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CHAPTER 5.

Port Development

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Chapter 5

PORT DEVELOPMENT

This chapter covers container port throughput for developing countries, improving port performance, institutional changes in ports and security measures in ports.

A. CONTAINER PORT TRAFFIC

Table 42 gives the latest available figures on reported world container port traffic in developing countries and territories for the period from 2000 to 2002. The world growth rate for container port throughput (number of movements measured in TEUs) increased by a remarkable 9.2 per cent in 2002. This was almost double the growth of the previous year — 5.2 per cent — and reflects the recovery of liner traffic during 2002. The throughput for 2002 reached 266.3 million TEUs, an annual increase of 22.5 million TEUs, from the level of 243.8 million TEUs reached in 2001.

The rate of growth for developing countries and territories was 9.3 per cent, with a throughput of 103.6 million TEUs, which corresponds to 38.9 per cent of world total throughput. The rate of growth was considerably higher than that reached in 2001 — 4.5 per cent — when developing countries' throughput was 94.7 million TEUs. Countries with double-digit growth in 2001 and 2000 were India, the Islamic Republic of Iran, Malaysia, Saudi Arabia and Venezuela — a total of five countries, less than the number recorded for the years 2001 and 2000. The growth rate in developing countries is uneven from year to year, owing sometimes to strong fluctuations in trade and sometimes to improved reporting of data or lack of data for some years.

Figures for 2003 are available for the leading 20 ports of the world that handle containers and the results are set out in table 43. Container throughput in those ports reached 144.9 million TEUs after recording a double-digit growth rate in the last two years. There were 11 ports of developing countries and territories and socialist countries of Asia on the list, with the remaining nine located in market-economy countries. Of the latter, there were five in Europe, three in the United States and one in Japan. Eleven ports were located in east Asia, five in China and one in west Asia, while five were located in Europe and the remaining three in North America.

Hong Kong (China) maintained its leadership, with an 8.8 per cent increase, followed by Singapore, which recorded a slightly lower growth rate of 8.7 per cent. Mainland Chinese ports fared particularly well: Shanghai moved up one position to occupy the third place on the list, with an outstanding 29.1 per cent increase; Shenzhen fared even better — it moved up two places after traffic expanded at the almost incredible rate of more than 40 per cent in two consecutive years; and Qingdao moved from 15th to 14th place after traffic increased by more than 20 per cent in two consecutive years. Kaoshiung dropped one place to sixth place after growing at a modest rate of 3.8 per cent, and Busan, hit by a typhoon, moved down on the list by two places after traffic expanded at the respectable rate of 9.7 per cent.

Other ports recording gains were Dubai and Tokyo: each moved up two places in the table. There were two new entries — Tanjung Pelepas and Laem Chabang — which replaced Manila and Felixstowe. Among the ports moving down the list were Gioia Tauro, down three places, Bremerhaven and Long Beach, down two places, and New York, down one place. The remaining ports, namely Rotterdam, Los Angeles, Hamburg, Antwerp and Klang, maintained their respective ranks. These top 20 ports accounted for 48.0 per cent of the world container port traffic for 2002 (45.4 per cent in 2001).

Table 42

Container port traffic of 50 developing countries and territories in 2002, 2001 and 2000

(TEUs)

Country or territory	TEUs 2002	TEUs 2001	TEUs 2000	% change 2002/2001	% change 2001/2000
Hong Kong (China)	19 140 000	17 900 000	18 100 000	6.9	-1.1
Singapore	16 800 000	15 520 000	17 040 000	8.2	-8.9
Republic of Korea	11 542 733	9 827 221	9 030 174	17.5	8.8
Malaysia	7 541 725	6 224 913	4 642 428	21.2	34.1
United Arab Emirates	5 872 244	5 081 964	5 055 801	15.6	0.5
Indonesia	4 539 884	3 901 761	3 797 948	16.4	2.7
Thailand	3 800 929	3 387 071	3 178 779	12.2	6.6
Philippines	3 270 796	3 090 952	3 031 548	5.8	2.0
India	3 242 989	2 764 757	2 450 656	17.3	12.8
Brazil	2 923 120	2 323 801	2 413 098	25.8	-3.7
Saudi Arabia	1 930 051	1 676 991	1 502 893	15.1	11.6
Sri Lanka	1 764 717	1 726 605	1 732 855	2.2	-0.4
Mexico	1 561 929	1 358 136	1 315 701	15.0	3.2
Oman	1 415 498	1 331 686	1 161 549	6.3	14.6
Malta	1 288 775	1 205 764	1 082 235	6.9	11.4
Panama	1 248 369	2 376 045	2 369 681	-47.5	0.3
Egypt	1 233 133	1 708 990	1 625 601	-27.8	5.1
Chile	1 147 172	1 080 545	1 253 131	6.2	-13.8
Venezuela	1 078 000	924 119	674 558	16.7	37.0
Jamaica	1 065 000	983 400	765 977	8.3	28.4
Pakistan	965 610	878 892	159 919	9.9	449.6
Bahamas	860 000	570 000	572 224	50.9	-0.4
Iran, Islamic Republic of	808 821	618 195	415 382	30.8	48.8
Colombia	603 070	577 041	791 588	4.5	-27.1
Côte d'Ivoire	579 055	543 846	434 422	6.5	25.2
Argentina	500 171	663 811	1 144 834	-24.7	-42.0
Ecuador	462 509	414 355	414 104	11.6	0.1
Dominican Republic	430 561	487 827	566 479	-11.7	-13.9
Yemen	388 436	377 367	248 177	2.9	52.1
Trinidad and Tobago	385 233	352 758	282 487	9.2	24.9
Morocco	375 837	346 724	328 808	8.4	5.4
Guatemala	360 161	322 136	495 809	11.8	-35.0
Algeria	338 152	311 111	267 530	8.7	16.3
Lebanon	298 876	299 400	n.a.	-0.2	n.a.
Uruguay	292 962	301 641	287 298	-2.9	5.0
Jordan	277 307	241 037	n.a.	15.0	n.a.
Ghana	270 878	221 468	n.a.	22.3	n.a.
Syrian Arab Republic	257 586	222 698	n.a.	15.7	n.a.
Cyprus	233 400	235 100	257 020	-0.7	-8.5
Cuba	214 760	258 264	185 055	-16.8	39.6

Table 42 (continued)

Country or territory	TEUs 2002	TEUs 2001	TEUs 2000	% change 2002/2001	% change 2001/2000
Mauritius	198 177	161 574	157 420	22.7	2.6
Djibouti	178 405	147 908	157 990	20.6	-6.4
Senegal	164 341	136 076	133 325	20.8	2.1
Reunion	162 636	159 006	154 394	2.3	3.0
United Republic of Tanzania	149 223	135 632	133 660	10.0	1.5
Martinique	146 771	140 034	140 062	4.8	0.0
Cameroon	146 737	139 587	n.a.	5.1	n.a.
Guam	140 990	140 158	132 689	0.6	5.6
Sudan	126 236	120 701	94 182	4.6	28.2
Slovenia	114 863	93 187	85 742	23.3	8.7
Total	102 838 828	94 012 255	90 265 213	9.4	4.2
Other reported [a]	738 828	722 544	356 078	2.3	102.9
Total reported [b]	103 577 656	94 734 799	90 621 291	9.3	4.5
World total	266 337 242	243 814 545	231 689 448	9.2	5.2

Source: Derived from information contained in *Containerisation International Yearbook 2003* and from information obtained by the UNCTAD secretariat directly from terminal operators and port authorities.

[a] Comprises developing countries and territories where less than 95,000 TEUs per year were reported or where a substantial lack of data was noted.

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

Table 43

Top 20 container terminals and their throughput, 2003-2001

(millions of TEUs and percentage change)

Port	TEUs 2003	TEUs 2002	TEUs 2001	2003/2002	2002/2001
Hong Kong (China)	20.82	19.14	17.80	8.78	7.53
Singapore	18.41	16.94	15.57	8.68	8.80
Shanghai	11.37	8.81	6.33	29.06	39.18
Shenzhen	10.7	7.61	5.08	40.60	49.80
Busan	10.37	9.45	8.07	9.74	17.10
Kaoshiung	8.81	8.49	7.54	3.77	12.60
Rotterdam	7.1	6.52	6.10	8.90	6.89
Los Angeles	6.61	6.11	5.18	8.18	17.95
Hamburg	6.14	5.37	4.69	14.34	14.50
Antwerp	5.44	4.78	4.22	13.81	13.27
Dubai	5.15	4.19	3.50	22.91	19.71
Port Klang	4.8	4.50	3.76	6.67	19.68
Long Beach	4.66	4.52	4.46	3.10	1.35
Quingdao	4.24	3.41	2.64	24.34	29.17
New York	4.04	3.75	3.32	7.73	12.95
Tanjung Pelepas	3.5	2.67	2.05	31.09	30.24
Tokyo	3.28	2.71	2.77	21.03	-2.17
Bremenhaven	3.19	3.03	2.92	5.28	3.77
Laem Chabang	3.18	2.66	2.34	19.55	13.68
Gioia Tauro	3.06	3.28	2.49	-6.71	31.73
Total top 20	144.87	127.94	110.83	13.23	15.44

Sources: Container Intelligence Monthly, Clarkson Research (London), March 2004.

B. IMPROVING PORT PERFORMANCE

The improved performance of container terminals was said to have contributed to attracting some direct calls at Indian ports and thus decreasing the reliance of India's international trade on feeder services. In the ports of Jawaharlal Nehru, Tuticorin and Chennai the number of container movements per hour at quay increased from 14, before privatization, to more than 25 in late 2002. Improved performance was reported for Salalah (Oman), where gross crane productivity averaged 30.4 moves per hour with peaks of 33 moves per hour. Annual throughput for this port in 2003 increased by 56 per cent to 1.9 million TEUs and reflected callings by carriers other than Maersk, including COSCO, MOL and Norasia. Increased annual container throughput was also good in Djibouti, up by 70 per cent in two years to 0.2 million TEUs. Increased performance resulted from the deployment of additional handling equipment (rubber-tyred yard gantry cranes, reach stackers, etc.) and implementation of computerized yard planning system and integrated billing procedures. In 2003, this port moved a total of 4.3 million tons for the Horn of Africa and continued to be the main gateway for Ethiopian international trade.

During 2003 performance in some ports was hampered for several reasons and affected some or all users. In May 2003, up to five Evergreen containerships were stranded in Port Elizabeth (New York, United States) owing to a strike related to the right to unionize for some of the Evergreen staff in ports of the United States. In November, a strike paralysed Israeli ports for 10 days as labour opposed government plans to modify current legislation. This resulted in about 2,000 containers being discharged in Port Said (Egypt) and a $450 compensation transhipment fee paid by the Government. Commercial sources deemed the fee to be insufficient and work resumed after a Court banned the strike. In the same month there were strikes in the port of Gijon (Spain) due to a dispute over workers' manning levels. Early in 2004, a collision between a containership and a offshore support vessel closed the lower Mississippi affecting the port of New Orleans — about 40 vessels were reported to be idled on either side of the collision site. A similar number of vessels were left on the roads off Santos (Brazil) owing to a strike by health inspectors.

In South Africa the influx of car-parts for the new manufacturing facilities was partly responsible for the increase in containerized imports through Durban during 2003 and highlighted shortages of handling equipment as well as investment delays. In May, average vessel waiting times of 37 hours triggered a $100 congestion surcharge per TEU, which container carriers promised to lift after the average vessel delay was reduced below 16 hours. The port authority announced remedial measures — a $85 million investment in quay gantry cranes, agreement to guarantee berthing slots for some carriers and approval for a second container terminal in Durban. There was an underlying concern for the latter due to the role to be assigned to the private sector in operating it. Moreover, a global terminal operator proposed to develop a container terminal in Coega, the new industrial bulk port under construction 30 km east of Port Elizabeth, and car manufacturers drew up plans to use Maputo (Mozambique) as an alternative import outlet.

From mid-2003, congestion surcharges were also applied by the Europe West Africa Trade Agreement to a number of ports in West Africa — Luanda (Angola), Tema (Ghana), Port Harcourt (Nigeria), Cotonou (Benin), and Malabo (Equatorial Guinea). In March 2004, sea carriers imposed a $70 per TEU vessel delay surcharge on Mombasa because of poor productivity. This resulted from the combined effect of damaged equipment (a power surge was alleged to have affected quay gantry cranes and computer equipment a few months before) and protracted procurement of new cargo-handling equipment. Elsewhere, relief and commercial operations resumed in Umm Qasr (Iraq) by mid-2003 after the military authorities transferred the port's operations to civilian management. A few months later capital expenditures for rehabilitating this port were estimated at $50 million.

The importance of land-based transport for smooth door-to-door operations was highlighted by the challenges facing a number of ports in the United States. During the year, Savannah and New Orleans were affected by truckers' strikes. Truckers move containers from sea terminals to off-dock warehouses and rail yards on a per trip basis, and were seeking higher pay to compensate for rising fuel costs and excessive delays at sea terminals. Pick-up times of up to two hours inside the terminals were common and added to time spent in queuing outside the terminals; they resulted in a reduced number of trips per day. In California, vehicle appointment schemes put in place by environmental regulation provided some relief to truckers because terminals could be fined $250 for each truck waiting outside the terminal for more than 30 minutes. A vehicle appointment scheme was put into place in Southampton in November and was under consideration in Felixstowe in the following months.

Increasing the market share of rail transport for freight passing through ports was sometime laborious. The 30-km-long Alameda Corridor connecting the ports of Los Angeles and Long Beach to the transcontinental interchange railroad yards managed to maintain the traditional 36 per cent market share for containers moving through these ports basically by handling long-distance freight moving through them. Plans for achieving a 50 per cent market share would be contingent on fresh investment targeted to attracting short-distance freight currently based in distribution centres located 90 km to the east of these ports and which rely solely on truckers for their movements.

Increasing demand in the Far East was responsible for the commissioning of port facilities and plans for developing new ones. In July 2003, the first berth of the $1 billion development of Terminal Nine opened for business in Hong Kong (China), with the other five berths being scheduled for commissioning until 2005. The berth can accommodate 8,000-TEU-plus vessels in its 15.5-metre draft and will be equipped with four quay gantry cranes able to work 17 boxes across. Three major container operators (HPH, Modern Terminals and Asian Terminals) were to operate in this terminal, which will add 4 million TEU capacity to Hong Kong (China). Announcement of details for developing a Terminal Ten on Lantau Island was scheduled for 2004. Port development also proceeded apace in mainland China. Modern Terminals announced plans to invest up to $1 billion until the end of this decade and unveiled plans for the first phase of the $854 million new container port of Dachan, located 60 km west of Hong Kong (China), where it owns a 65 per cent share. China Merchants, another port operator, invested $132 million in adding three more berths in Shekou, one of the large terminals in Shenzhen across the border from Hong Kong (China). Container carriers also participated in this investment drive. In mid-2003, P&O, Maersk and COSCO started the first phase of the Qingdao expansion estimated at $172 million. When completed in the next six years the port will increase capacity from the current 1.3 to more than 6 million TEUs. Meanwhile, late in the year Shanghai asked for authorization to change the status of its large Yangshan deepwater development to that of a free port.

Reconstruction needs also required investment. In September 2003 Pusan was hit by typhoon Maemi, which caused losses totaling $58 million (12 of the 52 quay gantry cranes collapsed or were derailed). All parties concerned worked around the clock to resume operations. The port also brought forward by five years, to 2007, the construction deadline for upgrading facilities to facilitate transhipment operations, which accounted for about 40 per cent of the 9.1 million TEU throughput in 2003. During the year three global carriers — MSC, Zim and China Shipping — relocated their operations to Chinese ports, with a consequent estimated revenue loss of $33 million. In late 2003, the Democratic People's Republic of Korea was reported to be constructing its first container terminal on the Daedong River.

Several transhipment investments were announced or were under way during the year. Naha Port (Okinawa, Japan) invited a tender late in the year to serve mainland China and cut mainline vessel schedules. PSA reduced its exposure in Hibiki (Japan) to a one-third share, with this port seeking to have a triangular network linking Dalian (China) and Inchon (Republic of Korea). Similar schemes were advancing in the Caribbean: construction proceeded apace for Caucedo port in the Dominican Republic, and Port of America, located near Ponce (Puerto Rico), was reported to be seeking funding.

Investments were also announced in European ports. Dunkirk boosted its container handling capabilities by adding two container berths with a draft of 16.5 metres, a new dry port, cold storage and about 30 hectares of land for the industrial park. Plans for the $350 million Jade container port, close to Bremerhaven, were under way, with reported private finance to come from Russian and Baltic interests together with Eurogate, a German-based global operator. The privatization of the Baltic Container Terminal in Gdynia (Poland) fetched $42 million in May 2003 and a further $80 million was to be invested in the next five years by the successful bidder, ICTSI, to raise capacity to 0.9 million TEUs. In Southern Europe, the $819 million development of Punta Langosteira in Spain was promoted as a refuge and industrial bulk port for revitalizing the north-west corner of the country. Algeciras started the $500 million extension of Isla Verde Exterior, which will add 2.3 km of berth and 112 ha of land, and announced the lease of plots of water for maintaining the competitiveness of bunkering activities. Across the Strait, the Government of Morocco started the $264 million development of the port of Tangier, which will include areas for industrial and logistics activities.

Other measures were also called for to remain competitive. PSA (Singapore) announced a cut in salaries of between 8 and 14 per cent for senior executives, between 4 and 7 per cent for managers and less than

4 per cent for non-executive staff, with the aim of remaining competitive against neighbouring low-cost competitors. Also, a joint venture with COSCO was announced whereby two dedicated berths with an annual capacity of 1 million TEUs will be operated at Singapore.

In Port Klang (Malaysia) bundled tariffs for marine services (pilotage and towage) were raised by 42 per cent; this was opposed by ship agencies, which had suggested spreading the increase over a number of years. In Jakarta (Indonesia), the Commission for Supervision of Business was reported to be cancelling the clause, which allowed near monopoly powers to HPH, the operator of the two largest container terminals in Tanjung Priok, in the wake of a six-month investigation that determined that the company was controlling 75 per cent of the market. The Chamber of Commerce had complained of high handling tariffs, about $93 per 20' box, and poor service quality.

Elsewhere, port fees were reduced and free-storage periods extended to promote Turkish ports as a viable alternative for relief and commercial cargo to Iraq. Ukraine ended its two-tier ship tariff systems that discriminated against vessels flying open-registry flags, which paid up to 70 per cent more. In Brazil ship agents sought an injunction to stop the Government imposing an import tax on transhipped containers.

C. INSTITUTIONAL CHANGE

During the year the role of global container terminal operators in ports was highlighted. There were 325 port investment opportunities reported for private investors, of which about 25 per cent were privatization projects. The modalities of these investment opportunities varied from region to region. In Northern Europe acquisition of current facilities made up 44 per cent of the opportunities, while in South Asia up to 79 per cent were greenfield, build-operate-transfer (BOT) and joint partnership opportunities.

Moreover, concentration was a feature of terminal operators as the top five global container terminal operators (HPH, PSA, APM Terminals, P&O Ports and Eurogate) made up 33.6 per cent of the total 160 million TEUs handled by all operators in 2002. The corresponding shares for the top 10 and top 20 were 46.1 and 56.6 per cent respectively. In June 2003, P&O Ports and CMA CGM, a French sea carrier, completed negotiations to take 80 per cent of Egis, the largest French terminal operator. HPH and the terminal operator subsidiary of COSCO were reported to be teaming up to bid in the Bayonne Terminal (New Jersey, United States), conveniently located close to the New York and New Jersey conurbation. Elsewhere, a consortium of seven companies took control of Ghana's two main ports — Tema and Takoradi — and pledged to invest up to $200 million for upgrading current facilities.

The involvement of the private sector continued in ports in spite of occasional opposition. In Arica (Chile) opposition to a government decision to concession the port as a single unit sparked violence in August. The local population favoured splitting the port into two or more units to foster competition, and this was also the view of small terminal operators. Late in 2003, the Nigerian Government started pre-qualification of bidders for the privatization process, which would reportedly make redundant up to two thirds of the 12,000-strong workforce.

The relationship between private sector terminal operators and public sector port authorities was not always smooth. In the ports of Paranagua and Rio Grande (Brazil), port authorities were reported to be boosting container handling capability in the public berths to avoid monopolies being secured by current private sector operators of container terminals. In Yemen, PSA sold back to the Government its 60 per cent stake in Aden Container Terminal. In India two global container operators were precluded from bidding for the container expansion of Jawaharlal Nehru Port. The Hong Kong-based HPH was disqualified on internal security grounds, while P&O Ports, which currently operates the container terminal in the port, was banned on the grounds that it was undesirable to have a private monopoly in the port. HPH, however, continued to invest elsewhere — in Panama, after converting a fixed concession fee into a variable one per box, and in Mexico, where it took control of Lazaro Cardenas, a port on the Pacific Coast, in August 2003. P&O Ports acquired container facilities in Mundra (Gujarat, India) from the private port developer Adani for $195 million.

In some countries port authorities gained recognition while in others measures were taken to improve their efficiency and competitiveness. In Peru a law established a national port authority in control of all ports of the country. In Brazil plans to transfer control of the largest port, Santos, from the Federal to the State Government stalled during most of the year. In India work proceeded on developing a comprehensive land policy for all 12 major ports. In Spain a law on the financial regime for ports clarified the legal nature of port tariffs. In France the longstanding issue of the status of crane drivers was solved by mid-2003: their contracts with the port authority were suspended while staff were on transfer to the terminal operator and reactivated whenever the latter was unable to keep the staff on the payroll. An updated environmental code of practice following the one published in 1994 was issued for the European Sea Port Organization in September 2003.

Individual port authorities were also given recognition and sought measures to remain competitive. A new port authority took over in Pusan (Republic of Korea) in early 2004. Constantza (Romania) was granted free-port status whereby ships would be exempted from Customs controls before starting unloading, and import duties for cargoes would be paid when goods actually exit port premises and enter the country. Antwerp threatened legal action in international courts if negotiations with the Netherlands for dredging the Scheldt were not conducted in time. The port authorities of Osaka and Kobe (Japan) agreed to become a single authority so that vessels would have to file entrance applications and pay entrance dues only once. This heralded the move into the super-hub strategy whereby Japanese ports would integrate into four larger entities such as Tokyo and Yokohama, Nagoya, Kobe and Osaka, and Kitakyushu and Hakata.

The issue of a national port policy was highlighted by four applications for port development presented in the United Kingdom. ABP, the port authority for more than 20 British ports, had proposed new facilities at Dibden Bay, close to Southampton, and this generated opposition from environmental groups and nearby residents during the year as the inquiry progressed. P&O Ports proposed the London Gateway Shell Haven development in the Thames estuary and, finally, HPH proposed to expand capacity in Felixstowe and build a new facility at Bathside Bay, in Harwich. Late in the year a report by the transport committee of the House of Commons agreed with the need to have additional port capacity in the country and called for an integrated approach instead of relying solely on market forces. The Government, however, rejected calls for a national port plan, stating that it would be unacceptable to delay decisions on applications currently under consideration, and this was welcomed by the industry. Early in 2004, timing for the decision became controversial as HPH requested simultaneous decision-making and in late April the proposed Dibden Bay proposal was rejected on environmental grounds.

The controversial directive of the European Commission on port services was defeated in November 2003 in the European Parliament. It had caused strikes in ports of the European Union during most of the year, notably because of labour opposition to self-handling. Afterwards, the Commission started to look at competition law as a way to regulate ports and early in 2004 suggested that a proposed draft directive designed to eliminate obstacles to the freedom of establishment for service providers and the free movement of services between member States could serve this purpose.

D. SECURITY MEASURES IN PORTS

During the year many ports started to take steps to implement the measures required by the International Ship and Port Facility Security Code (ISPS Code), which is set to enter into force by July 2004. This involved conducting security audits to determine the measures to be taken and their cost, and identifying the sources for funding. Also, major world ports implemented measures prescribed by the United States' security initiatives. Agreements were worked out for the latter, such as the one reached, at the end of 2003, between the European Commission and the United States concerning the procedures to be applied in connection with the Container Security Initiative (CSI). This agreement followed the acceptance by some European ports that US Customs officers inspect containers bound to the United States. The agreement sought to strike a balance between the rights of port operators on both sides of the Atlantic as well as to prevent differential treatment in European ports that might cause trade diversion within the European Union. A working group was created to develop all the technical elements of the agreement.

Moreover, the European Commission published a security proposal aimed at strengthening security in ports beyond the ship–port interface and embracing port premises. The proposal was intended to complement current maritime security measures and avoid fragmentation.

The progress of the security audits and the implementation of specific measures were uneven in the 1,500 ports estimated to be taking part in this task worldwide. A number of ports outsourced these audits to specialized companies and the recommendations included procurement of specialized equipment as well as training for key personnel. In ports of the United Kingdom security inspectors from the Department of Transport started to carry out the risk assessments mandated by the ISPS Code, but it appeared towards the end of the year that they would be hard pressed to comply with the deadline for the 60 priority ports selected. Some small ports in the country, visited by one-day cruises, doubted the feasibility of costly measures, such as fencing, recommended by experts. Major world ports indicated that they were confident they would have the measures required by the ISPS Code in place by the agreed deadline. Rotterdam reported that up to 134 terminal security plans would have to be prepared, and offered to share expertise with ports in developing countries in this endeavour. Singapore and Hong Kong (China) stated that auditing of the facilities were on track. In March 2004, the Japanese authorities gave assurances that 110 ports would comply with the ISPS Code deadline. In other countries priority was given to ports engaged in international trade: only five of the Indonesian ports were taking steps to comply with the ISPS Code. In some countries the security task was deemed to be of national importance. In Mauritius the commitment shown by authorities and commercial parties in Port Louis was backed by the Prime Minister.

The cost of implementing security measures could be significant for ports. It was estimated that terminal operators in the United States might have to disburse about $936 million. For the fiscal year 2003–2004 the port of Los Angeles allocated $17.7 million for safety and security but recognized that that amount fell short of what federal security initiatives required. The joint management for the ports of Copenhagen and Malmö estimated an initial cost of $1 million and annual disbursements of $0.4 million. Procurement procedures were started: Puertos de Estado, the port authority for Spanish ports, issued a tender for procuring scanners for several ports, and the port of Valencia reported that a new depot was under construction to install the necessary equipment.

Container traffic was one of the areas addressed by the security audits and featured prominently in the recommendations. This seemed to be justified in March 2004 by the terrorist attack in the port of Ashdod (Israel), which left 10 dead and 20 wounded, as the perpetrators were said to have entered the heavily guarded port hidden in a container.

There were questions relating to the equipment recommended for implementing the security measures. It was reported that gamma ray scanners did not provide enough penetration to assess suspect items within a container while X-ray would detect a 1-mm-thick wire and would therefore have a superior performance. Also, questions were raised in relation to the use of fixed or mobile equipment as close inspection would need a controlled environment. Some equipment was said to provide advantages in passing through US Customs — containers equipped with metal seals and sensors to detect tampering were supposed to allow fast-track passage. Moreover, new equipment was introduced in ports: in March 2004 radiation detection monitors were installed in the port of New York heralding the deployment of similar units in other ports of the United States and major ports in other parts of the world, Rotterdam having stated it would also install such a monitor.

The issue of recovering security expenses emerged in early 2004 in several ports. HPH, the largest global container operator, sought to impose a security charge on containers passing through Felixstowe (United Kingdom) for additional security measures mandated by the ISPS Code. The surcharge was to be effective from July 2004 and would reach $9.20 per export container and $17.50 per import box. Both cargo-owners and sea-carriers voiced opposition to the surcharge. In Rotterdam, the Dutch Association of Ship Brokers and Agents also stated carriers' opposition to the surcharge. Two Malaysian port authorities, Port Klang and Tanjung Pelepas, stated that no security charge was to be imposed on container trade, but some weeks later two terminal operators, Northport and Westport, in Port Klang started to charge $34 per TEU as "extra movement charges" for boxes selected for scanning under the Container Security Initiative. In Charleston (United States), after inconclusive negotiations between the port authority, carriers and terminal operators, the port authority stated that it would impose a surcharge of $1 per foot of length for every vessel calling at the port.