from the secretariat of the Organization of Eastern Caribbean States (OECS) and UNCTAD and was organized by the Ministry of Commerce, Industry and Consumer Affairs, the coordinating agency for the trade facilitation task force. The OECS secretariat has undertaken to promote the creation of national trade facilitation task forces as coordinating mechanisms for all matters related to trade facilitation. This includes capacity-building for the task force members, support for participation in the WTO negotiations and technical assistance in priority areas identified by task force members and trade officials.



Saint Lucia's Trade Facilitation Task Force was formally established on 6 November 2008 by cabinet decision and comprises private sector, statutory bodies and public sector representatives. The task force has mainly been concerned with the WTO negotiations and raising awareness among public and private sector agencies. Its first major activity was the

conduct of a needs assessment on trade facilitation with the assistance of the OECS secretariat, the WTO secretariat, UNCTAD and HM Revenue and Customs.

The half-day activity included a presentation on the functions and the current and proposed reforms of the customs department and a tour of the facilities at Port Castries. Participants were able to gain a better understanding of the operations of two key agencies involved in the movement of goods in and out of Saint Lucia and their successes and challenges on the road to increasing their efficiency.



Source: Excerpts of a press release of the Organization of Eastern Caribbean States (OECS), March 2009. For further information on the OECS activities in trade facilitation, contact Alicia Stephen, secretariat of the OECS, Castries, Saint Lucia, <u>astephen@oecs.org</u>, <u>http://oecs.org</u>. For further information on UNCTAD's support to its member states for the negotiations on trade facilitation at the WTO contact Birgit Viohl, Jan Hoffmann or José María Rubiato, Trade Logistics Branch, DTL, UNCTAD, <u>birgit.viohl@unctad.org</u>.

## WTO Trade Facilitation Self-Assessment in Afghanistan

#### Kabul, 7 to 13 March 2009

Forty-five representatives and experts from various public and private sector institutions and organizations participated to the WTO Self-Assessment Workshop hosted by the Afghan Ministry of Commerce and Industry and supported by UNCTAD and the World Bank. Mr. Azim Hussaini, Senior Advisor of Ministry of Commerce and Industry, introduced the agenda and described the objectives and goals of the workshop.

UNCTAD staff Ms. Aurélie Legrand and Mr. Jan Hoffmann explained the methodology to be followed and highlighted the need for national stakeholders and the Afghanistan Trade Facilitation Committee (AFPRO) to assume full ownership of the process.



Mr. Abdul Safir Sahar, Legal Advisor to the Customs Department, explained the concept of trade facilitation, the needs assessment and its benefits. He highlighted that trade facilitation and the reduction of customs tariffs are two different concepts. Afghanistan's Customs Department is currently carrying out standardization and automation reform processes which include a centralized revenue collection system, the adoption of standardized customs procedures in major areas, a new customs law based on the World Customs Organization Kyoto Convention, the implementation of the Harmonisation System (HS code), membership in the WCO and adhesion to other regional agreements, the training of customs officers, the establishment of closer relations with the business community, new customs infrastructures and the implementation of the ASYCUDA system developed by UNCTAD, which introduced the Single Administrative Document (SAD) as well as automated procedures for customs, including transit. General Aman ullah Sadat, Deputy Commander of the Border Police, explained the role of the Border Police, including its responsibility for security, safety and antinarcotics.

Mr. Khan Jan Alokozai, Deputy Chairman of the Afghanistan Chamber of Commerce and Industry, thanked the international community for providing the opportunity for Afghanistan's public and private sectors to assess the trade facilitation situation in their country. He recalled that the objective of international assistance should be to enable Afghan nationals to work for their country's development. He provided numerous practical examples where a lack of transparency and lack of effective facilitation resulted in serious obstacles to Afghanistan's trade competitiveness and development.

#### Parallel working groups

Following the presentation of the WTO Self-Assessment methodology, participants were clustered into three parallel working groups to discuss and analyse three different sets of specific trade facilitation measures. The working groups benefited from the assistance of lead facilitators Ms. Aurélie Legrand and Mr. Reza Mohammadi from UNCTAD and Mr. Gareth Davies from USAID.

Following a detailed analysis, discussions and the sharing of information over four working days, the participants concluded that 17 per cent of the Afghanistan administration's measures might be fully compliant with the proposed basic standard, 35 per cent partially complied, and that for 48 per cent no compliance capacity could be identified (see table 7).

As Measures assessed	signed Groups	GROUP 1 Legal	GROUP 2 Customs	GROUP 3 Transit	pe	Total ercentage
Compliance	Yes		3	3	б	17%
(Measures)	No	5	6	6	17	48%
	Partially	6	3	3	12	35%
National Priority	High	8	5	3	16	51%
(of 35 Measures)	Medium	3	4	4	11	31%
	Low		3	3	6	18%
Priority for	High	7	7	7	21	60%
Technical Assistance	Medium	4	2	2	8	23%
Assistance	Low		3	3	6	17%

Table	7. Summarv	of findings	of Afghanistan <sup>7</sup>	's national	self-assessment
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Participants then discussed and identified possible reasons for non-compliance as well as key barriers for each non-compliant/partially compliant measure. Among the obstacles and bottlenecks mentioned most frequently were the lack of infrastructure, lack of coordination

among government entities, weak technical and institutional capacity, lack of transparency in the procedures, insufficient enforcement of existing rules, lack of information, weak implementation of bilateral and regional agreements and lack of security. Among the 35 measures assessed during the self-assessment workshop, 16 were considered of particularly high priority for the country.



#### Conclusions

For a landlocked and least developed country such as Afghanistan, the implementation of some of the trade facilitation measures currently examined at WTO poses particular challenges. Even when customs reform and trade facilitation are considered crucial for the country's future development, their effective implementation still depends on international technical assistance. In particular, public and private sector stakeholders need further capacity development, better coordination among key ministries, agencies and industry organizations, and strengthened public–private partnerships.



The conclusions of the parallel working groups were presented on the last day of the workshop. Mr. Mustaeen Bella Balagh, Third Secretary of the Permanent Mission of Afghanistan in Geneva, also provided background information and an update of the negotiations currently taking place at the World Trade Organization. The self-assessment workshop contributed to a better understanding between national experts and Afghanistan's representation in Geneva. The workshop findings also provide interesting information for developing future trade facilitation projects.

Deputy Minister Mr. Gul Maqsood Sabet, Ministry of Finance, thanked everyone for their valuable contributions and added that such initiatives contribute to enhanced economic reforms in Afghanistan. Participants further stressed the importance of the self-assessment workshop and emphasized that it would be beneficial if such workshops could be conducted once or twice a year. It was highlighted that the successful work of the stakeholder group should be continued not only in the context of the WTO negotiations but also for other reform processes. Future work in this area could be continued also in the framework of Afghanistan's trade facilitation committee AFPRO.

Source: Summary based on the workshop report provided by the Ministry of Commerce and Industry of Afghanistan, March 2009.

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## **World Ports Climate Initiative launched by IAPH**

The International Association of Ports and Harbors (IAPH) launched a global platform for port climate action, called the World Ports Climate Initiative (WPCI). The inaugural meeting held in Los Angeles, United States in November 2008 was attended by some 50 experts, representing port authorities in Europe, the Americas, Africa and Asia, regional port associations such as the American Association of Port Authorities (AAPA) and the European Sea Ports Organization (ESPO), consulting firms and research institutes.



Delegates of the WPCI meeting in Los Angeles, November 2008. Photo credit: MBI.

This is a follow-up action of IAPH, which adopted a resolution on port climate action in Dunkirk, France in April 2008 and also participated in the Rotterdam, Netherlands conference that adopted the World Ports Climate Declaration in July 2008. The WPCI aims to raise awareness in the port and maritime community of the need for action, to initiate studies, strategies and actions to reduce GHG emissions and improve port air quality, and to facilitate sharing of experiences and the exchange of best practices and climate change information. The WPCI is open to IAPH member ports and non-member ports alike and virtually everyone who is interested in port climate action. It is chaired by the Chair of the IAPH Port Environment Committee, Dr. Geraldine Knatz, CEO of the Port of Los Angeles with the Managing Director of IAPH Europe Office, Mr. Fer van de Laar, as Director of the WPCI bureau for overall coordination. More information on the WPCI is available at the IAPH website. The website will be powered up shortly in terms of both content and functions.<sup>27</sup>

Though at an initial stage, projects already in progress under the WPCI framework include (a) a carbon footprint inventory; (b) low-emission yard equipment; (c) an environment ship index; and (d) onshore power supply. Each of these projects is being implemented by a voluntary working group of WPCI members. Work is also now in progress to develop version 2 of the IAPH Tool Box for Port Clean Air Programs, which was launched in March 2008, by expanding its scope to cover all components to reduce GHG emissions.<sup>28</sup> In the midst of the global economic recession, ports are now facing difficulties. Yet port climate action remains high on the priority agenda of the world port community. The world port community should hasten to place integrated programmes in motion for GHG reduction and clean air. Dr. Geraldine Knatz, Chair of WPCI, urges all ports around the globe to join the WPCI activity, asking especially for their active participation in the ongoing project groups. The next venues where WPCI matters will be discussed are the IAPH Bi-annual World Port Conference (26 May 2009, Genoa, Italy) and the IAPH Europe regional meeting (18 November 2009, Hamburg, Germany).

Prepared by the IAPH secretariat. For further information please contact Mr. Fer van de Laar by email at <u>info@iaph.nl</u> or call him at + 31-180-32-33-99. <u>www.iaphworldports.org</u>

<sup>&</sup>lt;sup>27</sup> www.iaphworldports.org/wpci 2008/index.html

<sup>&</sup>lt;sup>28</sup> www.iaphworldports.org/toolbox%201/toolbox%201.htm

#### **Maritime Casualty Statistics**

The International Union of Marine Insurers (IUMI) has published its 2008 casualty statistics.

According to the IUMI report, "The number of total losses recorded for 2008 stands, at present, at 74, a significant reduction on the 2007 figure (106)." In terms of tonnage, the loss figure for 2008 represents 0.05 per cent of the world fleet, an improvement over the 2006 (0.10 per cent) and 2007 (0.08 per cent) figures. Weather continues to be the major cause of "total losses", at 42 per cent in 2008.



Machinery damage remains the primary cause for "major partial losses" accounting for more than one third of the "major partial losses" between 2004 and 2008. Collisions/contact and grounding represent around 23 per cent each. Weather has been a relatively small cause of serious partial losses, despite being the major cause of "total losses".

http://www.iumi.com/index.cfm?id=7165

### AAPA seminar on Shifting International Trade Routes

The Association of American Port Authorities (AAPA) and the United States Maritime Administration co-sponsored this workshop to look at shifting international trade routes and the implications of the planned expansion of the Panama Canal. Speakers addressed shifts in global trade patterns, provided an update on the planned expansion of the Panama Canal and discussed trade lane competition, impacts on waterside and terminal development, landside and inland infrastructure development for meeting future infrastructure needs and financing future infrastructure needs.

www.aapa-ports.org/Programs/PastDetail.cfm?itemnumber=12567

## Report on the Panama Canal expansion

A new report by Dynamar covers the following items:

(a) The present canal: history, tolls, traffic, user segments, transit times, tariffs;

(b) The future canal: the new locks, fairways and access channels; previous and present works and project costs; market;

(c) Ports in Panama: profiles of existing container ports and terminals including throughputs per main trade served; port projects in the Panama Canal Zone;

(d) Competing with Panama: the United States intermodal system; the Panama Canal Railway; the Suez Canal and other routes and arteries; distances; current transhipment hubs in the Americas;

(e) Ships: current Panamax and PostPanamax, including the existing fleet and order book; NewPanamax and NewPostPanamax, including by operator; economic rationale of Ultra Large Container Ships; categorization of container ship sizes;

(f) Panama Canal-related (current) costs;

(g) Supply: Panama container carriers, brief trade-related profiles; all current services (operators, rotations, frequencies, ships) by tradelane; services grids and ports of call analyses; capacity analyses; post-publication services and trades development; current Panama Canal-based shipping networks; overview and analyses of the system of mainline and feeder networks of six leading carriers;

(h) Demand: TEU throughput of ports in Panama Canal trades; units by Canal Zone ports per main trade area worldwide; full container statistics per main trade area; forecasts until 2020; assessment of required future capacity.

www.dynamar.com

#### **International Transport Forum**

The International Transport Forum (ITF) is organizing its 2009 forum on "Transport for a Global Economy – Challenges and Opportunities in the Downturn" from 26 to 29 May in Leipzig, Germany.

www.internationaltransportforum.org/2009/pdf/Prelprog.pdf.

## Market Power and Vertical and Horizontal Integration in the Maritime Shipping and Port Industry

This discussion paper was presented by Eddy van de Voorde and Thierry Vandelslander to the Joint Transport Research Centre of the ITF and the OECD, in January 2009. According to the report, the "maritime sector is undergoing constant change, as is particularly apparent in the shift in competition that has unfolded in recent years. Whereas in the past shipowners and ports used to compete with one another, the competitive struggle is now increasingly unfolding at the level of logistics chains. Today, market players are selected not so much for their stand-alone competitiveness, but on the basis of whether or not they belong to a successful maritime logistics chain. This explains why certain market players are continuously trying to gain greater control over these chains  $(\ldots)$ ."

www.internationaltransportforum.org/jtrc/DiscussionPapers/DP200 902.pdf

## **Trade Facilitation and Swedish Experiences**

The Swedish National Board of Trade has produced a 72-page publication on trade facilitation which is being made available free of charge on-line. Apart from detailed information about the Swedish policies and trade facilitation measures, the publication also includes a detailed introduction to trade facilitation and а overview of "international comprehensive standards and instruments". According to the presented "analysis of the potential gains from a deal in the Doha round (WTO), trade facilitation would leave a bigger economic contribution than agriculture, industrial goods or services. The benefits from trade facilitation are especially important for developing countries."

Pages 26 and 27 of the document present an informative overview of the historical time line of trade facilitation, including milestones such as the creation of the WCO, the United Nations Layout key, the United Nations Centre for Trade Facilitation and Electronic **Business** (UN/CEFACT) recommendation on trade facilitation committees, ASYCUDA and the inclusion of trade facilitation in the WTO Doha Round.

## Empirical Evidence for Integration and Disintegration of Maritime Shipping, Port and Logistics Activities

This discussion paper was presented by Antoine Fremont to the Joint Transport Research Centre of the ITF and the OECD in January 2009. According to the report "containerization has become the backbone of globalization. That it has done so can be attributed to the beneficial interaction of three broad types of factor[s]: technical, economic and organizational. In the beginning, containerization was nothing more than a simple technical innovation. However, as an intermodal tool, the container paved the way for new and long-term organizational models in the transport sector. These organizational factors challenged transport actors, who had to redefine the demarcation lines between their respective businesses in order to bring reliable door-to-door transport chains with a global reach into operation. (...)"

www.internationaltransportforum.org/jtrc/DiscussionPapers/DP200 901.pdf

### World Conference on Transport Research Society

On 7 and 8 May 2009, the Special Interest Group 2 (Ports and Maritime) of the World Conference on Transport Research Society (WCTRS), co-chaired by Prof. Eddy Van de Voorde (University of Antwerp) and Prof. Enrico Musso (University of Genova), will host a twoday international conference on "Critical issues in the Port and Maritime Sector". It will be held at the University of Antwerp, Belgium.

http://www.wctrs-maritime-ports.org/

## **UNESCAP/UNECE Symposium on Building Regional Capacity for Paperless Trade**

Presentations from the event, which took place in Bangkok 24–25 March 2009, are available online. Sessions dealt with the following topics:

- (a) Joining expertise to build capacity;
- (b) Business models;
- (c) Enabling legal framework;
- (d) Data harmonization;
- (e) Single Window.

www.unescap.org/tid/projects/da6\_symposium\_presentations.asp

www.kommers.se

## **Transport Intelligence Recession** Watch

According to Transport Intelligence's first Global Logistics Business Confidence Index (February 2009), Europe and North America are currently the least confident markets, with the emerging markets of China and India being more upbeat. This is evidenced in a number of developments, with both manufacturers and express companies continuing to invest in these markets.



Confidence Level by Region of Operation

www.transportintelligence.com

### UNCTAD Trade and Development Commission

#### 11–15 May 2009, Geneva

The Commission will, inter alia, consider the reports of the multi-year expert meetings on Transport and Trade Facilitation (TD/B/C.I/MEM.1/3) and on International Cooperation: South–South Cooperation and Regional Integration (TD/B/C.II/MEM.2/3).

The Accra Accord adopted at UNCTAD XII established the Trade and Development Commission. The commission will have the mandate of the previous Commission on Trade in Goods and Services, and Commodities, and will also assume responsibility for transport and trade logistics issues from the previous Commission on Enterprise, Business Facilitation and Development. Paragraph 201 further provides that the role of the commission is: to conduct policy dialogue on one or two selected issues; to consider reports of expert meetings; to manage and recommend for approval the work programme of expert meetings within their purview; and to promote and strengthen synergies among the three pillars.

http://www.unctad.org/en/docs/cid1\_en.pdf

## Shipping companies' pollution costs

Eurosif (the European Sustainable Investment Forum) and Trucost published a report examining six critical environmental, social and governance challenges facing the shipping industry. The report highlights the risks and opportunities these issues present to long-term returns.

According to the report, companies that delay or cancel investments in cleaner, more efficient vessels during the economic downturn could be more exposed to strengthening environmental regulations. Under cap-and-trade schemes that price the carbon dioxide emissions to address climate change, carbon-efficient shipping companies stand to gain from shifts in freight from carbon-intensive air transport. awav However, lack of environmental disclosure by shipping companies in Europe makes it difficult for investors to assess which companies present the greatest carbon risks or opportunities. Other issues examined are marine pollution, ship recycling, waste management and working conditions.

http://www.trucost.com/pressreleases/Eurosif.html

