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## **CHAPTER 6.**

### **Trade and Transport Efficiency**

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## Chapter 6

# TRADE AND TRANSPORT EFFICIENCY

*This chapter provides information on latest developments in the fields of transport, trade facilitation and multimodal transport and information on the status of the main maritime Conventions.*

### A. EFFICIENT TRANSPORT AND TRADE FACILITATION

The Expert Meeting on the Development of Multimodal Transport and Logistics Services was convened by UNCTAD and held in Geneva from 24 to 26 September 2003. Its objective was to help Governments and the trade and transport industry examine policy alternatives and actions in the wake of new developments so as to promote the development of multimodal transport and logistics services.

The wide range of issues discussed by experts was grouped into the following six topics: transport services and developments; infrastructure and technology; security and safety; facilitation; the legal framework; and finally market structure and market access.

Experts noted that a reduction in transport costs would give considerable impetus to the development process of developing countries, and some examples were provided: in one country each additional day of ship waiting time in its ports cost shippers \$1 million; inefficient port and Customs operations in Latin America were estimated to cost \$4 billion. In this context the introduction of multimodal transport and logistics services would increase the competitiveness of traders from developing countries. For instance, reducing transit times would represent savings of billions of dollars in reduced interest rate payments. It would also trigger a virtuous cycle by encouraging trade, which in turn would foster additional multimodal transport and logistics services.

The experts also recognised that the availability of transport infrastructure and information and

communication technologies is a precondition for multimodal transport and logistics services. It was apparent that national long-term policies for infrastructure development and their integration into regional initiatives were essential for reaping benefits from increased trade due to globalization. Also, experts reviewed the impact of security measures proposed within the framework of the SOLAS Convention (ISPS Code) and those that stem from US initiatives such as CSI (Container Security Initiative) and C-TPAT (Customs Trade Partnership Against Terrorism) in the operation of multimodal and logistics operators.

Furthermore, experts agreed that the existence of an appropriate legal framework is paramount for multimodal transport and its development. In many countries existing laws and regulations were outdated and in need of modernization. In others there was no specific legal framework for multimodal operators. Some countries relied on regional or subregional solutions to overcome these limitations, and different sets of rules, for example, in Latin America, have started to emerge with a consequent uncertainty.

On the issue of market structure and market access the experts recognised the difficulties of Governments in striking a fair balance between the interests of traders regarding the provision and availability of cost-effective and adequate multimodal transport services and those of local carriers in need of support for the provision of competitive services. The bottom line was, however, to maintain shippers' freedom of choice. There were calls to the international community to help countries in building competitive multimodal transport services through exchange of know-how, increasing managerial capability,

and promotion of the use of information and communication technologies.

It was recognised that operational improvements in the private sector need to be matched by corresponding improvements in public administration and regulatory bodies. Experts pointed out that competition in the transport services should be encouraged for achieving cost reduction and promoting development of logistics providers. In this context market access, which is being negotiated in WTO as part of GATS, was deemed an important issue that could stimulate transport service providers in developing countries and their evolution into suppliers of logistics services.

The agreed recommendations of the meeting called on UNCTAD to review and analyse developments relative to efficient transport and trade facilitation, including multimodal transport and logistics services; to provide guidance and assistance to developing countries on the use of information and communication technologies for international transport services, in particular through its programmes ASYCUDA (Automated System for Customs Data) and ACIS (Advance Cargo Information System); to review the impact of security initiatives on international trade and transport; to cooperate with other intergovernmental organizations in their work on developing international legal instruments affecting international transport and trade; and to continue the analysis and assistance to countries in the field of trade facilitation, in particular for the implementation of the Almaty Plan of Action.

An International Ministerial Conference of Landlocked and Transit Developing Countries and Donor Countries and International Financial and Development Institutions on Transit Transport Cooperation was convened by the United Nations to discuss the specific problems facing landlocked developing countries, including issues related to developing transit agreements to improve their connectivity with trading partners. The conference was held in Almaty (Kazakhstan) from 28 to 29 August 2003. It reviewed the current situation of transit transport systems, including of the Global Framework for Transit Transport Cooperation of 1995. The special needs of landlocked developing countries were also addressed, and this led to a formulation of policy measures and a programme of action, known as the Almaty Programme of Action (A/CONF.202/3 Annex I), which set out a new global framework for action to develop efficient transit transport systems in landlocked and transit developing countries that accommodate the interests of both

landlocked and transit developing countries. The characteristics of such systems would include secure access to and from the sea by all means of transport according to applicable rules of international law, reduced costs and improved services so as to increase the competitiveness of exports from the region, reduced import costs, reduced delays and uncertainties in trade routes, adequate national networks, a low rate of loss, damage and deterioration en route, an opportunity for export expansion, and lastly, improved safety of road transport and security of people along the corridors.

## **B. LEGAL FRAMEWORK FOR INTERNATIONAL TRANSPORT**

### **1. The use of transport documents in international trade**

The negotiable bill of lading has traditionally played a key role in international trade, as it fulfils a number of functions facilitating trading in an international environment. It operates as a receipt providing evidence that goods conforming to the contract have been shipped as agreed and are in the physical possession of the carrier for delivery to the consignee at destination. The bill of lading also contains or evidences the terms of contract with the carrier. Most importantly, however, it operates as a transferable document of title, and it is this aspect that sets the document apart from non-negotiable seawaybills. Thus, while goods are in the physical possession of a carrier during transit, a seller is able to pass possession and property in the goods to a subsequent buyer simply by passing on the negotiable document of title.<sup>4</sup> By the same token, the document can be pledged to a bank and thus may be used as security to raise finance.

However, as the document needs to be physically transferred to the final consignee, possibly along a chain of buyers and banks, a number of problems may be associated with the use of negotiable bills of lading. These include high administrative costs related to the issue, processing and transfer of paper documentation and additional costs due to delayed arrival of the document at the port of discharge, in particular where travel times are fast, for example in short-sea shipping. While in practice, a carrier may frequently agree to release the goods against a letter of indemnity, this may seriously compromise the position of an unpaid seller or bank and may expose the carrier to a claim for misdelivery.<sup>5</sup> The successful development of an electronic alternative to the negotiable bill of lading would potentially avoid these

problems to a large extent. At the same time, any efforts in this direction are made more difficult by the need for (a) secure “electronic replication” of the unique document of title function and (b) full legal equivalence of any electronic alternatives.

In order to assess the extent to which negotiable bills of lading remain necessary for modern-day international trade and the extent to which they could be replaced by non-negotiable documents and electronic alternatives, the UNCTAD secretariat prepared a questionnaire, which was circulated widely to the industry. The questionnaire focused on (a) the current rate and pattern of use of different types of transport documents and factors relevant to the choice of document; (b) the degree to which electronic alternatives are used or their use is being contemplated; and (c) the main obstacles and advantages perceived to be associated with the use of electronic alternatives.

The survey confirms that negotiable rather than non-negotiable transport documents are still used in the majority of transactions, although in some trades and routes the use of seawaybills is common. It is interesting to note that while security concerns and/or requirements arising from finance arrangements appear to be a major factor in the choice of negotiable transport documents by commercial parties, in many cases these types of documents are also used as a matter of standard practice without there being a need for the use of a document of title. Moreover, legal or regulatory requirements imposed by some Governments currently necessitate the use of negotiable transport documents even in cases where the commercial parties may not require a document of title. These are clearly areas where review of the relevant commercial practices and governmental requirements would be appropriate. As regards the successful transition to an electronic environment, the results of the survey confirm that electronic alternatives are not yet in widespread use. In this context, it is worth noting that one of the major obstacles identified by respondents is the fact that the legal framework is not sufficiently clear or is otherwise inadequate.

The full results of the survey are presented, together with an overview of the relevant issues and some recent developments, in a report entitled “The use of transport documents in international trade” (UNCTAD/SDTE/TLB/2003/3).<sup>6</sup> Table 44 provides a breakdown of the responses received to the questionnaire.

## 2. Container security: Major initiatives and related international developments

Following the events of 11 September 2001, safety and security considerations have been at the forefront of international concerns and a variety of different unilateral and multilateral security measures regulations and legislative initiatives have been developed or are under consideration. Given that world trade is largely dependent on maritime transport, much of the focus has been directed to enhancing maritime transport security and addressing the particular challenges posed by containerized transport. The different sets of rules and measures, which have been implemented or are being considered internationally, need to be properly understood and their potential impacts on trade and transport need to be assessed.

Against this background, the UNCTAD secretariat has recently published a report,<sup>7</sup> which provides a first step in this direction. The report focuses on the main measures relevant to maritime container security, namely those initiated by the United States, including the Customs Trade Partnership Against Terrorism (C-TPAT), the Container Security Initiative (CSI) and the 24-Hour Advance Manifest Rule or the 24-Hour Rule.

Also considered in the report are related legislative developments in the United States<sup>8</sup> and elsewhere, for instance in Canada and the European Union, and some of the most important international developments at the IMO (International Maritime Organization), ILO (International Labour Organization), World Customs Organization (WCO) and OECD (Organisation for Economic Co-operation and Development).

In particular, the report presents in some detail the recent amendments to the 1974 Safety of Life at Sea Convention (SOLAS), including the new International Ship and Port Facility Security Code (ISPS Code).<sup>9</sup> This new security regime enters into force in July 2004 and its timely implementation is mandatory for all SOLAS member States, without any distinction as to their level of development. Owing to its central importance for all involved in maritime transport, the main requirements of the new regime imposed on Governments, vessel-owning and/or operating companies, as well as port facilities, are presented in overview and cost implications as well as other potential impacts are briefly discussed.

Table 44

**Breakdown of responses to UNCTAD questionnaire on transport documents in international trade**

*(N.B. Where indicated (\*), percentages relate to the overall number of answers (= 100%) received in respect of a question)*

1. Which transport documents do you mainly use/issue/require?	
- negotiable bill of lading	88%
- non-negotiable seawaybill	51%
- multimodal/combined transport document	53%
negotiable	37%
non-negotiable	27%
- other	20%
2. Please indicate the reasons why you may use/issue/require a negotiable document (more than one answer possible)	
- document is required as security under a letter of credit (or other finance requirement)	75%
- goods covered by the document are intended for sale during transit	25%
- document ensures application of rules of mandatory transport legislation	31%
- no particular reason / standard practice	20%
- requested / suggested by trading party	35%
- to be on the safe side	14%
- other	5%
3. * If possible, please provide an estimate of the percentage of negotiable transport documents, which are in fact negotiated to at least one other party (more than one answer possible)	% of answers
None	8%
1% – 19 %	27%
20% – 49 %	17%
50% – 79 %	16%
80% – 99 %	22%
100 %	10%
4. To what extent is, in your view, the use of negotiable bills of lading still required in modern international trade?	N/A
5. Please indicate in respect of which transactions (e.g. trades and/or routes) you regularly use/issue/require non-negotiable transport documents, such as seawaybills?	N/A
6. Which characteristics of these transactions make the use of non-negotiable transport documents desirable or advantageous?	N/A
7. If you do not use/issue/require non-negotiable transport documents, please indicate why, by marking one or more choices:	
- prohibited by law	15%
- other documents required by law	15%
- government requirements make use inappropriate	17%
- banking requirements make use inappropriate	31%
- non-negotiable character of document	14%
- inadequate security	28%
- lack of interest/knowledge	9%
- otherwise not suitable or advantageous	4%
8. Do you currently:	Yes No
(a) use any electronic alternative to traditional transport documents?	22% 79%
(b) consider the use of electronic alternatives to traditional transport documents or are you investing or taking other measures in this respect?	32% 68%

9. If your answer to question 8 is no, please indicate if you consider one or more of the following as obstacles:			
- infrastructure/market/trading partners not yet ready for use of electronic alternatives			51%
- legal framework is not clear enough or is not adequate			44%
- technology and/or switch to electronic environment is too costly			12%
- electronic equivalents to transport documents are not sufficiently secure			25%
- concerns about confidentiality			10%
- other			2%
10. Do you currently use any electronic means of communication in your trading relations? If so, to what extent and for which purpose?			N/A
11. What in your view are potentially the main benefits of substituting traditional paper transport documents with electronic equivalents?			
- speed			84%
- cost			68%
- competitiveness			43%
- avoiding liability arising from late arrival of documents			56%
- other			6%
12. * Do you believe that the transition to an electronic environment is easier for non-negotiable than for negotiable transport documents?	Yes	No	
	85%	15%	
13. * What are the features of a negotiable transport document? (under the law of your country and/or under the law typically chosen to govern the transaction)	% of answers		
- document is made out "to order"			18%
- document is made out to "named consignee or order"			22%
- document is made out to "bearer" or no party is indicated in consignee box			7%
- document contains a statement that goods will be delivered against surrender of the document			13%
- document is <u>not</u> marked "non-negotiable" or "not negotiable"			10%
- document <u>is</u> marked "negotiable"			14%
- title of the document			15%
- other			1%
14. * What are the effects of using a negotiable transport document? (under the law of your country and/or under the law typically chosen to govern the transaction)	% of answers		
- the right to demand delivery of the goods from the carrier may be transferred by endorsement and/or transfer of the document			22%
- the property of the goods may be transferred by endorsement and/or transfer of the document			19%
- only the lawful holder of the document is entitled to demand delivery of the goods from the carrier. The document provides security.			22%
- the goods may be sold in transit and endorsement and/or transfer of the document to another party has the same effect as physical delivery of the goods			16%
- the carrier is only entitled to release the goods against surrender of the document			20%
- other			1%
15. * Is there a clear difference between a seawaybill and a so-called "straight" bill of lading?	Yes	No	Don't know
(a) under the law of your country	51%	20%	29%
(b) under the law typically chosen to govern the transaction, if different	19%	19%	62%
16. * In your view, should there be a difference in the evidentiary effect of statements regarding the goods (e.g. weight, quantity, container contents) in a non-negotiable as opposed to a negotiable transport document?	Yes	No	
	7%	93%	

The report concludes by stating that:

“As has become evident, a variety of different unilateral and multilateral security measures, regulations and legislative initiatives have been developed or are under consideration. These impose diverse and wide-ranging requirements on all actors involved in international maritime transport.

While there is universal agreement on the need to enhance maritime transport security, it is clear that security requirements may have serious impacts. Concerns, particularly for developing countries, fall broadly into four categories, namely

Costs and expenses, both direct and indirect;

Delays and disruption of legitimate trade;

Difficulty in the implementation of diverse and detailed requirements, due to lack of technical infrastructure, expertise and know-how;

Competitive imbalances and marginalization resulting from the above...”

The report goes on to say that:

“There is general consensus on the need for enhancement of maritime and transport security. However, there is also consensus that measures should be internationally uniform<sup>10</sup> and be developed in international cooperation, that they should be based on risk-assessment, be proportionate and balanced and should disrupt legitimate trade as little as possible.<sup>11</sup> Finally, there is consensus that security measures should not serve as a pretext for protectionism and create unnecessary barriers to trade.<sup>12</sup> While some efforts have already been made to analyse security related costs and their impacts,<sup>13</sup> as well as possible international strategies,<sup>14</sup> much more work is required in this respect.

In view of the fact that transport security measures are going to form an integral part of the international trading environment, it is important that considerations such as the above are taken into account in any further discussions on the subject. In this context, particular attention may need to be paid to the position of developing countries.”

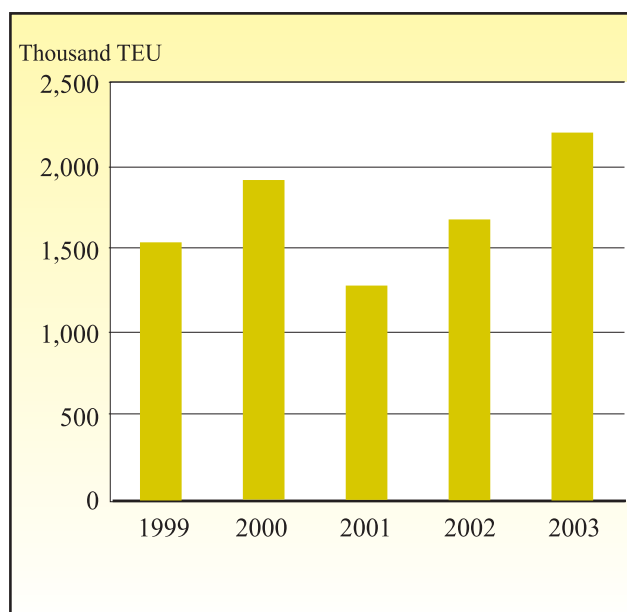
The full report is available on the UNCTAD website.<sup>15</sup>

## C. PRODUCTION AND LEASING OF CONTAINERS

For the past three years, production of new containers (see figure 9) has followed an upward trend in line with the expansion of the world fleet, and for the first time worldwide production was over the 2 million TEU mark in 2003. The standard freight container made up about 90 per cent of worldwide production, with the balance being non-standard boxes (see figure 10), mainly integral reefer containers whose production exceeded 120,000 TEUs in 2003. In that year production increased slightly for other categories of non-standard containers, such as non-ISO European and North American boxes and tank containers, and decreased for dry-freight special boxes.

Figure 9

### Annual production of containers

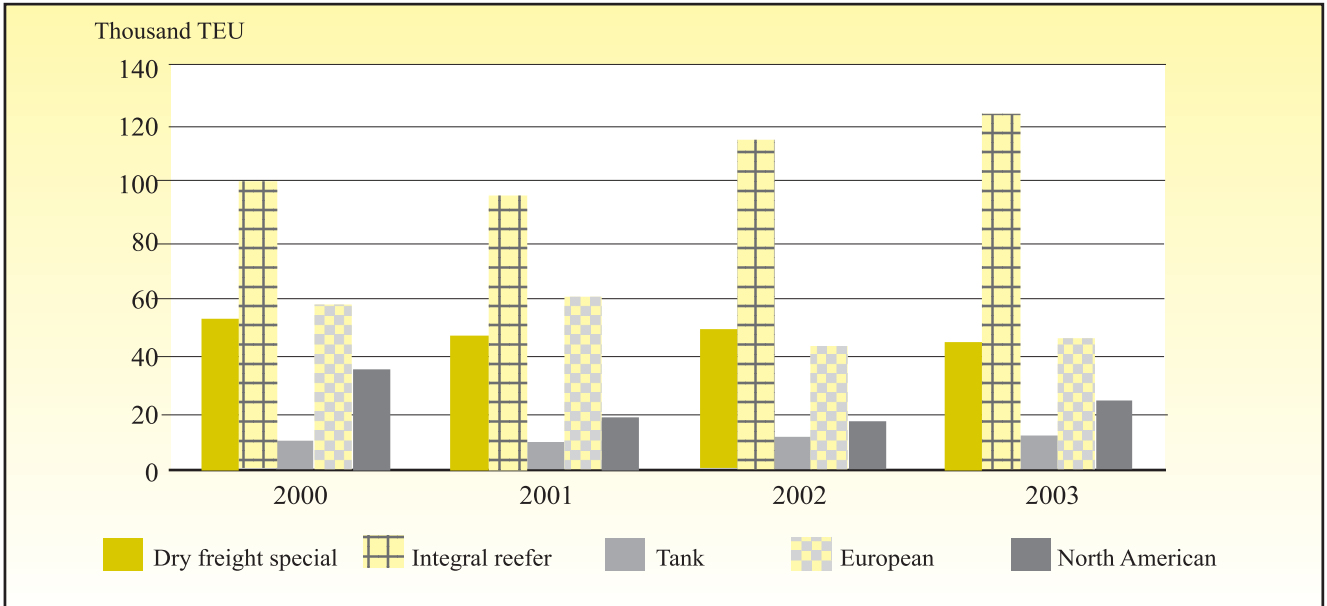


Source: *Containerisation International* and *World Cargo News*, 1999-2004 issues.

Container production continued to be concentrated in China, which accounted for slightly above 90 per cent of world production in 2003 (see figure 11). Existing factories resumed full production and several new factories were established to meet the growing demand. Lower labour costs and cheap materials and intermediate

Figure 10

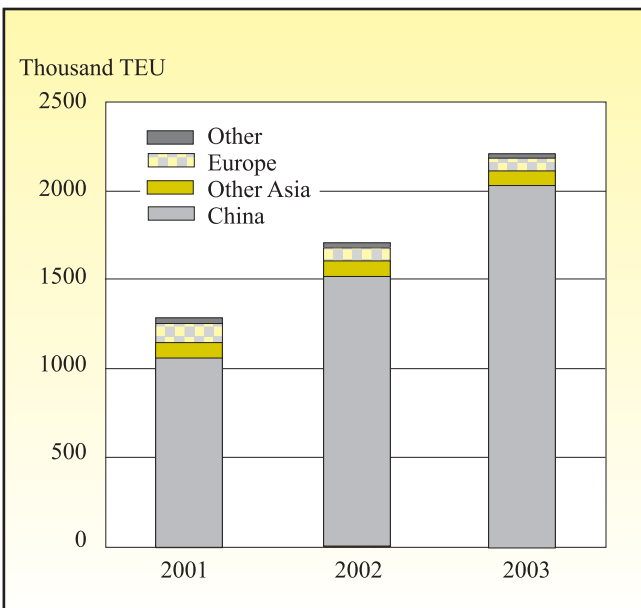
Output of non-standard boxes



Source: Containerisation International, 2000-2004 issues.

Figure 11

Output of new boxes by region



Source: Containerisation International, 2001-2004 issues.

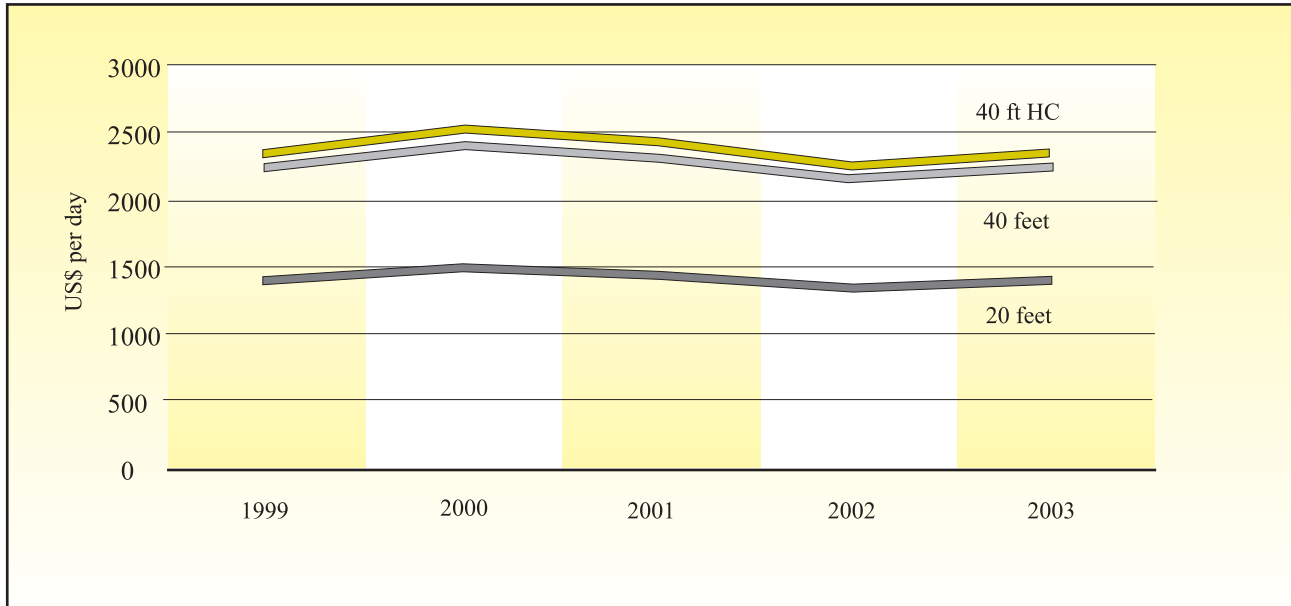
inputs explain China’s dominance of this market. In 2003 euro appreciation and depreciation of the US dollar, to which the yuan is pegged, added to Chinese competitiveness.

Prices of new boxes have been decreasing steadily since 2000, reflecting production in low-cost areas and economies of scale reaped by larger factories. The upward turn of prices in 2003 (see figure 12) was attributed to the increased cost of raw materials to satisfy a buoyant market and reaction to suggestions for a more flexible exchange rate between the yuan and the US dollar. It also anticipated forthcoming changes in VAT on Chinese exports due to be introduced in 2004.

A share of container demand stems from lessors that supply sea carriers and other transport operators with appropriate containers. Average lease rates for 2003 (see figure 13) increased during the second and third quarters, falling back during the last quarter almost to the levels that prevailed early in the year. The upward trend for prices of new boxes towards the end of 2003 might herald an increase in rental strategies in 2004.

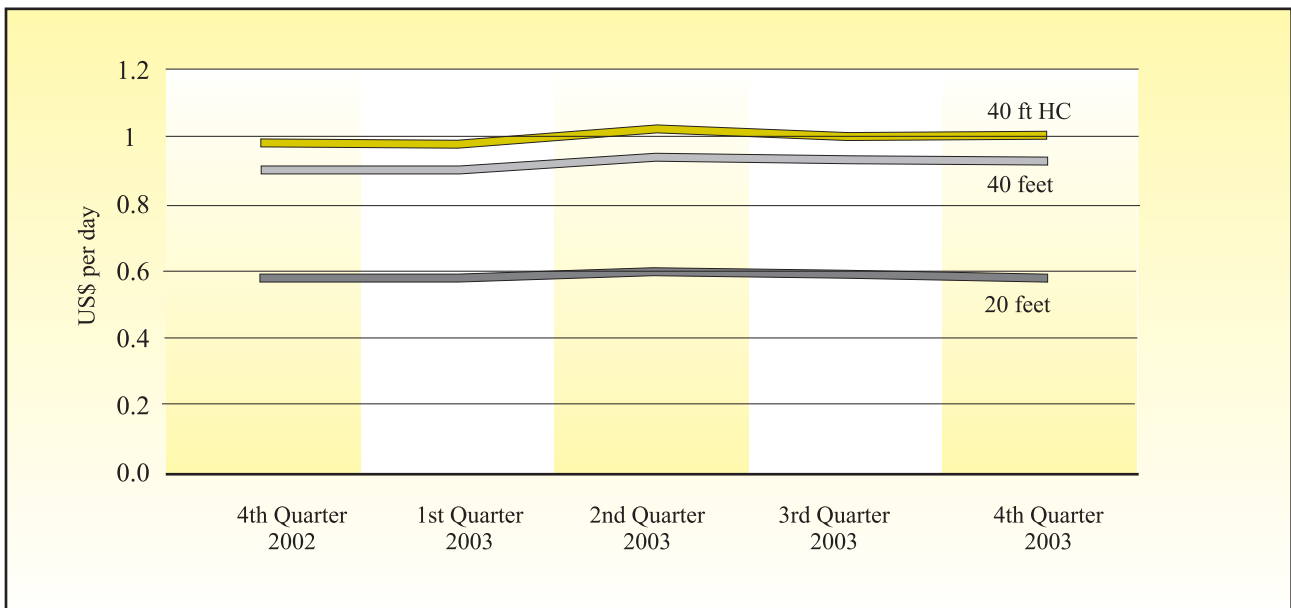


Figure 12  
Average price of new box



Source: Containerisation International, 1999-2004 issues.

Figure 13  
Quarterly average lease rates, 2003



Source: Containerisation International, 2002-2004 issues.

#### D. INLAND TRANSPORT DEVELOPMENTS

The forthcoming enlargement of the European Union in 2004 gave an impetus to sustainable inland transport. In July 2003 EU transport ministers reiterated the priority given to two long-standing alternatives to road freight transport — the promotion of short sea shipping and transport liberalization. The former was under way in several countries through measures such as tonnage tax and crew tax exemptions. The latter meant allowing international rail freight to be carried across borders of member States under the second railway liberalization package. This would build upon a previous agreement to carry international freight only through main cross-border routes. EU member States agreed that rail performance standards should be prepared by the industry and in the terms used for recognizing drivers' licences and working conditions across borders. However, in early 2004, the Council of member States and representatives of the European Parliament failed to reach agreement at the Conciliation Committee and the second railway liberalization package was therefore postponed.

Some railway companies took steps to become providers of logistics services. For instance, DB (Germany) had purchased Schenker, a large freight forwarder, and SNCF (France) started to give priority to international trains in its network. However, individual shippers were critical of expensive and rigid rail services. A survey conducted during the fourth quarter of 2003 with 1,500 senior logistics managers of retailers and manufacturers in Europe indicated that companies can make substantial improvements in selecting third-party logistics providers. In most cases selection was national and made from a few known companies whose performance was deemed reactive and lacking in innovation and IT capabilities. Nevertheless, some major freight forwarders and logistics service providers continued to prosper. The Swiss-based Kuehne & Nagel reported booming business for 2002 when it moved 1 million TEUs. This company and the

UK-based Exel are the world leaders, with revenues exceeding \$6 billion each.

The difficulties in reducing the share of road transport in EU member countries were illustrated by events in Germany and the United Kingdom. A well-publicized effort to introduce a computerized system for collecting tolls from trucks on German highways (LKW Maut charge) was delayed because of technical problems facing the concessionaire. The Sensitive Lorry Miles did not manage to remove much traffic from heavily congested UK motorways. In fact, there was recognition that new road investment was needed when the UK Government announced more than \$11 billion expenditure on motorway and truck road widening.

Road investment was also a priority in the Safe, Accountable, Flexible and Efficient Transportation Act 2003 (SAFETEA) proposed by the US Secretary of Transportation. In this draft legislation it is mandated that states spend 2 per cent of federal funds on intermodal connectors, which would be up to 90 per cent funded by federal monies. Additionally, partnerships with the private sector are also encouraged by this legislation.

#### E. STATUS OF CONVENTIONS

There are a number of international conventions affecting the commercial and technical activities of maritime transport. Box 3 gives the status of international maritime conventions adopted under the auspices of UNCTAD as of September 2004. Comprehensive and updated information about these and other relevant conventions is available on the United Nations website at [www.un.org/law](http://www.un.org/law). This site also provides links to, *inter alia*, the following organizations' websites, which contain information on the conventions adopted under the auspices of each organization — the International Maritime Organization (IMO) ([www.imo.org/home.html](http://www.imo.org/home.html)), the International Labour Organization ([www.ilo.org](http://www.ilo.org)) and the United Nations Commission on International Trade Law ([www.uncitral.org](http://www.uncitral.org)).

## Box 3

## Contracting States parties to selected conventions on maritime transport as of 30 September 2004

Title of Convention	Date of entry into force or conditions for entry into force	Contracting States
<b>United Nations Convention on a Code of Conduct for Liner Conferences, 1974</b>	Entered into force 6 October 1983	Algeria, Bangladesh, Barbados, Belgium, Benin, Bulgaria, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Chile, China, Congo, Costa Rica, Côte d'Ivoire, Cuba, Czech Republic, Democratic Republic of the Congo, Denmark, Egypt, Ethiopia, Finland, France, Gabon, Gambia, Germany, Ghana, Guatemala, Guinea, Guyana, Honduras, India, Indonesia, Iraq, Italy, Jamaica, Jordan, Kenya, Kuwait, Lebanon, Madagascar, Malaysia, Mali, Mauritania, Mauritius, Mexico, Morocco, Mozambique, the Netherlands, Niger, Nigeria, Norway, Pakistan, Peru, the Philippines, Portugal, Qatar, Republic of Korea, Romania, Russian Federation, Saudi Arabia, Senegal, Serbia and Montenegro, Sierra Leone, Slovakia, Somalia, Spain, Sri Lanka, Sudan, Sweden, Togo, Trinidad and Tobago, Tunisia, United Kingdom, United Republic of Tanzania, Uruguay, Venezuela, Zambia (78)
<b>United Nations Convention on the Carriage of Goods by Sea, 1978 (Hamburg Rules)</b>	Entered into force 1 November 1992	Austria, Barbados, Botswana, Burkina Faso, Burundi, Cameroon, Chile, Czech Republic, Egypt, Gambia, Georgia, Guinea, Hungary, Jordan, Kenya, Lebanon, Lesotho, Malawi, Morocco, Nigeria, Romania, Senegal, Sierra Leone, Syrian Arab Republic, Saint Vincent and the Grenadines, Tunisia, Uganda, United Republic of Tanzania, Zambia (29)
<b>International Convention on Maritime Liens and Mortgages, 1993</b>	Entered into force 5 September 2004	Ecuador, Estonia, Monaco, Nigeria, Russian Federation, Saint Vincent and the Grenadines, Spain, Syrian Arab Republic, Tunisia, Ukraine, Vanuatu (11)
<b>United Nations Convention on International Multimodal Transport of Goods, 1980</b>	Not yet in force – requires 30 contracting parties	Burundi, Chile, Georgia, Lebanon, Malawi, Mexico, Morocco, Rwanda, Senegal, Zambia (10)
<b>United Nations Convention on Conditions for Registration of Ships, 1986</b>	Not yet in force – requires 40 contracting parties with at least 25 per cent of the world's tonnage as per Annex III to the Convention	Bulgaria, Côte d'Ivoire, Egypt, Georgia, Ghana, Haiti, Hungary, Iraq, Libyan Arab Jamahiriya, Mexico, Oman, Syrian Arab Republic (12)
<b>International Convention on Arrest of Ships, 1999</b>	Not yet in force – requires 10 contracting parties	Albania, Algeria, Bulgaria, Estonia, Latvia, Spain, Syrian Arab Republic (7)

Source: For the current official status of these conventions see [www.un.org/law](http://www.un.org/law)