

# UNCTAD Transport Newsletter

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## NOTE

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## Editorial

Dear readers:

Welcome to the third 2006 issue of our Transport Newsletter. It is published slightly later than usual so as to include information on the latest **Review of Maritime Transport** and on our Expert Meeting on **ICT Solutions to Facilitate Trade at Border Crossings and Ports**.

**Trade facilitation** is the topic of two articles, notably our UNCTAD Technical Notes and the featured topic of the Global Facilitation Partnership. Two articles look at **liner shipping** issues, notably freight rates and concentration in liner shipping. Further, we introduce several new and upcoming publications that deal with trade and transport **security**, and provide information on conventions affecting **multimodal transport**.

For feedback, comments, and suggestions for our next UNCTAD Transport Newsletter (Fourth Quarter 2006), please contact Jan Hoffmann at [jan.hoffmann@unctad.org](mailto:jan.hoffmann@unctad.org) before December 2006.

The Trade Logistics Branch Team

Geneva, September 2006

## Subscriptions

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

For past issues of the Transport Newsletter, please visit [www.unctad.org/transportnews](http://www.unctad.org/transportnews).

## **Review of Maritime Transport 2006**

The Review of Maritime Transport is an annual publication prepared by the UNCTAD secretariat. It is a comprehensive study providing up-to-date statistics and information on maritime and ancillary services. It focuses on developments concerning maritime activities in developing countries as compared with other groups of countries.

The Review provides a complete view of the development of world seaborne trade, world fleet size by principal types of vessel, ownership of the world fleet by countries of registration, fleet development, tonnage oversupply, the average age of the world fleet, productivity, and freight markets and rates. The Review also contains chapters on port development, including container port traffic and container terminal throughput, as well as developments in trade and transport efficiency.

Since the Review has been published annually since 1968, a significant historical time series has been built up, and the Review uses this to compare statistics with those of the past few years and with the figures from 1970, 1980, 1990 and 2000. The particular focus of this edition is on developments in trade and maritime transport in sub-Saharan Africa.

The 2006 edition of the Review of Maritime Transport reports that the world merchant fleet expanded by 7.2 per cent to reach 960.0 million deadweight tons (dwt) at the beginning of 2006. The average age of the world fleet fell marginally to 12.2 years, with almost 27.1 per cent of the fleet 20 years of age and over. World container port traffic continued to expand at the rate of 12.6 per cent during 2004, reaching 336.1 million TEUs. Ports of developing countries and territories handled 137.0 million TEUs, or 40.7 per cent of the total. World total freight payments as a proportion of total import value stood at 3.6 per cent in 2004. The freight factor was 3.1 per cent for developed market-economy countries compared with 2.9 per cent in 2003, while for developing countries it decreased to 5.9 per cent from 6.1 per cent in 2003.

*The complete report can be downloaded via [www.unctad.org/en/docs/rmt2006\\_en.pdf](http://www.unctad.org/en/docs/rmt2006_en.pdf)*

## **Customs and Transit Conventions affecting Multimodal Transport**

A new self-practice exercise CD with information on existing Customs and transit conventions and procedures has just been prepared (UNCTAD/SDTE/TLB/2005/5).

International transportation of goods is increasingly carried out on a door-to-door basis, involving more than one mode of transportation. International multimodal transport may reduce transit times and transaction costs, but unless Customs formalities at each border crossing are simplified, the potential advantages of multimodal transport will not be achieved. Various multilateral conventions have been ratified by developed countries and increasingly so by developing countries to solve Customs problems affecting transit.

To strengthen understanding of the impact of international conventions on international transport, this CD-Rom provides an introduction to transit-related Customs procedures and reviews the main international Customs and transit conventions. The self-practice exercise allows for an individual learning process and provides feedback on progress made.

*To order a copy of the CD-ROM, please contact [trade.logistics@unctad.org](mailto:trade.logistics@unctad.org)  
Birgit Viohl, Junior Professional Officer, Trade Logistics Branch, UNCTAD, [birgit.viohl@unctad.org](mailto:birgit.viohl@unctad.org).*

## **UNCTAD Expert Meeting on ICT Solutions to Facilitate Trade at Border Crossings and Ports**

UNCTAD's Commission on Enterprise, Business Facilitation and Development held its 27<sup>th</sup> Expert Meeting on 16–18 October 2006 in Geneva. Experts attending the meeting discussed recent developments in trade and transport, particularly new requirements for Customs modernization and other trade and transport facilitation measures at the regional and national levels. Industry experience shows how modernization through the adoption of improved ICT has contributed to the strengthening of the whole supply chain. Another topic under discussion was the need for an enabling and accommodating legal framework, as well as recent efforts to formulate rules, regulations and standards which encourage and facilitate Customs modernization and the contribution this makes to efficient and secure transport and trade. In response to the demand for ICT solutions that facilitate trade at border crossings and in ports, experts examined available ICT tools and considered to what extent they can be introduced in developing countries and least developed countries. To assess the roles of UNCTAD and other international agencies in cooperation with their national and regional counterparts, experts looked into the capacity-building and technical assistance requirements of countries planning to implement specific technology-based trade facilitation measures, including those related to the institutional, commercial, legal and operational environment for Customs and other operations at border crossings and ports.

Immediately after this three-day event, a Global ASYCUDA Users' Meeting was held on Thursday, 19 October 2006. The objective of this meeting was to present the latest developments of the ASYCUDA Programme, including the web-based ASYCUDAWorld system.

*For further information about ASYCUDA and the ASYCUDA meeting, please visit [www.asycuda.org](http://www.asycuda.org).*

*For further information about the Expert Meeting you are invited to visit*

*[www.unctad.org/Templates/meeting.asp?intItemID=1942&lang=1&m=11898&info=highlights](http://www.unctad.org/Templates/meeting.asp?intItemID=1942&lang=1&m=11898&info=highlights) or contact Bismark Sitorus, Trade Facilitation Section, Trade Logistics Branch, SITE, UNCTAD, [bismark.sitorus@unctad.org](mailto:bismark.sitorus@unctad.org). Presentations have been made available via <http://r0.unctad.org/ttl/ttl-ppt-2006-10-16to18.htm>*

## **Global Survey on the Implementation Costs of the ISPS Code**

On 1 July 2004, amendments to the 1974 International Convention on the Safety of Life at Sea (SOLAS) and the International Ship and Port Facility Security Code (ISPS Code), adopted under the auspices of the International Maritime Organization (IMO) entered into force and became mandatory for all SOLAS Contracting States. These amendments introduced a new international maritime security regime, which imposes wide-ranging obligations on governments, shipping companies, ships and port facilities. Implementing these obligations entails costs and is likely to have some economic implications. Although indicative of the magnitude of the resources required to implement and comply with the IMO security regime, the early preliminary estimates were, nonetheless, made prior to the coming into effect of the SOLAS amendments and the ISPS Code and were based on broad modelling assumptions to impute global costs. To date, no global assessment of the actual costs incurred or expected is available.

Against this background, and in accordance with the mandate conferred on UNCTAD by the São Paulo Consensus adopted by the UNCTAD XI Conference in June 2004, the secretariat conducted a study on the implementation costs of the SOLAS amendments and the ISPS Code requirements. The study is based on a survey technique using a questionnaire designed to obtain first hand information from parties directly affected by the new IMO security regime, namely governments and the shipping and port industries. The main objective of the study was to establish the order of magnitude of the financial resources required to comply with the SOLAS and the ISPS

Code requirements. Therefore, this study should be considered as a first step towards any assessment of potential economic implications of the new international maritime security requirements.

While a good response rate was achieved with respect to governments, limited responses were received from the shipping sector. As to ports, a good response ratio was also achieved with over one-third of the respondents located in developing regions. Reported figures for initial and annual costs indicate the presence of wide cost differentials. Expressed in relative terms and, based on relevant valid cases in the total sample, average unit costs (initial and annual) are found to be higher for smaller ports. A detailed report is currently being finalized and is expected to be published shortly.

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## **Logistics Perception Index**

The World Bank Group in partnership with the International Federation of Freight Forwarders Associations (FIATA), the Global Express Association (GEA) and the Turku School of Economics (TSE, Finland), and supported by the Global Facilitation Partnership (GFP), has launched a project on trade logistics indicators. Referred to as the “Logistics Perception Index” (LPI), this initiative will help generate an informed set of perception indices measuring key dimensions of logistics for developing and industrialized countries. Key operational staff from ten of the largest international logistics providers (freight forwarders and express carriers) have accepted the invitation of the World Bank Group to participate in the survey and are currently preparing their answers. The respondents provide information on several logistics dimensions: transport cost, infrastructure, customs and border formalities, amongst others.

Following the suggestions we received from some of our partners, we are opening the survey to independent logistics professionals who deal with international trade in various countries, including subscribers of UNCTAD’s Transport Newsletter. Through the Global Facilitation Partnership (GFP) portal, local or regional freight forwarders not affiliated with large multinationals can now take the survey and add to the quality and quantity of the dataset.

*Alina Mustra, World Bank, [mmustra@worldbank.org](mailto:mmustra@worldbank.org).*

*Detailed information on the project as well as an access to the survey site is available at the GFP website [www.gfptt.org/lpi](http://www.gfptt.org/lpi).*

## **IMMTA Questionnaire on Multimodal Transport**

The working group on multimodal transport of the International Multimodal Transport Association (IMMTA) has produced a detailed questionnaire on multimodal transport. Non-IMMTA members with an interest in the topic are also invited to participate in this global survey.

*The questionnaire can be downloaded at the following website: [www.immta.org](http://www.immta.org)*

## **Technical Notes on Trade Facilitation Measures in English and in Spanish language**

As announced in previous issues of the Transport Newsletter, UNCTAD has produced several Technical Notes on trade facilitation measures. Nineteen Technical Notes have been published on the following topics and are now available on the Internet:

- Publication of Trade Regulations and their Uniform Administration
- Levy of Fees and Charges
- Use of Customs Automation Systems
- Release of Goods in Event of Appeal
- Customs Procedures — Post Clearance Audit
- Single National Enquiry Points
- Maintenance of Integrity among Officials
- Freedom of Transit and Regional Transit Arrangement
- Documentation Requirements in Maritime Transport
- Right of Appeal against Customs and other Agency Rulings and Decisions
- Prerequisites for Internet Publication
- Risk Management in Customs Procedures
- Simplification of Trade Documentation Using International Standards
- Border Agency Coordination
- Pre-arrival Customs Clearance
- The Electronic Submission of Trade Documentation
- Bonded Transport Regimes
- Border Cooperation and Coordination amongst Agencies, Authorities and the Private Sector in Relation to Transit
- Separating Release from Clearance Procedures
- Trade Transaction Modelling
- ASYCUDA
- Advance Ruling

All Technical Notes are available electronically on the the following web page:

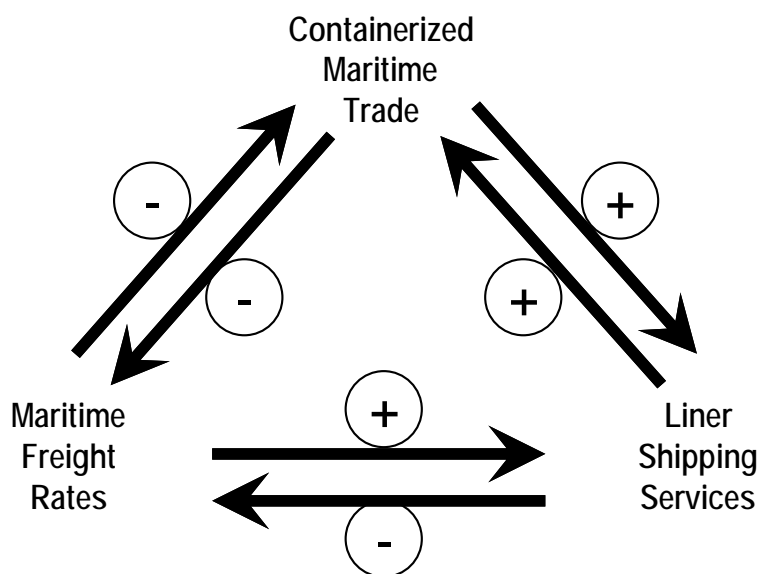
<http://r0.unctad.org/ttl/technical-notes.htm>

Further information can be obtained from [jan.hoffmann@unctad.org](mailto:jan.hoffmann@unctad.org)

## Trade, Liner Shipping Supply, and Maritime Freight Rates

Most international trade in manufactured goods is transported by containerized liner shipping services. The supply of such liner shipping services, the traded volumes, and liner shipping freight rates are closely related to each other. Figure 1 illustrates the longer term effects that trade volumes, the supply of shipping services and maritime freight rates can be expected to have on each other.

Figure 1: Expected causal relationships between trade volumes, shipping services and freight rates



An arrow with a negative sign is meant to indicate a negative causal relationship; for example, it can be expected that an *increase* in maritime freight rates will lead to a *decrease* in containerized maritime trade volumes. An arrow with a positive sign, on the other hand, is meant to indicate a positive causal relationship; for example an *increase* in containerized maritime trade volumes can be expected to lead to an *increase* in the number of services provided by liner companies.

Several of these relationships have been looked at in previous issues of the Transport Newsletter. For instance, it has been shown that distance, trade balances, economies of scale, the type and value of commodity, various port characteristics as well as the supply of direct liner shipping services are among the main determinants of maritime freight rates.<sup>1</sup> The supply of direct liner shipping services, in turn, appears to a large extent to be determined by traded volumes, port characteristics as well as of course the geographic position of a country's ports.<sup>2</sup> Transport efficiency in general has been identified as an important determinant of the trade competitiveness of nations.<sup>3</sup>

Ongoing research by UNCTAD on liner shipping services in the wider Caribbean region has shed some further light on the determinants of freight rates, trade volumes and liner shipping supply. Combining data on the supply of liner shipping services, freight rates, maritime distances, national income and trade in manufactured goods, and undertaking linear regressions, the following preliminary conclusions can be drawn.<sup>4</sup>

### **Trade in manufactured goods**

Most Central American countries and the Caribbean countries trade very little with each other. By way of example, less than 0.001 per cent of Guatemala's exports in manufactured goods are destined for Surinam, 0.24 per cent for Jamaica, 1 per cent for the Dominican Republic and around 8 per cent for Costa Rica. What are the main explanations for such differences?

According to the standard "gravity" model, the participation of country B in global imports is the basic determinant of the share of country A's exports that are destined for country B; i.e. if for example country B's imports are 5 per cent of all the world's imports, it can, *ceteris paribus*, be expected that 5 per cent of country A's exports will be destined for country B. Also in line with the gravity model, neighbouring countries can be expected to trade more with each other than those that are not. The estimated parameters in our regressions confirms such expectations, i.e. A can be expected to export significantly more to country B if A and B share a common border.

As regards the impact of distance, the gravity model would suggest that countries that are further away from each other will trade less with each other. Although in principle such a positive correlation also exists in the wider Caribbean, it is interesting to note that in our regressions the parameter for distance is not statistically significant if other variables are

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<sup>1</sup> Transport Newsletter No. 31, 1<sup>st</sup> Quarter 2006, page 12: "Ports and International Transport Costs"; Ibid., No. 24, 2<sup>nd</sup> Quarter 2004, p.9: "Recent Trends in Liner Shipping Freight Rates". All past Transport Newsletters can be downloaded via [www.unctad.org/Templates/Page.asp?intItemID=2651](http://www.unctad.org/Templates/Page.asp?intItemID=2651)

<sup>2</sup> Ibid., 1<sup>st</sup> Quarter 2005, p.4: "Liner Shipping Connectivity". Ibid., No. 31, 1<sup>st</sup> Quarter 06, p.20: "Liner Shipping Connectivity in Latin America"; Ibid. No. 29, 3<sup>rd</sup> Quarter 2005, p.7: "Liner Shipping Connectivity Index 2005"; Ibid., No. 32, 2<sup>nd</sup> Quarter 2006, p.9: "Liner Shipping Connectivity between Pairs of Countries".

<sup>3</sup> Ibid., 3<sup>rd</sup> Quarter 2004, page 14: "On the New Geography of Trade: The role of transport services and their costs"; Ibid. No. 26, 4<sup>th</sup> Quarter 2004, p.20: "Transport and international trade"; Ibid., No. 23, 1<sup>st</sup> Quarter 2004, p.12: "Export performance and its determinants: supply and demand constraints".

<sup>4</sup> Sources are [www.ci-online.co.uk](http://www.ci-online.co.uk) for liner shipping services, [www.world-register.org](http://www.world-register.org) for distances, commercial data from a liner shipping company, as well as UNCTAD for economic data on trade and income. The number of observations in the data base is 189. The R<sup>2</sup> in the various regressions ranges between .35 and .61.



incorporated that capture the supply of shipping services and transport costs. For example, a larger number of liner shipping companies that provide direct services between a pair of countries appears to significantly enhance trade volumes. In fact, the simple existence of direct liner shipping services, versus the alternative situation where maritime trade has to be transshipped in a foreign port, is estimated to enhance the share of country A's exports to country B by around 0.7 percentage points. These results support the expected (+) sign in Figure 1 as regards the impact of liner shipping supply on trade volumes.

As regards the impact of transport costs on trade volumes, the empirical results suggest that an increase of the freight rate per TEU (twenty foot equivalent unit) by 1000 USD will reduce the share of country A's exports to country B by almost half a percentage point. These results support the expected (-) sign in Figure 1 for the impact of transport costs on trade volumes.

### **The supply of liner shipping services**

Approximately half of the 189 routes covered in our data base are served by regular direct liner shipping services, whereas the other half includes transshipments in ports of third countries. By way of example, between Costa Rica and Colombia, there are 14 companies, that deploy a total of 50 container ships, with a combined container carrying capacity of around 61,000 TEU; the largest vessel being of 2,500 TEU. Between Costa Rica and Jamaica, there are 5 companies/16 ships/17,400 TEU/2105 TEU maximum size. Between Costa Rica and Guyana, there are no direct services.

The farther two countries are geographically apart, the more likely it is that there are no direct liner shipping services between them. Also, trade volumes are a statistically significant determinant of the number of companies as well as of the number of ships and the TEU capacity of these ships that are deployed on direct liner shipping services between a pair of countries. These results support the expected (+) sign in Figure 1; supply certainly follows demand.

It is interesting to note that a higher GDP per capita in the exporting country also appears to attract additional liner shipping services. This coincides with other research where a higher GDP per capita was found to be a statistically significant explanatory variable for port efficiency and liner shipping connectivity.

### **Liner shipping freight rates**

Freight rates on 189 routes of our sample range between \$600 and \$3,300 per twenty foot container. A longer distance between a pair of countries, for obvious reasons (such as additional fuel expenditure), leads to higher freight rates. However, the actual impact of distance on freight rates is not very strong. For example, doubling the distance between a pair of countries, according to our empirical results, can be expected to lead to an increase in the freight rate of only around \$50 to \$76.

If the freight rate is for a route where the liner shipping company itself does not have a direct service, but instead includes a transshipment, the freight rate can be expected to be \$600 to \$700 higher. Interestingly, the freight rate will be significantly lower if other, competing, companies do provide a direct service; i.e. although the shipping company itself does not provide a direct service, the freight rate it charges to its clients is influenced by the given market situation. If the market provides a direct service, the freight rate can be expected to be around \$425 lower as compared to a situation where no single company provides a direct service between a pair of countries. By the same token, a higher number of companies in the market, with more ships, and a larger total container carrying capacity on direct services all have significant negative impact on the freight rate; i.e. more competition and economies of

scale appear to confirm the (-) sign in Figure 1 above as regards the impact of liner shipping supply on freight rates.

Other variables with an apparent impact on freight rates include the GDP per capita in the exporting country, where it appears that a higher income helps to reduce freight rates. Also trade balances have the expected impact on freight rates as these go up whenever the shipping company needs to import empty containers or ships because country A's exports to country B are higher than its imports from country B.

The estimated impact of the total exports of country A to country B has a negative sign, most likely because of the impact of economies of scale. However, once variables for liner shipping connectivity, such as the number of liner shipping companies in the market, are incorporated in the regression, the total volume of exports is no longer statistically significant.

## Conclusions

The linear regressions do not prove actual causalities, which in any case go both ways for most variables. For example, freight rates have an impact on trade, just as the volume of trade has an impact on freight rates.

The empirical research on liner shipping and trade in the wider Caribbean in general supports the results of previous research on the various relationships between trade volumes, shipping supply and freight costs. Although the exact values of the estimated parameter values reported above should only be taken as examples from one region at a given point in time, they provide interesting indicative values that allow quantifying the effects that different variables can have on trade volumes, shipping supply and freight rates.

The above described empirical results strongly suggest that international trade models should always attempt to include hard data on transport costs and shipping supply capacities, rather than rely on distance as a proxy for transaction costs. Freight rates, competition and economies of scale in liner shipping are important issues to take into account when looking at the trade competitiveness of nations.

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## Consolidation among Container Shipping Lines

According to latest data from Clarkson's Container Intelligence Monthly (CIM), the process of concentration in liner shipping has been continuing apace during 2006. In January 2003, the 10 largest container ship operators accounted for 44.4 per cent of global container carrying capacity; at the beginning of September 2006, the percentage had risen to 54.8 per cent. The growth is partly due to the two major acquisitions of 2005, i.e. Maersk's takeover of P&O Nedlloyd and Hapag Lloyd's takeover of CP Ships. But organic growth has also led to a continuous gradual increase in the market share of the largest carriers. Monitoring this trend is of particular interest to shippers and also to regulatory bodies who, for example, look at the issue of anti-trust immunity.

An individual shipper or port will be particularly concerned about the effect of global consolidation on competition in his port or on a specific trade route. According to UNCTAD research, based on data on fleet deployment from Containerisation International, up to the beginning of 2005, it appeared that the number of carriers offering services at individual ports had continued to increase in spite of the global process of concentration. Mergers and acquisition has meant that there are fewer carriers today than ten years ago, but the same global carriers had continued to expand into new markets, and as a consequence the number of carriers

providing services to a specific port had actually increased for the majority of countries. Since mid-2005, however, the average number of carriers per country has started to decline. The following table compares the averages per country for the months of July 2004, July 2005 and July 2006.

**Table 1: Fleet deployment and companies providing services per country, 2004-2006**

	2004	2005	Percentage change 2005/2004	2006	Percentage change 2006/2004	Percentage change 2006/2005
Average TEU capacity deployed per country	296025	309658	+4.6%	337940	+14.2%	+9.1%
Average vessel size, TEU	1212	1254	+3.4%	1399	+15.4%	+11.6%
Average # of companies per country	21.7	21.5	-0.7%	20.3	-6.2%	-5.5%

Source: UNCTAD, based on data for 161 countries from Containerisation International Online.

While the deployed TEU capacity per country and the average vessel sizes continue to increase, the average number of companies that provide services to an average country's ports has decreased from 21.5 (July 2005) to 20.3 (July 2006). Although the reduction of an average of around one company per country may not, at first sight, appear to be significant, for smaller markets it can make a considerable difference. Among the 161 countries in the database, in July 2004 there were 79 countries which were served by only 10 or even fewer companies; this number increased to 80 in July 2005 and to 85 in July 2006.

Clarkson Research Services: [www.crsi.com/acatalog/Container\\_Intelligence\\_Monthly.html](http://www.crsi.com/acatalog/Container_Intelligence_Monthly.html)

Containerization International Online: [www.ci-online.co.uk](http://www.ci-online.co.uk)

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## IAPH Award for IT Projects

Entries are being invited for the International Association of Ports and Harbours (IAPH) IT Award 2007, which celebrates outstanding information technology (IT) projects in ports and maritime transportation. The award is organized by IAPH's Trade Facilitation Committee and is presented to those who can demonstrate their commitment to promoting the use of IT in the industry. This award, the eighth, will be presented at the 2007 IAPH World Ports Conference in Houston in April and is open to any IAPH regular or associate member. Any IT application within a port may be submitted, whether purely internal to the port authority or whether involving outside organizations. The winner will be the project or application, implemented in the previous two years, that resulted in the greatest benefit to the port in areas such as: reduced costs; increased revenue; improved safety; environmental protection and enhanced efficiency.

Ports in developing countries are encouraged to compete for the award alongside those who already use available technology extensively. Relative improvement for a port will be the key factor for comparison. The deadline for submission of the entries is 28 February 2007.

[info@iaphworldports.org](mailto:info@iaphworldports.org)

## GFP Featured Topic: The Use of ICT for Facilitation

As has become regular practice, the Transport Newsletter introduces the current "featured topic" at the Global Facilitation Partnership (GFP).<sup>5</sup>

Use of ICT for facilitation has become an important determinant in the efficiency of trade and transport management, transaction and procedures. With the establishment of enabling rules

<sup>5</sup> [www.gfptt.org/topics/ict](http://www.gfptt.org/topics/ict)

and regulations, various applications and systems of ICT have been developed as part of facilitation initiatives. Nevertheless, different levels of ICT usage in facilitation remain evident between developed and developing countries.

Ultimately, the use of ICT for facilitation should also reduce delays and cost of transport of traded goods. Along with the development of protocols, rules and regulations, and automation systems, new requirements in global trade, especially concerning security, have presented challenges in equipping countries with appropriate ICT solutions.

**Definition:** All activities, approaches and procedures that have adopted some degree of ICT techniques, systems and tools in the effort to facilitate trade, particularly in areas such as transport facilitation, customs formalities, trade transaction, traders community building, trade security and safety.

**Overview:** Nowadays the use of ICT has been incorporated in various areas of trade. One of the original objectives for adopting ICT is to reduce the accumulation of paper-based trade information/documentation by increasing the use of its electronic version; an initiative that is believed would contribute to lower transport cost and slimmer bureaucracy. The development in the ways of how electronic trade information are being handled and shared among traders, operators and authorities along the trade chain has made a significant progress in the past decade.

The evolution from traditional ways of utilizing paper-based trade information to newer ways formed from the experience in processing its electronic version has been possible and facilitated by the development and establishment of global rules and regulations on how the structure of trade information in electronic form should look like and be handled in an efficient global trade environment. Indeed, the development of layout and protocols for EDI should go hand in hand with the advancement in modern trade and transport systems, which nowadays encompass areas such as automation of customs procedures, single window system, risk assessment approaches using advance container information, cargo scanning, tracking and tracing.

**Where to start:** For trade and transport, introduction into the use of ICT starts by recognizing the contribution made by various organizations in developing the *layout and protocols* for EDI. A better understanding may come from exploring how these standards are being observed in the work of various bodies in the development of modern *systems and automation*. Challenges that come with *new requirements*, such as those in the area of security and safety, must also be explored in order to express other factors which may spur ICT innovation which is crucial if a trade off between efficient trade and transport, on the one hand, and high security and safety, on the other, can be kept to a minimum.

**Layout and protocols:** The United Nations Economic Commission for Europe (UN/ECE) has contributed to the groundwork of layout and protocols for Electronic Data Interchange (EDIFACT<sup>6</sup> is now also an ISO standard). Continuing work is being carried on by the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). A list of trade facilitation recommendations,<sup>7</sup> electronic business standards<sup>8</sup>, and technical specifications<sup>9</sup> under the care of the Centre has been made available online for reference purposes.

**Systems and automation:** Combining advancement in computer and Internet technologies with approaches in processing electronic trade information that facilitate Customs procedures has helped form an area of expertise commonly known as Customs automation technology.

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<sup>6</sup> <http://www.unece.org/trade/untdid/welcome.htm>

<sup>7</sup> [http://www.unece.org/cefact/recommendations/rec\\_index.htm](http://www.unece.org/cefact/recommendations/rec_index.htm)

<sup>8</sup> [http://www.unece.org/cefact/cf\\_std\\_pub.htm](http://www.unece.org/cefact/cf_std_pub.htm)

<sup>9</sup> [http://www.unece.org/cefact/umm/umm\\_index.htm](http://www.unece.org/cefact/umm/umm_index.htm)

UNCTAD through its ASYCUDA programme<sup>10</sup> has developed a Customs automation system with various levels of applications, with ASYCUDA world<sup>11</sup> being the latest version of the system.

**New requirements:** Security and safety are now inseparable issues from good trade practice. Lack of assurance for trade security may mean delays and higher transport costs. Strategies and systems have now been developed to assess risk and rebuild trust in the security of traded goods. Advance Cargo Information strategy is among the first system set up by the Industry.<sup>12</sup> WCO has recently published “Framework of standards: to secure and facilitate global trade”.<sup>13</sup> Technology to track and trace cargo has gained attention lately, especially due to its potential to enhance security and safety through incorporation of the recently developed RFID technology<sup>14</sup> in the managing of global supply chain.

**Building communities:** Disseminating a culture of resorting to ICT solutions for facilitating trade and transport is a challenge in itself. Building a community of ICT users is an initiative that may contribute toward the success of imparting benefits from projects related to the modernization of border crossings and ports facilities. This community also serves as a bridge that encourages the move of users from their traditional trade and transport practices toward other ways that are more compatible with the newly-established ICT-supported facilities. As examples, see TradeNet,<sup>15</sup> DagangNet,<sup>16</sup> TradeLink,<sup>17</sup> Trade-Van,<sup>18</sup> TEDI,<sup>19</sup> KTNET,<sup>20</sup> and TEDMEV.<sup>21</sup>

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## New Publications

### Landlocked Developing Countries: Facts and Figures 2006

UNCTAD has published a new quick reference source on one of the most vulnerable groups of developing countries. The publication presents key economic, social and trade information on all 31 landlocked developing countries (LLDCs). It seeks to present the development challenges faced by these countries and underlines the need for international assistance to them. The location of LLDCs in the interior of continents requires their merchandise exports and imports to travel hundreds or even thousands of kilometres to and from the closest maritime ports. However, transit traffic increases transactions costs and reduces competitiveness in world markets. This discourages investors and diminishes the capacity of LLDCs to reap benefits from the international division of labour.

Most landlocked developing countries are very poor. Many are far away from reaching the Millennium Development Goals (MDGs) related to primary education, infant mortality, access

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<sup>10</sup> <http://www.asycuda.org/aboutas.asp>

<sup>11</sup> <http://www.asycuda.org/asyversions.asp>

<sup>12</sup> [http://www.unctad.org/en/docs/sdtetlb20041\\_en.pdf](http://www.unctad.org/en/docs/sdtetlb20041_en.pdf)

<sup>13</sup> [http://www.wcoomd.org/ie/En/Press/Cadre%20de%20normes%20GB\\_Version%20Juin%202005.pdf](http://www.wcoomd.org/ie/En/Press/Cadre%20de%20normes%20GB_Version%20Juin%202005.pdf)

<sup>14</sup> [http://www.aimglobal.org/technologies/rfid/resources/shrouds\\_of\\_time.pdf](http://www.aimglobal.org/technologies/rfid/resources/shrouds_of_time.pdf)

<sup>15</sup> <http://www.tradenet.gov.sg/>

<sup>16</sup> <http://www.dagangnet.com/>

<sup>17</sup> <http://www.tradelink.com.hk/eng/index.html>

<sup>18</sup> <http://www.tradevan.com.tw/97English/Index.htm>

<sup>19</sup> [http://www.tediclub.com/index\\_e.html](http://www.tediclub.com/index_e.html)

<sup>20</sup> <http://homepage.ktnet.co.kr/ktnet>

<sup>21</sup> [http://www.tedmev.com/MainPage\\_e.htm](http://www.tedmev.com/MainPage_e.htm)

to safe water and the primary goal of poverty eradication. In fact, several landlocked developing countries are even slipping back on these objectives.

For landlocked developing countries, promoting efficient transit systems is crucial in efforts to lower trade transaction costs, particularly transport costs, is an important objective. However, the building of supply capacities for goods and services that are not sensitive to distance and a stronger regional trade expansion are also major prerequisites for a more beneficial integration of these countries in the international trading system.

Free download via [www.unctad.org/en/docs/ldc20062\\_en.pdf](http://www.unctad.org/en/docs/ldc20062_en.pdf)

### **Geography Against Development: A Case for Landlocked Developing Countries**

Price: \$39.00. United Nations Sales Number: 05.II.A.5. ISBN: 9211045401. Pages: 184. Binding: Paperback. United Nations, Department: Department of Economic and Social Affairs. August 2006.

In the book, the authors Anwarul K. Chowdhury and Sandagdorj Erdenebileg analyse the impact of geographical handicaps on external trade and economic development of landlocked developing countries and identify practical solutions to address them. The book is divided into four chapters. Chapter 1 analyses factors that hamper the effective participation of landlocked developing countries in international trade and economic development. Chapter 2 examines the corridor approach for establishing efficient transit systems and outlines the challenges faced and efforts made in different landlocked subregions. Chapter 3 describes international conventions that are essential for securing freedom of transit and day-to-day transit operations. Chapter 4 outlines international support measures for establishing efficient transit transport systems.

<https://unp.un.org/details.aspx?entry=E05416>

### **Trade Facilitation Strategy for SPECA Countries**

The United Nations Special Programme for Economies of Central Asia (SPECA) is supported by the Economic Commission for Europe (UNECE) and the Economic and Social Commission for Asia and the Pacific (UNESCAP). SPECA's overall objective is to meet Central Asia's development needs through greater subregional cooperation and trade, as well as by strengthening the region's links with Asia and Europe and addressing interrelated issues such as transport and trade facilitation.

Free download via [http://www.unece.org/trade/ct/ct\\_2006/list\\_06.htm](http://www.unece.org/trade/ct/ct_2006/list_06.htm)

### **Trade Security**

A brief discussion paper by John Raven asks, *inter alia*, how far the concept of global security chains is compatible with radical deficiencies in and differences between Customs administrations. It further looks at what is being done, and by whom, to identify, assess and minimize the cost and other adverse trade-related effects of current security strategies on developing countries.

Free download via [www.gfptt.org](http://www.gfptt.org)

### **EU Report on Transport Security and its Financing**

The European Commission has published a short summary report (8 pages, COM (2006) 431) on the topic of air and maritime transport security and its financing. According to the report, security costs can be significant and are currently largely borne by the users. Increased transparency relating to security taxes and charges would give users of transport services better

information and provide a clearer insight into possible effects on competition. The current lack of transparency increases the difficulty to identify potential distortions. Also according to the summary report, the heterogeneity of approach to the funding of the implementation of security measures means that there is a possibility of some distortion of competition.

Free download of the summary report via

[http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006\\_0431en01.pdf](http://eur-lex.europa.eu/LexUriServ/site/en/com/2006/com2006_0431en01.pdf)

## **IAME Conference Proceedings**

The International Association of Maritime Economists (IAME) held its 2006 annual conference in July in Melbourne, Australia. Around 60 peer reviewed academic papers were presented, covering a wide range of topics, including, for example, “Security and Reliability of the Liner Container–Shipping Network”, “Internationalisation and Consolidation of the Container Port Industry”, “Indicators to Measure Port Performance”, “Assessing Shipping Traffic and Channel Capacity in Ports”, “Determinants of Maritime Policy”, “Maritime Network Connectivity, Transport Costs and Maritime Trade”, and “The Spatial Coverage of Shipping Lines and Container Terminal Operators”. The related PowerPoint presentations are available on-line also for non-IAME members.

Free download of presentations via [www.iame.info](http://www.iame.info)

## **TRB Ports, Waterways, Freight & International Trade Conference proceedings**

Selected presentations made at the Annual Summer Ports, Waterways, Freight & International Trade Conference are now available on-line. Topics include, *inter alia*, “Expanding Port Capacity through Regional Port Alliances”, “Expanding Capacity of the Panama Canal” and “Expanding Capacity with Asia through Mexico”.

Free download of presentations via [www.trb.org/conferences/jointsummer/2006/ports/presentations.pdf](http://www.trb.org/conferences/jointsummer/2006/ports/presentations.pdf)

## **Harmonized System**

The World Customs Organization (WCO) announces the release of the new Harmonized System Explanatory Notes – fourth edition – that will entry into force as from 1 January 2007. The 2007 version is the third major revision of the Harmonized System (HS) since its adoption by the WCO Council in 1983 and its entry into force in 1988. The new version includes more than 350 amendments to the HS Nomenclature. The amendments were adopted in order to reflect technological developments, take account of current trade practices, clarify texts to ensure uniform application, cater for social and environmental concerns, and assign code numbers. According to the WCO, the HS Nomenclature contributes to the harmonization of Customs and trade procedures, and non-documentary trade data interchange. This harmonization, achieved by having the same numeric code used world-wide for a given commodity, gives rise to a reduction in the costs related to international trade.

<http://events.wcoomd.org/>

## **Annual Review of Global Container Terminal Operators, September 2006**

The report by Drewry Shipping Consultants underlines the increasing role being assumed by global terminal operators within the container transportation industry worldwide. Drewry expects the annual throughput capacity of global terminal operators to achieve an average yearly growth rate of 5.7 per cent between 2005 and 2011. In contrast, other private sector terminal operators are expected to increase their capacity by an annual average of 4.1 per cent in this period, while average annual growth of under 3 per cent is forecast for public sector

terminals. By 2011, terminals within the global terminal operator community will account for 61 per cent of total world capacity, compared with 58 per cent in 2005. Drewry calculates that in 2005 container ports world-wide handled a total of some 399 million TEU (twenty foot equivalent units or containers), more than 11 per cent up on 2004 levels. Global operators, however, outperformed the market with a 14 per cent increase in their combined volumes, which rose to over 267 million TEU, pushing up their market share to around 67 per cent.

One of the fastest growing container terminal businesses is DP World, which was in sixth place in 2005, with a 12.9 million TEU throughput, over 13 per cent up on 2004 levels. The Dubai-based company is certain to be one of the top four companies in the 2006 league table, following its recent absorption of the P&O ports portfolio. A number of carrier-based global terminal operators are fast expanding their businesses in this sector, reflecting a desire to secure sufficient terminal capacity to support the core liner shipping activity in key geographical areas. Geneva-based Mediterranean Shipping Company (MSC) is now in 9<sup>th</sup> position in the league table, while the fastest rising company compared with 2004 is CMA CGM, which has jumped to 17<sup>th</sup> place, after almost trebling its total throughput to 3.4 million TEU.

Using three measures – TEU per metre of quay, TEU per ship-to-shore gantry crane and TEU per hectare – Drewry evaluated productivity and found that the global terminal operators' performance in 2005 was mixed. Whereas, in terms of TEU throughput per metre of quay, global operators performed better than average in five of the eight geographical regions surveyed by Drewry; using TEU per hectare as a measure, the global operators performed above average in only four of these eight regions. Moreover, when performance was measured by TEU per ship-to-shore gantry crane, global operators were below average in six of the eight geographical regions. The report thus suggests that there is still room for smaller players.

[www.drewry.co.uk](http://www.drewry.co.uk)

### **Port and Supply-Chain Initiatives in the United States and Abroad**

The research for this report, conducted for the Congressional Research Service of the U.S. Congress by the LBJ School of Public Affairs, directed by Leigh B. Boske, examines the various institutional, legal, and policy arrangements that have been put into place in the U.S. and abroad (Brazil, France, Hong Kong, India, Mexico, Netherlands and South Africa) to enhance worldwide port and supply-chain security. The involvement of international organizations and private-sector firms and associations in maritime security is also investigated.

Free download via [www.utexas.edu/lbj/pubs/isbn/0-89940-763-3](http://www.utexas.edu/lbj/pubs/isbn/0-89940-763-3)

### **ECLAC Web Portal on Ports, Shipping and Logistics Issues**

The United Nations Economic Commission for Latin America and the Caribbean (ECLAC) has created a new website within its Natural Resources and Infrastructure Division. Among the latest studies that can be accessed via the site are new papers (in Spanish) on productivity indicators for the port industry and on sustainable development in the Amazon region.

The site can be accessed via [www.eclac.cl/drni](http://www.eclac.cl/drni)

Ricardo Sanchez, Economic Affairs Officer, ECLAC, [ricardo.sanchez@cepal.org](mailto:ricardo.sanchez@cepal.org)



# **New Contracting Parties to International Conventions Adopted Under the Auspices of UNCTAD**

## **United Nations Convention on the Carriage of Goods by Sea, 31 March 1978**

Entry into force: 1 November 1992; Contracting States: 32

Albania - 20 July 2006 (a)

*For more information on the latest status of this and other conventions, please visit:*

[www.unctad.org/ttl/legal](http://www.unctad.org/ttl/legal)

## **Agenda**

### **UNCTAD and GFP events**

Oct 31-Nov 1, 2006: UNCTAD/ECE seminar on trade facilitation platforms. Geneva

Feb 19-23, 2007: UNCTAD Commission on Enterprise. Geneva

Mar 19, 2007: GFP meeting. Brussels

### **Other events on trade and transport facilitation**

Nov 6-8, 2006: OECD-APEC Conference on Removing Barriers to SME Access to International Markets. Athens

Nov 21-22, 2006: WCO Training on Rules of Origin. Brussels

Nov 27, 2006: ECLAC/OAS seminar on the impact of the Panama Canal expansion for Latin America and the Caribbean. Santiago de Chile

Nov 29-Dec 1, 2006: 4th International Logistics and Supply Chain Congress. Izmir

Dec 4-15, 2006: Structuring and Financing PPP Projects in the Transportation Sector. Washington

Apr 17-21, 2007: Globalization and Freight Transportation in a Containerized World. San Francisco

Jun 3-6, 2007: International Port Training Conference. Rotterdam

Jul 4-6, 2007: IAME annual conference. Athens

*For further details and continuous updates please visit [www.gfptt.org/Entities/EventList.aspx?list=all](http://www.gfptt.org/Entities/EventList.aspx?list=all)*