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Chapter V: Port Development

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Chapter V

PORT DEVELOPMENT

This chapter covers container port throughput for developing countries, institutional changes in ports and port reform in South America, and port tariff regulation.

A. CONTAINER PORT TRAFFIC

109. Table 42 gives the latest available figures on world container port traffic in developing countries and territories for 1996 and 1997. The world growth rate for container port throughput (number of movements measured in TEUs) decreased to 8.6 per cent in 1997 from 9.8 per cent in 1996, which is less than the average annual containerized trade growth of 10 per cent experienced since the late 1980s. The throughput for 1997 was over 163.74 million TEUs, which is an annual increase of slightly over 13.0 million TEUs.

110. The rate of growth for developing countries and territories was 9.3 per cent in 1997 with a total throughput of 83.3 million TEUs (accounting for slightly more than 50 per cent of total throughput), which was a decrease compared to the 10.2 per cent growth rate in 1996. Countries with double digit growth in 1996 and 1997 were the Republic of Korea, Malaysia, Mexico, Argentina, Chile, Honduras, Bangladesh, Kuwait and Morocco. The extraordinary growth that both Singapore and Hong Kong have been maintaining slowed, but it was still over 9 per cent, and gave an annual growth of over 1 million TEUs for each port. The growth in developing countries is uneven from year to year, owing sometimes to strong fluctuations in trade and sometimes to improved data or lack of data.

111. Initial figures for 1998 are available for the main ports, including those of developing countries and of the socialist countries of Asia, with seven ports from these countries ranking among the top 20 container ports. Their throughput is shown in table 43, together with the annual percentage increase for each of the past two years. In 1998, Singapore became the world leader in total number of movements, overtaking Hong Kong, China which had a growth rate of only 0.6 per cent. This low rate is due to the fact that China is now shipping more of its traffic through its container terminals on the mainland rather than through Hong Kong.

B. INSTITUTIONAL CHANGE

112. Private firms are forming partnerships with the public sector to develop and manage container-handling facilities. Concessions and build-operate-transfer agreements (BOTs) are rapidly growing where public and private investors share financial risks. Labour is an impediment to partnerships because it resists institutional changes, as frequently the new organization requires less staff to operate the concession. Events in Chile and India have illustrated labour=s reluctance to accept these changes and at the same time their power to delay developments in the privatization procedures.

113. In 1998, the International Association of Ports and Harbors (IAPH) did a global survey of its members, and received an 80 per cent response, in order to determine the extent of the private sector=s involvement in the port industry. The vast majority of the 188 respondents, 78 were from developing countries, said that most port assets were owned by the port authority. The exception was for handling equipment for bulk terminals, where ownership was equally divided between the public and private sectors. Approximately 25 per cent of handling equipment at container and break-bulk terminals was provided and owned by private companies. The majority of port authorities were fully responsible for navigational aids, harbour master services, dredging, warehousing and port information services. Other public and private bodies provided most of the services such as pilotage, stevedoring, towage, ships agents, land transport and other shipping services. One third of the port authorities provided stevedoring

Table 42
Container port traffic of 26 developing countries and territories in 1997 and 1996 (in TEUs)

Country or territory	Container traffic 1997 [a]	Container traffic 1996	Percentage change 1997/1996	Percentage change 1996/1995
Hong Kong, China	14 667 231	13 460 373	9.0	13.6
Singapore	14 135 300	12 943 900	9.2	13.9
Taiwan Province of China	8 516 485	7 866 432	8.3	7.4
Republic of Korea	5 838 876	5 077 538	15.0	17.7
China	5 697 274	5 438 046	4.8	15.1
United Arab Emirates	3 653 578	3 750 359	-2.6	9.7
Malaysia	2 975 898	2 549 641	16.7	18.9
Philippines	2 507 473	2 338 274	7.2	-15.7
Thailand	2 100 000	2 052 296	2.3	10.8
Indonesia	1 920 363	1 764 392	8.8	7.1
South Africa	1 464 279	1 431 096	2.3	24.3
India	1 803 342	1 508 428	19.6	8.3
Brazil	1 533 786	1 424 424	7.7	22.8
Sri Lanka	1 687 184	1 356 301	24.4	5.8
Saudi Arabia	1 296 941	1 148 093	13.0	-7.9
Egypt	993 564	911 075	9.1	-4.8
Mexico	902 874	683 124	32.2	15.2
Panama	773 968	617,182	25.4	7.8
Argentina	720 247	530 336	35.8	29.3
Chile	709 103	633 124	12.0	37.0
Malta	704 427	632 048	11.5	0.5
Pakistan	505 413	555 347	-9.0	7.3
Jamaica	496 882	478 100	3.9	16.6
Côte d'Ivoire	416 111	309 713	34.4	-52.3
Cyprus	402 700	564 000	-28.6	31.6
Venezuela	385 107	245 237	57.0	1.7
Ecuador	375 894	323 377	16.2	5.6
Peru	372 351	335 795	10.9	-30.0
Honduras	365 864	316 522	15.6	10.0
Bangladesh	300 478	263 849	13.9	10.0
Lebanon	277 625	259 247	7.1	33.3
Iran, Islamic Republic of	254 454	244 450	4.1	1.4
Kuwait	*250 000*	*225 000*	11.1	25.6
Kenya	*240 000*	*220 000*	9.1	37.5
Morocco	236 034	213 014	10.8	35.9
Costa Rica	228 960	212 052	8.0	10.7
Trinidad and Tobago	209 531	200 387	4.6	30.1
Nigeria	*200 000*	180 190	11.0	-1.0
Uruguay	201 964	164 915	22.5	-2.2
Ghana	*172 300*	*152 400*	13.1	1.5
Guam	162 706	155 311	4.8	8.0
Jordan	161 000	139 317	15.6	9.9
Syrian Arab Republic	*150 000*	*135 000*	11.1	-44.0
Dominican Republic	*150 000*	*135 000*	11.1	9.0
Papua New Guinea	149 874	130 918	14.5	-3.8
Martinique	141 650	134 110	5.6	13.1
Total	81 409 091	74 409 733	9.4	- -
Other reported [b]	1 863 926	1 771 151	5.2	- -
Total reported [c]	83 273 017	76 180 884	9.3	10.2
World total	163 744 214	150 752 558	8.6	9.8

Sources:Derived from information contained in *Containerisation International Yearbook, 1999* and from information obtained by the secretariat directly from terminal operators or port authorities.

[a] Data in italics are estimates made by the UNCTAD secretariat.

[b] Comprising developing countries and territories where less than 140,000 TEU per year were reported or where a substantial lack of data was noted.

[c] Certain ports did not respond to the background survey. While they were not amongst the largest ports, total omissions may be estimated at 5 to 10 per cent.

Table 43
Top 20 container terminals and their throughput, 1998 and 1997
(in TEUs)

Ranking 1998	Ranking 1997	Port	1998 TEU	1997 TEU	Change 1998	Change 1997
1	2	Singapore	15 100 000	14 135 000	6.8	9.1
2	1	Hong Kong, China	14 650 000	14 567 000	0.6	7.4
3	3	Kaohsiung	6 271 000	5 693 340	10.1	1.9
4	4	Rotterdam	6 030 000	5 445 000	10.7	6.8
5	5	Busan	5 320 000	5 233 880	1.6	5.0
6	6	Long Beach	4 100 000	3 504 600	17.0	11.8
7	7	Hamburg	3 560 000	3 337 480	6.7	7.7
8	9	Los Angeles	3 383 000	2 959 710	14.3	13.7
9	8	Antwerp	3 278 000	2 969 200	10.4	11.9
10	11	Shanghai	3 050 000	2 530 000	20.6	31.1
11	10	Dubai	2 804 000	2 600 100	7.8	8.6
12	12	New York	2 519 000	2 456 890	2.5	11.5
13	13	Tokyo	2 450 000	2 382 630	2.8	5.9
14	15	Felixstowe	2 360 000	2 251 380	4.8	4.0
15	-	Gioia Tauro	2 121 000	1 448 400	46.4	153.2
16	14	Yokohama	2 047 000	2 328 000	-12.1	-12.9
17	17	Kobe	1 944 000	2 056 750	-5.5	52.9
18	20	Tanjung Priok	1 898 000	1 908 700	-0.6	5.0
19	-	Bremerhaven	1 850 000	1 703 000	8.6	1.0
20	-	Algeciras	1 825 000	1 537 630	18.7	13.2

Source: *Port Development International*, January 1999.

and cargo handling services, one third of these services was provided by private companies and the remaining one third by other public organizations. Private companies have become increasingly involved in port operations a trend that is expected to continue over the next few years.

114. The worldwide alliance of container ship owners has resulted in the use of larger ships, the development of feeder networks with hub ports and a permanent demand for higher productivity and lower rates. The development of the hub and feeder network has also led to the emergence of multi-port operating companies, such as Hutchinson Port Holdings, P&O Ports, PSA Corp and Stevedoring Services of America, which operate dozens of terminals around the world. Advances in communications and information technology allow terminal operators to increase their productivity through better planning and reduced dwell time of cargo in the port.

115. The European Commission was investigating whether the planned sale of 50 per cent of the shares in European Container Terminals (ECT) to Hutchinson Port Holdings (HPH) was an obstruction to free market forces. Shipowners and competing container terminal operators claimed that ECT's position would be too dominant in northwest Europe, with HPH as a major shareholder and

the city council through the Rotterdam Municipal Port Management (RMPM) serving as both port manager as well as an ECT shareholder. On 30 July 1999, HPH and RMPM advised the Commission they had decided to abandon this transaction and HPH will only hold a 35 per cent interest. RMPM will also hold 35 per cent with the remaining 30 per cent being held by financial institutions (28 per cent) and employees (2 per cent). HPH presently operates in 17 ports including Bahamas, China, Indonesia, Myanmar and Panama. Other major terminal operators are P&O Ports (four terminals in Australia and others in Argentina, China, Hong Kong (China), India, Indonesia, New Zealand, Pakistan, Philippines, Russia, Sri Lanka, Thailand and United Kingdom); PSA Corp (in addition to four terminals in Singapore, it operates seven others in Brunei, China, India, Italy, Portugal and Yemen); and International Container Terminal Services, Inc. (ICTSI) (in addition to Manila, ICTSI operates two terminals in Argentina, two in Mexico, and one each in Pakistan and Saudi Arabia). Stevedoring Services of America (SSA) and Ceres Terminals operate mostly in the United States, but have terminals also in Panama (SSA), Canada and Ukraine (both Ceres). With the recent merger of parts of Sea-Land to A. P. Moller, Maersk/Sea-Land now operates 24 terminals, and CSX Corporation only nine.

C. PORT REFORM IN SOUTH AMERICA

116. National ports have not developed fast enough to keep up with the economic growth in South America. Only in the last three or four years have governments taken steps to handle the growing traffic. Port reform and private participation have been accepted but the rate of implementation varies greatly from country to country.[17] Privatization in Chile began in 1981, but is only now entering the final phase with the dismantling of its national port authority, Emporchi. Venezuela started privatization in 1991, and it has not yet been fully implemented. In Uruguay, steps towards privatization were started in 1992, but there have been considerable delays in awarding the concession for the container terminal. Argentina begain to privatize in 1993; its largest port, Buenos Aires, is completed and work is progressing in other ports. Colombia embarked on its reform the same year; the management and operation of all its ports have been decentralized. Brazil started its reform in 1995, but its labour issues have not yet been resolved.

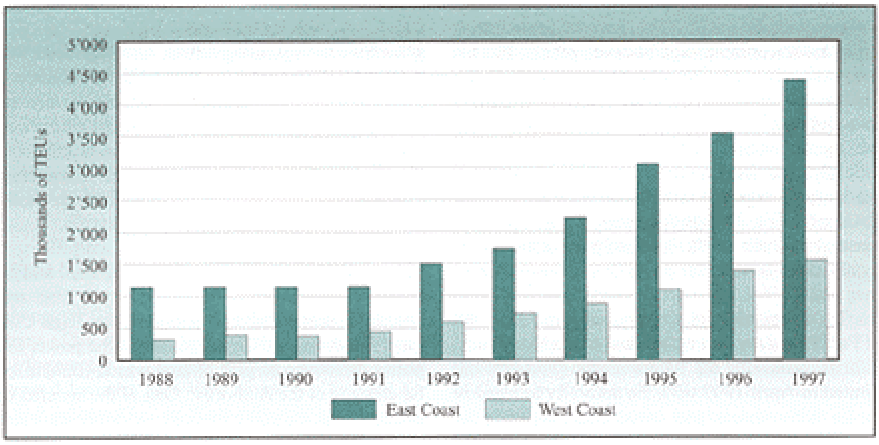
117. Ports on the South American continent still face a number of problems. Most ports cannot handle large vessels or large numbers of containers and customs delays are common.[18] Poorly maintained inland transport infrastructure is causing congestion and ports in the centres of cities have no room for expansion. Venezuela's four main ports - Puerto Cabello, La Guaira, Guanta and Maracaibo - handle 80 per cent of its imports and exports. In the year 2000, more than 65 per cent of its general cargo will be containerized but no port is capable yet of handling the container ships and there are no berths that can accommodate the weight of a ship-to-shore gantry crane. Puerto Cabello has invested in 12 mobile cranes which can be accommodated weight-wise, have a delivery and installation time of 11 to 14 weeks and cost about $3 million. Colombia's four main public ports - Cartegena, Barranquilla, Santa Marta and Buenaventura - have been transferred to the States and municipalities in which they are located, and, in turn, rent the ports to regional port companies on a 20-year non-renewable lease. These companies contract operators to manage the facilities. From 1993 to 1998, these ports reduced their operating costs by 65 per cent and increased productivity of container vessels from 10 to 40 containers per ship hour and that of general cargo ninefold to 4,500 tonnes per day. Ship time in port dropped from an average of 10 days to 15 hours and total tonnage more than doubled to 10.5 million tonnes. The port of Cartegena plans to have five post-Panamax gantries and 12 rubber tyred gantries in operation by the year 2000.

118. In Chile, the State-owned port authority, Emporchi, is being dismantled and its functions divided among 10 competitive port companies that will be responsible for the development and maintenance of infrastructure. The private sector is being given long-term operating concessions. The main container ports are Valparaiso and San Antonio, which handled 270,000 and 370,000 TEUs, respectively, in 1998. As land for expansion is limited in both these ports, the Government is promoting the construction of a new mega port, with private funds, 1,440 kilometres north of Santiago and close to Chile's largest copper-producing region. In Uruguay, there have been three attempts to grant a BOT concession for the Montevideo container terminal. Lack of political will and transparency has resulted in the successful bids being rejected in each attempt, which has raised doubts in the minds of foreign investors as to the seriousness of the Government in granting these concessions.

119. Argentina's port-reform process, which started in 1991, has increased productivity in the port of Buenos Aires by 530 per cent and reduced the workforce from 8,000 to 1,600. Three private operators have concessions for handling containers in the port and there is another operator outside the port area controlled by the Buenos Aires port authority. In 1998, these four terminals handled 1.25 million TEUs. In Brazil, the three main ports are Santos, Rio de Janeiro and Sepetiba. The law for modernizing ports was passed in 1993, but it has been difficult to implement it. Labour interests in the port of Santos strongly influenced local politicians which resulted in a lengthy tendering process. Finally, in July 1997, the authority to conduct the tender process was granted to the National Economic and Social Bank of Brazil. Within three months, a 25-year operating concession was auctioned off in public and after two months the operator had increased productivity by 40 per cent. By end-1999, the box handling tariff will have been reduced to $150 from the pre-auction tariff of $500. Since employers are not free to negotiate stevedoring arrangements, there are still some labour problems even though the number of dock workers in Santos has been reduced from 12,000 to 1,000. Because of South America? s major port reform, the long-term growth prospects for the industry are very good. Graph 9 shows how container traffic has increased in the past 10 years on the two coasts of South America.[i]

Graph 9

Growth of container throughput in South America[a]



Sources: Based on information from *Containerisation International Yearbook* (various issues) and UNCTAD secretariat estimates.

[a] On the east coast this includes data from the ports of Colombia, Venezuela, Brazil, Uruguay and Argentina and for the west coast Colombia (Buenaventura), Ecuador, Peru and Chile.

D. PORT TARIFF REGULATION

120. One of the principles of privatization proposed by the UNCTAD secretariat is that once awarded a concession, the private or private/public operator should be free to set tariffs, if no de facto monopoly exists. At the same time, the operator is obliged to meet all legal and fiscal requirements, and to pay corporate taxes. However, if a monopoly exists or would be created by the concession, the government should set the ceiling on the basis of the tariffs proposed in the private company's bid.

121. In its economic reforms, the Government of India has stressed liberalizing the economy in the last five years and decided to open up the port sector for privatization. This decision was taken not merely because of a lack of resources for developing additional port capacity, but also to introduce competition between port trusts and private operators, and among the port trusts themselves.

122. Eleven major ports handle over 80 per cent of India's import/export traffic. The Government believed, in light of India's present stage of development, that the economy should not be exposed to any traffic destabilization in these ports and recommended a cautious approach until the pace of the privatization picked up and open market conditions stabilized. Accordingly, the Government proposed to set up a neutral body to regulate tariffs and so guard against private monopolies. The (prospective) private operators also seemed to prefer tariffs regulated by an autonomous body rather than by the port trusts or the Government.

123. In the event, the Government amended the Major Port Trusts Act and established a regulatory body. The Tariff Authority for Major Ports (TAMP) was constituted in April 1997 with the authority to regulate tariffs for both vessels and cargo and also rates for leasing of properties. This body is made up of one full-time Chairman and two part-time members.

124. The Authority's jurisdiction is restricted to matters relating to tariffs in major ports and their BOT operators. It has no jurisdiction over the 'safety' and 'conservancy' aspects of port management in major ports, nor over public or private minor ports. The Authority is expected to streamline the tariff structure and the tariff-setting process. The approval of rates and the conditionalities of their application will allow the Authority to make operations more efficient. These power will provide the leverage required to have the port trusts make improvements. The regulation of tariffs is meaningful only if it improves the quality of service.

125. The Authority is expected to approve rates and conditionalities for leasing port property to ensure that it maximizes income generation so that tariffs do not have to recover all the fixed costs. It is an autonomous quasi-judicial body and is expected to introduce objectivity and transparency. Towards this end, it has decided to prepare regulations governing the modalities of its operations, its theories, principles and approaches.

126. A workshop was organized to develop guidelines for regulating tariffs. Consultations with the major ports and the Government to finalize these guidelines and approve these regulations are still in progress. Client orientation is an aspect emphasized by the Authority. Sessions are organized at the port level directly or through the Chamber of Commerce and Industry and joint hearings are held to hear any objections to proposals for changing tariffs.

127. The Authority's decisions are final and cannot be appealed back to the Authority. For redress, aggrieved parties have to approach the High Court of Law. However, the Government has the power to issue policy directives on port pricing which could affect the functioning of the Authority. One of the benefits of this system is that the port trusts can no longer automatically pass on cost increases to users and thus have been forced to introduce methods to improve operations.