Chapter VI

TRADE AND TRANSPORT EFFICIENCY

This chapter provides an update of the latest developments in the field of multimodal transport, including cargo rail services, information on the status of the main maritime Conventions, reports on the transport segment of the Least Developed Countries Conference in Brussels and on UNCTAD training activities.

A. DEVELOPMENTS IN MULTIMODAL TRANSPORT

Regulation of multimodal transport

156. In the last quarter of the twentieth century, transport of goods experienced fundamental changes as a result of the development of new and improved means of transport and communication. One of the most important steps forward was the invention and utilization of containers. Another major advance was the development of multimodal transport where goods are carried under a single contract by different modes of transport, for example by road and sea. At the beginning of the twenty-first century, transport of goods continues to undergo substantial change. An increasing number of movements are multimodal or warehouse-to-warehouse, which can be tailor-made for transport customers and are more efficient and cost-effective than segmented unimodal transports. More transport is now combined with various value-adding logistics services, such as warehousing, consolidation and deconsolidation of different consignments, packing and unpacking of goods, customs clearance and other forwarding services. Moreover, information technology is beginning to play a major role in the creation of more efficient and multi-functional transport. Electronic data communication systems are used to exchange information, make transport contracts and “track and trace” goods during transit, and will probably also be employed to provide the functions of traditional transport documents in the near future.

157. A significant number of contemporary shipments are door-to-door transport, performed as a multimodal transport under a single transport contract and a single transport document. However, they are generally not regulated and supported by an international convention or national legislation on carriage of goods.

158. In spite of various attempts to establish a uniform legal framework governing multimodal transport no such international regime is in force. The United Nations Convention on International Multimodal Transport of Goods 1980 failed to attract sufficient ratifications to enter into force. The UNCTAD/ICC Rules for Multimodal Transport Documents, which came into force in January 1992, do not have the force of law. The Rules, being contractual in nature, will have no effect in the event of conflict with mandatory law.

159. The lack of a widely acceptable international legal framework on the subject has resulted in individual Governments and regional/subregional intergovernmental bodies taking the initiative of enacting legislation in order to overcome the uncertainties and problems which presently exist. Concerns have been expressed regarding the proliferation of individual and possibly divergent legal approaches which would add to already existing confusion and uncertainties pertaining to the legal regime of multimodal transport.

160. The proliferation of diverse national approaches has prompted a number of organizations to initiate investigations into the subject with the aim of establishing possible solutions. The document prepared by the UNCTAD secretariat entitled: “Implementation of Multimodal Transport Rules”
(UNCTAD/SDTE/TLB/2, 27 June 2001) provides an analysis of the rules and regulations on multimodal transport adopted at the national, regional and subregional level in recent years. The document concludes that the long desired uniformity of law governing the international multimodal transport of goods has not yet been achieved. The subject still occupies the attention of various international and intergovernmental organizations as well as individual Governments. The search for uniformity of law in this important area continues and clearly requires treatment in a global forum on a priority basis. The following is an extract from the document reflecting its summary and conclusions:

“… As it appears from the study, some jurisdictions have adopted the network liability system making the liability of the MTO, in case of localized damage, subject to the provisions of mandatory international convention or national law applicable to the particular stage of transport during which the loss or damage occurred. Thus, the liability of the MTO changes depending on where the loss or damage takes place. In case of non-localized damage the MTO’s liability is often made subject to general provisions of the law, which may not be easily determined in every case.

A number of legislations, following the approach of the MT Convention, adopt modified network liability system based on presumed fault or neglect. These laws derive extensively from the provisions of the MT Convention and of the UNCTAD/ICC Rules for Multimodal Transport Documents.7

In general, these laws and regulations apply to multimodal transport contracts when the place of taking in charge, or delivery, of the goods is located in the country enacting the law. That is to say that such laws and regulations have a much wider scope of application and are not confined to the particular country or the region.

The enacted laws and regulations are in general of mandatory nature and often specifically provide that any contractual stipulations to the contrary are null and void. Thus, standard terms and conditions may not be used to derogate from these laws.

Regional and subregional organizations within Latin America have overlapping memberships. Some countries are members of more than one organization. These organizations have produced multimodal transport laws and legislation for their member countries, which are not entirely uniform but vary in approach to certain essential issues. Some countries, while being members of more than one organization, have also enacted legislation differing from those enacted by member organizations. Thus, the question of which law applies in a particular case becomes an important issue.

Clearly the desire to reach uniformity of the law governing multimodal transport is far from being achieved. The present situation may be characterized by uncertainty as to the law applicable to multimodal transport operations. The lack of a uniform liability regime in force, diverse national laws and regulations including varying approaches on central issues such as the liability system, limits of liability, time-bar, etc., make it difficult for the parties to assess in advance the risks involved.

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7 It should be noted that UNCTAD/ICC Rules were prepared with a view to their incorporation into contracts for carriage of goods and were not meant to be used as a model law in enacting mandatory national laws. Particular attention would need to be given in incorporating contractual provisions such as UNCTAD/ICC Rules into mandatory national laws to ensure, that in conjunction with provisions derived from the MT Convention, they do not produce unintended consequences.
The problem also arises if the loss is not localized and the stage of transport where the loss or damage occurred is not identified. In practice, standard terms documents which include varying liability provisions are normally used, but since these are contractual, they are usually subject to mandatory and divergent national laws and regulations. The situation is even more complicated where the damage has occurred gradually and during the entire process of transportation.

The present disunified and highly unsatisfactory situation regarding cargo liability regimes in general and multimodal transport in particular, has prompted a number of organizations to initiate investigations into possible measures to improve the situation. The solutions proposed vary from the preparation of a new set of model laws, to a mandatory international convention or a non-mandatory international convention, similar to the UN Convention on the International Sale of Goods 1980, to apply by default. It is recognized that model laws applicable by parties’ contractual agreement or a non-mandatory international regime would be more widely acceptable but they would not be effective in promoting uniformity. While a mandatory international convention would, in principle, be the best means of creating international uniformity, experience has shown that international conventions are difficult to negotiate and very slow to enter into force. After twenty years, the UN Convention on International Multimodal Transport of Goods has not entered into force and is unlikely to do so in the near future, although a significant proportion of its provisions have been used in the preparation of a number of national and regional/subregional legislation.

However, the nature and scope of any possible course of action would need to be decided at a global level and with the involvement and participation of all interested parties. The adoption of individual national or regional solutions would contribute to already existing uncertainty and lack of uniformity and thus work to the detriment of the international community. International coordination and cooperation are essential in order to arrive at a widely acceptable solution”. (paragraphs 246–254)

**Trade facilitation**

161. During 2000 the International Trade Procedures Working Group of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) conducted an update of the Compendium of Trade Facilitation Recommendations. The original version of the Compendium was prepared in 1994 by UN/ECE and UNCTAD for helping those engaged in trade facilitation — the systematic rationalization of procedures and documentation for international trade.

162. The Compendium is comprehensive and analytical — recommendations are grouped under headings pertaining to trade in general, official procedures and control (e.g. customs), transport and transport equipment, movement of persons, conveyance of hazardous goods, payment procedures, use of information technology and commercial practices and international standards. The revised Compendium was approved in March 2001 and the final version has been available since June 2001, on the website http://www.uncefact.org.

**Container leasing industry**

163. World container production in 2000 reached an equivalent of 1.85 million TEU, an increase of 24.6 per cent from production levels of 1999 (see graph 9). The weakening of container demand in 1998 due to the slow down in international trade had a minor effect on the level of box production in China. By 1999, many of producers in Republic of Korea, Taiwan province of China, India, and elsewhere went bankrupt because they were unable to match Chinese prices. At European ports, for example, containers
from China were priced at $1,700–$1,800 per 20 ft container. The main drive behind the downward trend of box prices since 1995 and 1999 was low production costs, especially labour, in China. The lowest price reached in 1999 was $1,350 for ex-works 20 ft in China.

Graph 9

World container production

Source: Containerisation International, February 2001

Note: Totals include maritime containers and other types of units.

164. As table 43 indicates world container production is overwhelmingly dominated by the standard dry freight container, which expanded by 29.3 per cent in 2000. Producers outside China have now started to diversify or shift completely into other more specialized sectors, such as ISO specials, swap-bodies, or other domestic containers. European companies concentrate on the production of swaps and reefers while output has decreased almost 50 per cent since 1996. The output of reefer containers expanded by 11.1 per cent in 2000. Swap body output for 1999 more than doubled that of 1995 and increased a further 4.4 per cent in 2000.

165. The leasing industry was affected by the slow down of world trade, its subsequent recovery and uncertain prospects of late 2000. The fleet of leased boxes increased by 8.6 percent in 1998, by a healthy 21.3 per cent in 1999 and by a modest 6.0 per cent during 2000 (see graph 10). The increase in shipboard slots (see table 7 of Chapter II) and the need for repositioning boxes on unbalanced trade routes fuelled the demand for leased boxes.
Table 43

Global container production by main type for 1999 and 2000

<table>
<thead>
<tr>
<th>Container type</th>
<th>1999</th>
<th>2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dry freight standard and high</td>
<td>1 230 000</td>
<td>1 590 000</td>
</tr>
<tr>
<td>Dry freight special</td>
<td>65 000</td>
<td>64 000</td>
</tr>
<tr>
<td>Reefer</td>
<td>90 000</td>
<td>100 000</td>
</tr>
<tr>
<td>Tank</td>
<td>12 000</td>
<td>12 000</td>
</tr>
<tr>
<td>European (swapbody)</td>
<td>45 000</td>
<td>47 000</td>
</tr>
<tr>
<td>United States domestic</td>
<td>43 000</td>
<td>37 000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1 485 000</td>
<td>1 850 000</td>
</tr>
</tbody>
</table>

*Source: Containerisation International*, February 2001

Note: Some of 2000 totals are estimated.

166. Container lessors purchased large numbers of new containers during 1997 and 1998. It is estimated that about 1.5 million TEU were stocked in early 1999 in anticipation of new box prices. This resulted in over-supply of new boxes in the leasing fleet, worsened by the accumulation of idle older containers in low demand areas around the world, especially in Europe and North America. The rate of utilization fell below 81 per cent at the beginning of 1999 and further decreased to 79 per cent as of 1 January 2000.

167. At the start of 2000, about 45 per cent of the leased container fleet was on long-term rental and the remainder on master lease or off-hired. In spite of reduced purchases and lowered operating costs through the use of IT, lessors continue to operate with marginal profit because of low utilization and lease rates.

168. Graph 11 shows that both rental rates and prices of new boxes move in tandem and reached their lowest level in 1999. The daily rate of long-term leased boxes, generally new boxes, bottomed at $0.70 per day, making them a more attractive option than the master leased boxes whose rates had only dipped down to slightly more than $1.20 per day because of high fixed service costs. Both rental rates and prices of new boxes recovered slightly in 2000.
Graph 10

Total fleet of leased boxes


Graph 11

Trend in price of new boxes and rental rates

Source: Containerisation International, July 2000
The upward trend of prices for new boxes commenced in mid-2000 as price differentials started to narrow across China. The strength of this trend was still unclear, as it was caused by the increase in the cost of raw material, increased demand for new boxes fuelled by the recovery of South East Asia and consolidation of several Chinese producers.

The turnaround trend in prices for different container types is shown in graph 12. The price of a new standard dry freight 20 foot container was around $1,500 in 2000, an increase of $100 from the 1999 price. The prices of ex-works 40 foot and high-cube 40 foot have moved closer together and in the same direction since 1995. By mid-2000 the prices of ex-work 40 foot and high-cube 40 foot have further increased — roughly $160 higher from the prevailing prices a year before.

The short-term prospect for demand of leased equipment is encouraging. The average utilization rate reached 84.4 per cent at the end of 2000, a similar percentage to that at the end of 1997, but better than rates achieved in 1998 and 1999 of 79 and 81 per cent respectively. Also, the increase of prices of new containers may encourage operators to lease boxes rather than to purchase.

At present, China is the dominating producer of containers with nearly 70 per cent of the world output of standard 20 foot units. Estimates for 1999 indicate that Chinese companies met about 85 per cent of global demand for dry freight containers, equivalent to more than 1.05 million TEU. Reductions in production capacity by 10 to 15 per cent in 1999 and 2000 and this year’s high demand for new standard boxes forced Chinese factories to work overtime and took over production lines originally dedicated to manufacturing special boxes.

Graph 12

Trend of prices standard dry boxes by types

Source: Containerisation International, September 2000
Impact of information technology in transport and trade facilitation

173. The most visible impact of information technology in transport and trade facilitation is the extent in which Internet sites and portals are being used for daily activities of service providers and for commercial transactions between different parties. For example, new technology-led companies have entered the transport and shipping field to provide brokering services but had difficulty in establishing themselves as viable alternatives to existing firms. In other cases, existing companies created information technology subsidiaries to boost their own businesses.

174. In March 2000, HPH commissioned its Internet portal for complementing the port activities of the company. The portal was redesigned in early 2001 to provide logistics solutions to enable companies to move goods around the world in the simplest and most efficient way (www.line.net). Currently the portal aims to serve the community of freight forwarders, transportation buyers and suppliers, banks, insurance companies and government agencies, across all modes of transport and all types of cargo. Planning, loading and routing of transport activities, electronic documentation and online booking, track and trace features and procuring parts, supplies and provisions for vessels and ports are some of the tasks to be performed by users.

175. There are presently three major shipping portals that plan to offer on-line services for sailing schedules, tariffs, bookings requests for shippers, bills of lading, tracking and tracing and payments. INTTRA (www.inttra.com), an ecommerce system, has the backing of P&O Nedlloyd, Hamburg Süd, CMA-CGM, Maersk-Sealand, Mediterranean Shipping Company and Hapag-Lloyd. A pilot programme for tracking and tracing was launched in February 2001. Other on-line container booking ventures are GTNexus and CargoSmart.

176. GTNexus (www.gtnexus.com) was formed by a partnership with an internet company for managing container shipments (Tradiant) and shipping lines (APL, ANZDL, Canada Maritime, Cast, Contship Containerlines, Lykes Lines, TMM Lines, Hanjin, Hyundai K-Line, Mitsui OSK Lines, Senator Lines, Yang Ming and Zim). The company has integrated its e-logistics applications to the back-office systems of its ocean carrier partners. In May 2001, Hewlett Packard, the third largest United States electronics importer agreed to manage all of its global transport over GTNexus.

177. CargoSmart (www.cargosmart.com) is the e-commerce system developed by OOCL and offers all of the above services. CargoSmart has been recently joined by COSCO Container Lines and MISC. All these portals seek to offer the shipper better and continuous information as a means of attracting and retaining their business.

B. CARGO TRANSPORT SERVICES IN THE RAIL INDUSTRY

178. The transport of goods overland is a natural extension of maritime transport. In the bulk trades for crude oil and dry bulks, pipelines, rail and long distance belt conveyors are used. In the liner trades road transport is predominant, especially for short and medium distances. The use of rail services for long distance conveyance of liner goods was pioneered in the 1980s by double-stack container trains from the West Coast of North America to Chicago and other inland destinations. In addition to cost savings, the environmental benefits of using rail instead of road transport for these goods is becoming apparent.

179. Improving rail services continues to be a challenge for both industry and Government. Mergers of rail companies, privatization of services and new investments are some the avenues pursued by countries to reach better services.
Merger of rail companies in the United States

180. Earlier mergers in the United States aimed to form a relatively smooth end-to-end network with few overlaps and to make rail companies profitable. This was still the case with recent mergers such as the one undertaken in 1999 between Canadian National Railway Company (CN) and US Illinois Central, which resulted in a 120 per cent increase in traffic in one year of operation. Also the merger, in February 2000, between the Florida Branch of Rail America and RailTex of San Antonio (Texas, United States) resulted in one of the largest operators of short-line and regional railroads and was widely supported by users.

181. In contrast, the takeover of Conrail by Norfolk Southern and CSX Corporations in 1999 and the merger of Southern Pacific Rail and Union Pacific Corporations in 1996 did not go smoothly. Services were disrupted and led to massive delays with relatively high unexpected costs to shippers. Therefore, the merger proposal between Canadian National Railway and Burlington Northern Santa Fe (BNSF) submitted in February 2000 for making the largest railroad in North America received a cautious welcome.

182. Shippers strongly reacted to the unsatisfactory outcome of these large mergers to the United States Surface Transportation Board (STB). As a result STB examined rail merger policies and procedures in light of current conditions in the rail industry and decided, in March 2001, to implement a 15-month moratorium on mergers. This was later upheld by the United States Court of Appeals for the District of Columbia Circuit. Shortly thereafter CN and BNSF decided to abandon their merger deal.

183. STB viewed that the guiding principle of its merger policy should be whether the proposed merger would be in the public interest and had provisions for enhancing competition. The latter was important as the number of Class 1 railroads passed from 30 in 1976 to only 7 in 2000. Shippers considered that lack of rail competitiveness had therefore become a barrier for users to remain competitive.

Privatization for better services

184. Australia has implemented a privatization programme in its rail industry. The start of transforming the heavily regulated Government-owned rail environment into a flexible, open-access, competitive and privately-owned system took place during 1997–1999, involving the buying of V/Line Freight and Australian National by private owners. The result of such an initiative was reflected through the birth of various competing rail companies with distinct specialities, the establishment of a group of scheduled service operators, such as Lachlan Valley, Northern Rivers, and Anstrac, and the forming of supporting group of service providers in the areas of locomotives, wagons, maintenance, and crewing. The year 2000 plan was to sell three more Government run rail companies, namely FreightCorp, Westrail Freight, and National Rail to further the benefits of privatization.

185. As regards to allowing foreign players in the privatization process, the United Kingdom is considering this option. Some United Kingdom transport groups supported the move but other parties considered that national operators would be unable at this time to match the higher bids likely to be offered by the foreign companies.

Investments and expanding services

186. At the beginning of 2000, the Government of Australia allocated about $150 million for its four-year plan to upgrade and improve the rail infrastructure of the country. More than 60 per cent of the fund was allocated for New South Wales, about 20 per cent for Victoria, and less than 10 per cent each for Western and South Australia. The investment and allocation was expected to bring improvements in
scheduling and service reliability in a number of corridors. In the Melbourne and Adelaide corridor a reduction in transit time to 10 hours was expected, along the Perth/Adelaide corridor a three-and-a-half hours reduction in transit time and in the Melbourne/Brisbane (via Sydney) corridor a five hours reduction.

187. Rail investments were often made to allow national ports to reach a wider hinterland. The regional Flemish Government (Belgium) is pursuing plans to add a second rail access to the port of Antwerp. Furthermore, a new shorter northern route is envisaged to enable the port to serve inland East European destinations.

188. Investments in rail infrastructure and ancillary services are also viewed as promoting environmentally friendly transport, as an alternative to road transport across densely populated areas. In 2000, the European Commission agreed to a Dutch subsidy for the construction and expansion of two intermodal rail terminals in Rotterdam (RSC Rotterdam and European Container Terminal). The subsidy, not exceeding 20 per cent of total investments, will allow terminal operators to offer their customers lower handling prices and progressively reduce demand for road transport.

189. Also, rail traffic has increased over the existing networks, in particular intermodal services from German seaports. The first semester of year 2000, resulted in an increase of block-train services by Intercontainer-Interfrigo (ICF) which serves destinations to Hungary from Bremenhaven and Hamburg. The throughput was 19,800 TEU, an increase of 25 per cent over the same period in 1999.

190. Moreover, some countries are drafting ambitious plans to foster rail transport over wider regions. A recent study carried out for the Brazilian Minister of Transport indicated that increased rail activity in South America was inevitable. Although the increase would be highest in containerized cargo moving through Santos and Rio de Janeiro, it has implications for the trading partners of Mercosur. Similarly, China has placed the development of the Eurasian Continental Land-Bridge, highest on its priority list. This is a 12,500 kilometre route linking the ports of Lianyungang (China) and Rotterdam (the Netherlands).

C. STATUS OF CONVENTIONS

191. 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 at end-June 2001. Comprehensive and updated information about these and other relevant conventions is available on the Internet. For instance the International Maritime Organization (IMO) maintains a website with the status of its Conventions on http://www.imo.org/home.html. Similarly, the labour–related conventions are available on the website of the International Labour Organisation (ILO) http://ilo.org and more specifically on http://ilolex.ilo.ch:1567/public/english/docs/convdisp.htm. Transport-related Conventions are found in the website of the United Nations Commission on International Trade Law (UNCITRAL) http://www.uncitral.org/english/texts/transport/transportindex.htm.
### Box 3

**Contracting States of selected conventions on maritime transport as at 1 August 2001**

<table>
<thead>
<tr>
<th>Title of Convention</th>
<th>Date of entry into force or conditions for entry into force</th>
<th>Contracting States</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Nations Convention on a Code of Conduct for Liner Conferences, 1974</td>
<td>Entered into force 6 October 1983</td>
<td>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, Sierra Leone, Slovakia, Somalia, Spain, Sri Lanka, Sudan, Sweden, Togo, Trinidad and Tobago, Tunisia, United Kingdom of Great Britain and Northern Ireland, United Republic of Tanzania, Uruguay, Venezuela, Yugoslavia, Zambia (78)</td>
</tr>
<tr>
<td>United Nations Convention on Conditions for Registration of Ships, 1986</td>
<td>Not yet in force — 40 contracting parties with at least 25 per cent of the world’s tonnage as per annex III to the Convention</td>
<td>Bulgaria, Côte d’Ivoire, Egypt, Georgia, Ghana, Haiti, Hungary, Iraq, Libyan Arab Jamahiriya, Mexico, Oman</td>
</tr>
</tbody>
</table>

*Source: For official status, see www.un.org/law/*
D. TRANSPORT AND DEVELOPMENT IN LEAST DEVELOPED COUNTRIES

192. The Third United Nations Conference on the Least Developed Countries (LDC III) took place in Brussels (Belgium) in May 2001 and included a session on transport and development. The development of a coherent national and international transport network is necessary to facilitate commercial relations between surplus and shortage areas. Transport services are essential elements to integrate different regions within a country and with neighbouring countries as well as to provide access to marketplaces.

193. Limited transport availability and high costs hamper the international trade of the 49 LDCs, which export low-value goods with limited potential for differentiation. In 1999, total freight payments for LDC imports were estimated at $5.0 billion for a total c.i.f. import volume of $27.5 billion. The existence of a functioning transport system is also a prerequisite for foreign direct investment to be channelled to a country. For LDCs, inward flows stood at only 0.3 per cent of world flows in 1998.

194. The creation of public-private sector partnerships in a number of LDCs has improved the efficiency of transport and provided funding for transport infrastructure development. For example, recent private sector involvement in the management of a container terminal in an east African LDC has resulted in the doubling of cargo handling productivity. Government should encourage the establishment of these partnerships and promote regular public-private dialogue and consultations as a means of improving transport efficiency.

195. Transport is particularly important for the trade-based development process of landlocked LDCs. The establishment of regional transit corridors and the adoption of common rules and standards are important to improve transit systems. Landlocked and transit developing countries have concluded a number of bilateral and regional agreements designed to provide a legal framework for transit operations, although much work and attention is needed to implement these agreements.

196. Governments must coordinate the provision of ports, terminals, roads and other infrastructure for international trade and refrain from levying excessive taxes or charges on transit movements. Upgrading port and transport management standards and practices will improve the quality and reliability of transport services. The application of information technology and management training are relatively low cost means to improve efficiency. Presently, transport operators in nine LDCs have benefited from UNCTAD’s Advance Cargo Information System (ACIS) to improve cargo and transport resource management.

197. In addition to the above and in parallel with international support, LDC Governments will need to focus on transport efficiency and take steps to streamline administrative procedures and strengthen the commercial capabilities of national providers of transport services. This will make the best use of existing infrastructure and thus reduce infrastructure-funding requirements and trigger the economic development of LDCs through increased transport efficiency.

E. OTHER DEVELOPMENTS

198. The availability of local training capacity to allow organizational change that contributes to efficient trade supporting services continues to be a main UNCTAD objective. The TRAINMAR programme was established in the 1980s to set up and strengthen local training institutions that provide quality training in maritime transport well adapted to local conditions. The use of modern technology and cooperation between countries were also features of the programme. Currently, activities of the programme are carried out at two levels: those of the local institutes that form the global TRAINMAR network and those that are produced specifically by the UNCTAD secretariat dedicated to supporting the network.
199. The network members are responsible for the provision of training services responding to local requirements and, in particular, the development and delivery of training courses. About 50 individual training institutes benefit from association with the TRAINMAR programme and, every year, provide some 10,000 training places on courses made available and exchanged through the network. Some institutes train up to 1,000 persons across the full range of courses they offer.

200. TRAINMAR has been active in Africa since 1980 and the programme entered a new phase with the development of the Port Certificate Package (see box 4). In the Asia/Pacific region, there are centres in the following countries: Egypt, Sri Lanka, India, Nepal, Thailand, Malaysia, the Philippines and Papua New Guinea. A regional electronic information exchange system has been created and is being maintained through the contribution of Campion College in Kathmandu (Nepal) (www.geocities.com/trainmar). Funding is being sought for upgrading local training capacity, focusing especially on freight forwarding. In 2000, 61 courses focusing mainly on port management training and transport logistics were delivered in the region for 859 participants. In early 2001, it was agreed to integrate into the region a series of courses available from the South American centres. Training of trainers will enable training sustainability.

201. In South America the centres are organized in the regional network ATAS which has developed a Specialization Programme in International Transport and Port Management that is now part of regular university specialization programme in Argentina and Uruguay. During 2000, more than 25 course deliveries for 800 professionals were organized. The six centres of the Central America network organized 105 courses for 1,552 participants, mostly coming from the public port sector of Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama. Courses dealing with Information and Communication Technologies in ports were also recently delivered as part of implementing trade facilitation recommendations in Central America. In the Caribbean Basin network a total of 200 seminars were offered for around 2,500 professionals, mainly from the private sector. A large volume of the activities of the Caribbean Basin network concentrates on its diploma programme on “Logistics of International Transport of Goods” (TRANSLOG) now part of the regular university programme in Panama, Mexico and Colombia. Two new centres have joined this network, in Manzanillo (Mexico) and Santo Domingo (Dominican Republic).

202. The ILO’s Portworker Development Programme (PDP) has started to be delivered on a regular basis. It was translated into Spanish by ATAS in 1999 and a core of professionals has been trained as potential instructors for each of the 30 modules of PDP. In Central America, a team of PDP instructors was trained in each country and training need analysis was conducted to develop training relevant to the port modernization in the subregion.

203. In the Black Sea region activities concentrated in Romania and Georgia. A total of 19 courses for 343 professionals were carried out as part of the project for the Modernization of the Port of Constanza (Romania) funded by the Government of Germany. Ten courses on port management techniques and the role of ports in international trade were delivered in English by foreign instructors and the remaining nine courses were delivered in Romanian by local instructors after having been adapted and translated from Spanish or English. In Georgia training activities concentrated on production and translation of training materials covering basic port functions and management techniques into Russian, as defined in the training need analysis undertaken in 1999. In a joint effort with UN/ECLAC, a workshop on Port Modernization was organized in November 2000 for 35 Georgian officials at the Batumi State Maritime University (BSMA). This event officially launched training deliveries for the Georgian port community.

204. The secretariat continued its support to member centres to maintain, improve and extend their training services, often through cooperation. A course on flexible training methods has been developed to ensure that centres can respond effectively to business needs for up-to-date training. Course materials are
available on the Internet, CD-ROM and printed. Phase One of the delivery was through distance learning, and Phase Two brought the trainers together for a week-long workshop at the APEC Antwerp/Flanders Port Training Center. Other network training programmes of the United Nations have requested authority to use this course. Collaboration between the Multimedia Center of the Arab Academy for Science and Technology and Maritime Transport in Alexandria (Egypt) and ATAS for CD-ROM-based course on Environmental Management in Ports was also fostered by the secretariat. Finally, contacts with Government representatives in Geneva were conducted by the secretariat to provide Governments with information on training services available and to encourage them to use those services as part of their plans for improving trade. In October, a Global Strategic Action Plan was prepared through Internet consultation and a workshop for participants from all regions was held in Frankfurt, Germany.

Box 4

UNCTAD Port Certificate

In 1993 an UNCTAD Intergovernmental Group of Experts on Ports proposed the creation of a Port Management diploma for managers of the port community. Following these recommendations, the UNCTAD secretariat explored ways of implementing a training course on port management aimed at enhancing capacities of developing countries to better master the new challenges their ports would have to face.

With the financial support of Belgium, the training package of the "Port Certificate" was produced along with its relative audio-visual supports. The 210-hour course, based on the TRAIN X methodology, has been prepared in French and comprises eight modules which cover all issues that a port manager is required to master to efficiently perform his tasks and respond to future challenges.

As a result of the pilot phase that was organized with three African ports (Dakar, Libreville and Cotonou), two deliveries were conducted — 93 trainees successfully completed the course. In fact, managers generally follow the modules over a period of one year to obtain the Certificate, which is awarded only to those participants having successfully presented an individual dissertation following completion of their training.

An evaluation of the impact of this pilot experience was carried out recently by a team of three consultants whose report was submitted in May 2001. This evaluation acknowledged that the pedagogical material is of high quality and that it matches current needs of the port community in terms of requirements in the field of international trade and transport. In fact, the implementation of this acquired knowledge in the human resources policies of the enterprises involved, has lead to a visible improvement of their daily activities. Nowadays, training sessions are being delivered for African trainers, thus facilitating the sustainability of the scheme. Globally, this is a new approach based on a real partnership among all the parties involved. Also, the cost-sharing arrangement between the three ports involved and the European counterpart (Belgium) is an example of the shift in the traditional donor/beneficiary relationship.

The UNCTAD Port Certificate material has been translated into English and Portuguese, and a pilot phase using distance-learning tools will soon be implemented with the participation of Comoros, Tunisia and Senegal. An extension of the traditional form of training is also scheduled for other developing and least developed countries in the near future, on the basis of requests from ports and communities interested in the implementation of this programme.

Complete updated information is available through the relevant website: [www.unctad.org/trainfortrade](http://www.unctad.org/trainfortrade).