5-B MAJOR CONTAINER HANDLING PORTS AROUND INDONESIA

5-B-1 Characteristic of Shipping Lines

1) Hong Kong

a) Asia/North America

266. Hong Kong is the busiest container port in the world and handled about 18,100,000 TEU in 2000. Hong Kong is a strategic port of call for almost all shipping lines. The major shipping lines calling regularly at Hong Kong on the Asia/North America Route are summarized in **Appendix-A**.

267. In summary, on the Asia/North America trunk line, there are 52 Hong Kong callings by 19 lines, all weekly service except one by Rickmer Line which is 2-3 sailings per month. The annual number of calls thus be calculated as follows:

52 Weekly Service x 52 weeks = 2,704 Callings at Hong Kong per year

268. There are 47 major routes serving Asia/North America trade of which 37 services ships call at Hong Kong, thus the calling ratio of Hong Kong is 78.8 %. This high ratio tells most eloquently how each shipping line recognizes the important status of Hong Kong.

269. The average size of the container ships calling at Hong Kong is about 4,200 TEU, excluding those ships of Maersk Sealand Line, details of which are not available. If included, the average would become larger, say about 5,000 TEU, because Maersk Sealand is deploying large vessels.

b) Asia/Europe

270. Asia/European trade is one of the two most important parts of the East-West container flow of the world together with North American trade. As is the case with Asia/North American trade, Hong Kong is playing an important role in Asia/European trade too. The major shipping lines calling regularly at Hong Kong on the Asia/Europe Route are also shown in **Appendix-A**.

271. In summary, on the Asia/Europe trunk line (U.K., Continent & Scandinavia, Mediterranean & Black Sea, Red Sea), there are 41 Hong Kong callings by 13 lines for U.K., Continent & Scandinavian ports, all weekly service. For Mediterranean & Black Sea ports, there are 12 callings, making the total callings 53. The only line which is maintaining non-weekly service from Hong Kong (2-3 sailings per month) is EIL. The annual number of calls from the Asia/Europe service route cant be calculated as follows:

53 Weekly Services x 52 weeks = 2,756 Callings at Hong Kong per year

272. There are 41 major routes serving Asia/Europe and Mediterranean routes of which 32 services vessels call at Hong Kong, thus the HK calling ratio is 78.0 %. As with the North American route (Calling Ratio:78.8%), the Port of Hong Kong is playing the most important role in this trade.

273. The average size of the container ships calling at Hong Kong is about is about 4,450 TEU, and a little bit larger than the average of the ships deployed in North America/Asia service, which is about 4,200 TEU. If those ships of Maersk Sealand Line, if included, the average would become larger say about 6,000 TEU.

c) Other Service Routes

274. There are many minor service routes. Many container ships deployed in these routes also call at Hong Kong. A listing of these HK caller is provided in **Appendix-A.**

275. In summing up, the total number of container ships calling at Hong Kong other than East-West main route are:

Mexico & Central America	3 Weekly Service
Caribbean Sea	1 Fortnightly (0.5 Weekly)
West Coast of South America	3 Weekly
East Coast of South America	4 Weekly
West Africa	4 Fortnightly (2 Weekly)
Australia	1 Weekly + 1 Fortnightly (1.5 Weekly)
New Zealand	1 Weekly
New Guinea & South Pacific	2 Weekly
Middle East & South Asia	6 Weekly
South East Asia	37 Weekly + 32 sailings/month (7.5 Weekly)
Round the World	2 Weekly
Inter Asia Feeder	26 Weekly + 1 Fortnightly (0.5 Weekly)
Total	97.5 Weekly

97.5 Weekly Services x 52 Weeks = 5,070 Callings at Hong Kong per year

276. It is obvious that South East Asian routes and Inter-Asian routes are dominant. The total number of the callings by the ships deployed on both routes is 3,146 per year which is 62 % of total callings. Most of the routes listed above are North/South trade and many of them are covered by East West trade ships and already counted as Hong Kong callers in the North American or European trade calculations.

277. East Asia routes are excluded from the calculation except for 3 weekly services connecting Hong Kong and East China and Japan direct because East Asia is independent from South and South East Asia.

278. There are about 82 service routes covering the South East Asia region and almost all of them are weekly service. In this region, there are 44.5 sailings per week (37 + 7.5) are calling at Hong Kong and this is 54.3 % of the total.

279. The situation is different in " Inter Asia Feeder " services. There are about 101 service routes in this region. Almost all of them are weekly service and the HK callings by shipping lines are 26.5 weekly services. Thus the ratio of HK calling is 26.2 % of the total. Clearly, Hong Kong is less used in Inter Asia services than in East-West trunk line routes.

280. Shipping lines regard the port of Hong Kong is important as a key stone of East-West container trunk lines for both North America and Europe. The port status of Hong Kong in terms of preference of port users including shipping lines and shippers/consignees is summarized as follows using a port calling ratio :

East-West Trade (North America)	about 79 %
East-West Trade (Europe)	about 78 %
South East Asia Trade	about 54 %
Inter Asia Trade	about 26 %

281. A calling ratio of 80 % is almost the maximum judging from past trends in the shipping business. It would be fair to conclude that there is little room for Hong Kong to solicit additional callings from shipping lines serving South East Asia. However, Hong Kong could attract more calls from Inter Asian trade.

282. The average size of container ships calling at Hong Kong on each route is:

Minor Service Routes (other than South East Asia and Inter Asia)	about 2,400 TEU
South East Asia Routes	about 1,350 TEU
Inter Asia Routes	about 1,270 TEU

283. It is worth noticing that a ship with a capacity of more than 1,000 TEU is deployed in the Inter Asian Routes and South Asian Routes due to a cascading effect of larger vessels being introduced in the East-West Trunk Routes.

2) Singapore

284. Most of the ships calling at Singapore are already listed together with Hong Kong. Especially on the North American route, there is no container service which calls only Singapore, but not calling Hong Kong, while many ships call only Hong Kong, eliminating Singapore. Thus, all Singapore callers are already listed in **Appendix-A**. On the European route, Hong Kong and Singapore are generally combined to form a series of calling ports either HK-SP or SP-HK. The details of Singapore calling vessels not calling Hong Kong also listed in **Appendix-A**.

a) North American Route

285. There are 17 Singapore callings by 9 lines, all weekly services. The number of ship calls to Singapore per year are calculated as follows:

17 Weekly Services x 52 weeks = 884 Callings at Singapore per year

286. There are 47 major routes connecting Asia with North America and 11 routes are selecting Singapore as a regular calling port. The calling ratio of Singapore is 23.4 % compared with 78.8 % for Hong Kong

b) European Route

287. There are 49 Singapore weekly callings by 17 lines including Mediterranean & Black Sea routes. The number of ship call to Singapore in Asian/ European service route is calculated as follows:

49 Weekly Services x 52 weeks = 2,548 Callings at Singapore per year

288. There are 41 major routes serving Asia/Europe and 24 ships are selecting Singapore as a regular calling port. Thus the calling ratio of Singapore is 58.5 % compared with 78.0 % for Hong Kong.

c) Other Service Routes

289. There are 30 weekly service ships calling at Singapore, while 71 weekly services boats are calling Hong Kong. However, in Inter Asian Region, is dominant (See **Appendix-A**).

290. As is shown in the table, the frequency of many services is more than weekly, thus the number of sailings per week was corresponding to weekly terms. (For example, daily service is equivalent to 7 weekly services.)

291. The annual number of calls can thus be calculated as follows:

109 Weekly Service x 52 weeks = 5,668 Callings at Singapore per year

292. There are 113 Inter Regional service routes (regardless of the frequency, the same route is counted as one service, for example, the three rotations of the Singapore – Jakarta route, A, B, and C are counted a s one) of which 66 service ships call at Singapore with the service frequency of 109 , thus calling ratio of Singapore is 58.4 % in terms of numbers of service routes, and 96.5 % in terms of service frequency. On the other hand, 26 service ships call at Hong Kong (service frequency is all weekly), thus calling ratio by Inter Asia service lines is 23.0 %.

293. What clearly emerges is that Singapore is dominant in the Inter Asia Region, while Hong Kong is more powerful than Singapore in East-West Trade. Calling ratios of both ports are listed below:

Table 5-B-1 Calling Ratios of Hong Kong and Singapore

	Hong Kong	Singapore
East-West Trade (N. America)	78.8 %	23.4 %
(Europe)	78.0 %	58.5 %
Inter Asia Trade (Service lines)	23.0 %	58.4 %
(Frequency)	23.0 %	96.5 %

Source: JICA Study Team

3) Tanjung Pelepas

294. Tanjung Pelepas is a very new port opened in April 2000. Thanks to the aggressive price policy of PTP (Port of Tanjung Pelepas), which is reportedly about 30% less than PSA's handling rate level, the port has been attracting a substantial number of containers from Singapore. Major shipping lines which have diverted their boxes from PSA are Maersk-Sealand and Evergreen. Some other major lines are monitoring the developments and it is possible that more containers may shift from Singapore to Tanjung Pelepas. The expected throughput in 2002 is about 300 million TEU.

4) Port Klang

295. There are 11 weekly services against the total number of the major Asia/Europe routes of 41, thus the calling ratio of Port Klang is 23.4%. On the other hand, only two routes out of 47 major routes serving Asia/North America trade are using Laem Chabang as a regular calling port. The calling port ratio is 4.3%.

296. In the other minor service routes, there are three weekly services calling at Port Klang. Those are:

Asia/East & South Africa	by KL/MISC/MOL/MSL/Safmarine	by 2,500 TEU type
South Asia/Middle East	by MISC/PIL/Yang Ming	by 2,200 TEU type
	by UASC	by 3,800 TEU type

297. There are 31 weekly minor routes serving to the various destinations to and from Asia, Thus, the calling ratio of Port Klang in this category is 9.7%.

298. On South East Asia Routes, there are about 45 weekly services ships calling at Port Klang of which 11 ships are calling weekly. The calling ratio is 24.4%.

299. There are a total of 136 routes serving the Inter Asia Region when converted to a weekly basis, of which 27 ships are calling at Port Klang. The calling Ratio is 19.9%.

5) Laem Chabang

300. Port of Laem Chabang is not like Hong Kong or Singapore. At present, quite a limited numbers of ships are serving on both Asia/North America Route as a regular calling port.

301. As is shown in Table 2-1, only Grand Alliance ships are calling at Laem Chabang weekly in their Far East Express service (about 5,000 TEU type ships) and Asia/US East Coast /PNW service (about 4,200 TEU type ships). The total callings per week are 4, thus per year callings are 208. There are 47 major routes serving Asia/North America of which 4 service ships call at Laem Chabang, thus the calling ratio of Laem Chabang is 8.5%.

302. No ships are calling at Laem Chabang in the Asia/Europe main route. In Mediterranean & Black Sea service, Evergreen/Lloyd Triestino joint operation ships are calling at the port weekly with about 3,000 TEU type ships. Because this is the only exception, calculation of the calling ratio is meaningless.

303. In minor service routes other than North America and Europe, Laem Chabang is one of the regular calling ports in the South East Asia/East & South Africa route of the alliance of KL/MISC/MSL/Safmarine. The size of the ships deployed is about 2,500 TEU type. Service frequency is weekly. Because only two groups are serving this route, and moreover the other line's calling frequency is monthly, the calling ratio is 87.5 %.

304. Situation changes in the South East Asia Region. There are 9 weekly services calling at Laem Chabang while the total number of the service routes in the same region is 45. Thus, the calling ratio of Laem Chabang in South East Asia is 20.0%.

305. For Inter Asia service, the port status of Laem Chabang is gradually getting important. The total regular calling numbers at the port are 41 weekly services, while there are 109 weekly services in total in the region, thus the calling ratio of Laem Chabang is 37.6%.

306. According to the Containerization International Yearbook of 2002, the throughput of 1999 and 1998 of the port were 1,828,460 TEU and 1,559,112 TEU respectively. In 1999, the port was world's 24th ranked container port.

307. Laem Chabang is gradually being recognized as one of the important way ports in the Asia/North America Route, as well as one of the regional hub ports for transshipment. Table 2-7 summarizes the service routes calling regularly Laem Chabang.

Table 5-B-2 Service Routes regularly calling Laem Chabang

Service Routes	Calling Service
Inter-Asia	41
Africa	0
Oceania	0
Europe	0
Around-the -World	1
Med. And Black Sea	1
Middle East / South Asia	2
Central & South America	0
West Coast of North America	2
East Coast of North America	0
Total	**47**

Source: OCDI

6) Port Status in terms of Liners' Calling Ratio

308. The port status of the five ports from the perspective of some major shipping lines is evaluated in Table 5-B-3. Of these five ports, Singapore is evaluated most highly, followed by Hong Kong. Port Klang is ranked as an important regional port and if operated jointly with Tanjung Pelepas, the allied ports will be able to compete with Singapore effectively. Laem Chabang is closely connected with East & South Africa through a weekly service by a shipping alliance of some major lines. The way in which Laem Chabang is being treated suggests that it may become a regional hub port in future.

Table 5-B-3 Status of Five Ports by Major Shipping Routes

	Hong Kong	Singapore	Port Klang	Laem Chabang	Tanjung Pelepas
North America	●	○	x	*	*
Europe	●	●	○	x	
Other Minor Routes	○	○	○	*	
South East Asia	○	●	○	○	
Inter Asia	○	●	○	*	

Source: JICA Study Team based on various brochures and interviews

Remarks

●: Strategically Important Port

○: Important Port

x: Possible to skip when needed

*: with some remarks

5-B-2 Characteristic of Container Cargo

1) Singapore

309. Port of Singapore is not only a container hub port but also an intermediate refinery base for petroleum products, and total cargo throughput reached 313 million tons in 2001.

310. Total container throughput decreased to 15.571 million TEU in 2001 from 17.087 million TEU in 2000. A decrease in container throughput of 8.9 per cent resulted from a move of Maersk Sealand Line to neighboring Port of Tanjung Pelepas of Malaysia at the end of 2000. Transshipment ratio reached 82 per cent in 2000.

Table 5-B-4 Cargo Throughput in Singapore (1)

	1991	1996	1997	1998	1999	2000	2001
Vessel Arrivals (No)	70,345	117,723	130,333	140,922	141,523	145,383	146,265
Shipping Tonnage ('000 GT)	536,618	768,521	808,305	857,655	877,127	910,180	960,093
Total Cargo ('000 tonnes)	206,429	314,164	327,507	312,322	325,902	325,591	313,487
General	108,184	175,083	185,559	172,968	188,553	199,577	186,076
Bulk	98,245	139,081	141,948	139,354	137,349	126,014	127,411
Total Container Throughput ('000 TEUs)	6,354	12,944	14,136	15,136	15,945	17,087	15,571
Bunker Sales ('000 tonnes)		16,938	16,941	18,064	18,891	18,651	20,352
Singapore Ship Registry (End of Period)							
Number	1,823	3,157	3,380	3,412	3,360	3,335	3,353
'000 GT	9,559	18,239	20,774	22,025	23,748	23,043	23,167

Source : Maritime and Port Authority of Singapore

Table 5-B-5 Cargo Throughput in Singapore (1)

	Total Throughput	Container	Others	Oil	Others
1998	312,322	160,318	12,650	127,168	12,186
1999	325,902	176,569	11,985	124,386	12,963
2000	325,591	185,857	13,720	113,329	12,685

Source: MPA

Table 5-B-6 Container Throughput in Singapore

	Transship Cargo	Local Cargo	Transship Ratio	Overseas Management
1998	11.72	3.37	78%	1.46
1999	12.92	2.98	81%	1.72
2000	13.93	3.1	82%	2.73

Sourece: PSA Corp. Year 2001 data came from MPA.

2) Tanjung Pelepas

311. Port of Tanjung Pelepas (PTP) handled 418,218 TEU (8,528,000 ton) containers in 2000, 2,049,487 TEU (36,891,000 ton) containers in 2001. Ship calls were 692 calls in 2000, and jumped to 2,283 calls in 2001. As is July 2001, PTP receives more than 40 vessels per week, and handles 200,000 TEU per month. Ninety one per cent of the total cargo volume is transported by Maersk line. Transshipment ratio reaches 95 %.

3) Port Klang

312. Container throughputs at Port Klang have been more than tripled during six years from 1995 until 2001, and nearly four million TEU were handled in 2001.

313. This rapid increase of container traffic originates from the synthesized policies set by the Malaysian government to establish international hub ports within its territory. The implemented policies include relaxation of cabotage regulation, tariff discount, and incentives to feeder operators.

314. As a result of these policy implementation, transshipment ratio via Singapore dropped to 40 per cent from 70 per cent in 1994 in the case of cargoes passing through the Port of Penang, which is located in the northern part of Malaysia.

315. Transshipment cargoes at Port Klang amounted to 1.89 million TEU in 2001, which accounted for 50 per cent of the total 3.76 million TEU.

316. Container transportation in the hinterlands is shared by railways and trucks. The former accounts for 10 – 15 per cent, and the latter accounts for 85 – 90 per cent. Some portion of cargoes generated from southern part of Thailand are also handled at Port Klang and transported by railways.

317. According to 2001 statistics, North port handled 935, 165 TEU, which was 54 % of the total Port Klang, and West port handled 810,706 TEU, which was 46 % of the total. TEU growth rate of West port was 69.6 % in 2001.

Table 5-B-7 Cargo Throughput in Port Klang

000 Freight ton

	Dry Bulk	Liquid Bulk	Break Bulk	Container	Total
1995	6,384	4,353	7,558	21,740	40,034
1996	8,381	5,085	8,542	27,016	49,025
1997	9,568	5,578	8,703	31,918	55,768
1998	6,202	5,490	4,221	31,429	47,432
1999	6,114	5,176	5,827	43,853	60,970
2000	6,477	4,710	5,993	48,097	65,277
2001					70,149

Table 5-B-8 Container Cargo in Port Klang

unit: TEU

	Laden	Empty	Total	Transship Container	Transship %
1995	986,862	146,949	1,133,811	32,614	2.9%
1996	1,216,793	192,801	1,409,594	154,147	10.9%
1997	1,452,884	231,624	1,684,508	278,619	16.5%
1998	1,466,261	353,757	1,820,018	460,809	25.3%
1999	1,960,353	590,066	2,550,419	996,090	39.1%
2000	2,551,553	776,881	3,206,753	1,350,484	42.1%
2001	2,910,305	849,207	3,759,512	1,886,745	50.2%

Table 5-B-9 Ship Calls in Port Klang

	Dry Bulk	Liquid Bulk	Break Bulk	Container	Passenger	Total
1995	566	1,102	2,349	2,715	1,138	7,870
1996	576	1,211	2,520	3,798	1,428	9,533
1997	602	1,283	2,667	4,889	1,543	10,984
1998	438	1,378	1,906	5,830	1,212	10,764
1999	374	1,427	2,002	6,734	902	11,439
2000	387	1,299	2,297	7,444	989	12,416
2001						14,207

4) Laem Chabang

318. Container throughputs at Laem Chabang have been increasing rapidly since the operation started in 1992 reached over 2.5 million TEU in 2002.

5) Summary of Container Throughput

'000TEU

	Hong Kong	Singapore	Laem Chabang	Port Klang	Tanjung Pelepas
1991	6,162	6,354	1	608	-
1992	7,972	7,560	34	678	-
1993	9,204	9,046	219	772	-
1994	11,050	10,399	377	944	-
1995	12,550	11,846	529	1,134	-
1996	13,460	12,944	820	1,410	-
1997	14,567	14,135	1,105	1,685	-
1998	14,582	15,136	1,559	1,820	-
1999	16,211	15,945	1,828	2,550	-
2000	18,100	17,040	2,195	3,207	418
2001	17,900	15,571	2,312	3,760	2,049
2002	19,140	16,941	2,749	4,533	2,660

Source: Containerization International

5-B-3 Existing Facilities and Future Development Plan

1) Hong Kong

a) Existing Facilities

319. Table 5-B-10 and Table 5-B-11 show the details of all the terminals of Hong Kong (Part I for MTL & Sea-Land , Part II for HIT). Figure XYZ shows each terminal layout.

Table 5-B-10 Details of Container Terminals in Hong Kong (Part I)

	CT1	CT2	CT5	CT8(West)	CT9	CT3
Officially Approved	1970	1970	1976	1991	1992	1970
Construction Cost (mil.HK$)	14	25	31	2,000 (Total 8 berths)	1,500 (Total 9 berths)	11
Developer	MTL	MTL	MTL	MTL	MTL	CSX*
Berths number	1	1	2	2	4	1
Berth Length(m)			1,082	740	-	305
Draught (m)	-12.2	-12.2	-12.2	-15.0	-	-12.2
Yard (ha)	10.1	10.1	15.2	30.0	41.0	13.0
Cranes			12	9	-	3
Throughput per year ('000 TEU)				3,519		1,180
Remarks			One berth for feeder		Under Construction	

Source: PMB *CSX World Terminals HK

Table 5-B-11 Details of Container Terminals in Hong Kong (Part II)

	CT4	CT6	CT7	CT8(East)	CT9	Total
Officially Approved	1976	1985	1988	1991	1992	
Construction Cost (mil.HK$)	19	110	4,390	2,000 (Total 8)	1,500 (Total 9)	
Developer	HIT	HIT	HIT	COSCO/HIT	HIT	
Berths number	3	3	4	2	2	19
Berths Length(m)			3,292	640	700	6,059
Draught (m)	-12.2	-14.0	-14.5	-15.0	-14.5	
Yard (ha)	16.7	28.7	32.0	30.0	19.0	186.0
Cranes			32	9	-	65
Throughput ('000TEU)			5,290	1,210*	-	11,200
Remarks					Under Construction	

Source: PMB *1997, all other figures are 1998

320. As for CT9, a total of six berths is under construction. Berth 1 will be completed around May 2003, and Berth 2 around the end of 2003. Berth 3 is scheduled for completion around March of 2004 and Berth 4 , two or three months after Berth 3. Berth 5 and 6 will be completed by the end of the same year. When completed, Berths 1 and 2 are to be operated by HIT, and Berths 3 through 6 by MTL. Berths 13 and 14 of CT- 8 which are now being operated by MTL are to be transferred to ACT (Asia Container Terminal Ltd.), a joint-venture company by CSX and three Hong Kong companies. ACT is the fifth terminal operator in Hong Kong.

321. Terminals 1- 9 of the Kwai Chung Container Port shows in 2004 and distribution among the five terminal operators are shown in Figure 4-1.

b) Future Expansion Plan

322. According to a report by some reliable container terminal sources, a London based consultancy firm has been awarded by PMB an HK$ 8 million contract to conduct a comprehensive study on Hong Kong's physical infrastructure development needs for the next two decades and beyond. The consultant is to formulate a competitive strategy and master plan for port development in the coming 20 years and beyond, and to finalize the preferred location for major container and related infrastructure. It is scheduled that the consultancy is to submit the report by the end of next year, 2003, which must be based on the conclusion of the Port Development Strategy Review 2001, an internal government review jointly conducted by the Marine and Planning Departments.

323. The study is to include a detailed analysis of present and future port competitiveness, projected demand for port facilities and suggested supply of those facilities, including their preferred locations. Next terminal, with an internal nickname as CT 10, is the main subject regarding the building schedule. The joint review conclusion is that CT 10 would not be needed until 2016. The review also concluded new river terminal facilities will not be required until the next decade, a new midstream site will not be required in the near future and no new public cargo working areas should be introduced other than those created to replace existing sites.

324. The Economic Development and Labor Bureau, which governs PMB and the Logistics Development Council, has spent more than HK$ 33 million on the future studies in the past three years as shown in the following list.

Year	Study	Cost (m.HK$)
1999	Port back-up facilities and land requirement	4.26
2000	Update of port cargo forecasts	1.19
2000	Bulk cargo facilities	0.40
2000	The potential of Hong Kong as a replenishment port	0,41
2000	Review of productivity of container port of Hong Kong	0.30
2001	Study to strengthen Hong Kong's role as the preferred international and regional transportation and logistics hub	3.28
2001	Master plan bridging project for Hong Kong as the preferred international and regional transportation and logistic hub	1.74
2002	Study on the implications of South China infrastructure development on cargo flowing to and from Hong Kong	1.28
2002	Study to strengthen Hong Kong's role as an international maritime center	3.40
2002	Study on enhancing the cost competitiveness of small and medium sized enterprises	3.40
2002	Study for the development of a digital trade and transportation network system	5.00
2002	Study on Hong Kong Port – master plan 2020	7.90
		32.56

Source: Economic Development and Labor Bureau, Hong Kong Government

2) *Laem Chabang*

a) *Existing Facilities*

325. There are eight container terminals in the port as of August 1, 2002. However, the details of the newest additional terminal, C1-3, is not available. Table 5-B-12 shows the details of five terminals completed in 1991 and already in full operation.

Table 5-B-12 Details of Container Terminals in Laem Chabang (excluding C1-3)

	B1	B2	B3	B4	B5	A2
Port Management	PAT (Port Authority of Thailand)					
Operator	LCB (APM Terminals)	EGCT (Evergreen)	ESCO (Kamigumi)	TIPS (NYK, MOL)	LCIT (P&O Ports, APL)	TLT (HPH)
Berths	1	1	1	1	1	1
Length (m)	300	300	300	300	400	300
Draught	-14.0	-14.0	-14.0	-14.0	-14.0	-14.0
Yard (ha)	10.5	10.5	10.5	10.5	18.0	17.4
Quay Cranes	3	3	4	4	4	3
RTG	8	7	8	10	12	9
Reefer Plugs	396	192	-	288	252	192
Throughput (2001) ('000 TEU)	477	346	489	603	525	(2002 open)

Source: OCDI, JICA Study Team

b) *Future Expansion Plan*

326. As is shown in the above Table, PAT is adding another six terminals surrounding Basin 2 and one of the six berths (C-3) has already been completed and in the process of bidding which is scheduled to close at the end of October, 2002. The expected yearly leasing fee for C-3 is about ¥1.2 billion and some major shipping lines and trading firms are reportedly preparing

for application. The PAT development plan including the terminals completed is shown in Table 5-B-13.

Table 5-B-13 PAT Development Plan

Development Phase	2	2	3	3
Year to be completed	2000	2002	(2006)	(2008
Number of Terminals	1	2	1	2
Project Berth Name	C-1	C-2,3	D-1	D-2,3
Total Berth Length (m)	500	1,200	500	1,200
Size of Terminal (m2)	500 x 450	500 x 450 700 x 450	500 x 450	500 x 450 700 x 450

Source: Port Authority of Thailand (PAT), August 2002
Remarks: C- 0 in Figure 4-1 is the dedicated berth for Passenger Terminal and Car Terminal.

3) Singapore

a) Existing Facilities

327. Existing facilities of Singapore is shown in Table 5-B-14.

Table 5-B-14 Details of Container Terminals in Singapore

	Tanjong Pagar	Keppel	Brani	Pasir Panjang	Total
Area (ha)	80	96	79	84	339
Berths number	main 6 feeder 2	main 4 feeder 10	main 5 feeder 4	main 6	main 21 feeder 16
Draught (m)	-11.0~14.6	-9.6~14.6	-11.0~15.0	-15.0	-9.6~15.0
Yard (ha)	10.1	10.1	15.2	30.0	41.0
Crane	GC 29 RTG 87	GC 36 RTG 101 RMG 13	GC 29 RTG 108 RMG 5 BC 2	GC 24 RTG - RMG 15 BC 44	GC 114 RTG 296 RMG 33 BC 46
Ground Slots	15,940	20,230	15,424	14,200	65,794
Reefer (points)	840	936	1,344	648	3,768

Source: PSA
Note: GC: Quay Gantry Crane, RTG: Rubber-tyred Gantry Crane, RMG: Rail-mounted Gantry Crane, BC: Bridge Crane.

b) Future Expansion Plan

328. Pasir Panjang Terminal has an expansion plan so called phase 2, however, development works is now suspended. Land area for the development has already completed in the first phase.

4) Tanjung Pelepas

329. Tanjung Pelepas is situated in the southwest shoulder of Johor in the Malaysian Peninsula. It is less than one (1) hour from the international shipping lanes of the Straits of Malacca. The port has also been granted Free Zone status by the Malaysian government.

330. The port enjoys geographical advantages - sheltered bay with naturally deep waters, with a draft of 15m. The approach channel measures around 12km in length though, there is enough room for two-way passage. Turning basin is 1.9km in length with a width of 600m.

331. Existing facilities of Tanjung Pelepas is shown in Table 5-B-14. There is an expansion plan to the south direction with the length of another 2km.

Table 5-B-15 Port Facilities of Tanjung Pelepas

Number of Berths	6
Length (m)	2,000
Draught (m)	-15.0
Crane	GC 19

Source: Tanjung Pelepas

5) Port Klang

332. Existing facilities of Port Klang is shown in Table 5-B-14. West Port has an expansion plan to the south direction with the length of 2.4km for 8 berths. This will increase the capacity by 2.4 million TEU.

Table 5-B-16 Details of Container Terminals in Port Klang

	West Port	North Port
Number of Berths	7	10
Length (m)	2,000	2,379
Draught (m)	-15.0	-13.0~14.0
Yard (ha)	50ha	85ha
Ground Slots	11,500	17,388
Annual Capacity	2.0 mil TEU	2.6 mil TEU
CFS (m2)	30,000	43,592
Reefer Points	250	620
Crane	GC 13 RTG 41	GC 25 RTG 30 RMG 2 Straddle Carrier 89
Prime Movers	122	159
Trailers	139	168
Productivity	25 BCH 70-100 BSH (main vessel) 25-40 BSH (feeder vessel)	

Source: Port Klang Authority
Note: GC: Quay Gantry Crane, RTG: Rubber-tyred Gantry Crane, RMG: Rail-mounted Gantry Crane

Figure 5-B-1 Layout of the Major Container Handling Ports around Indonesia

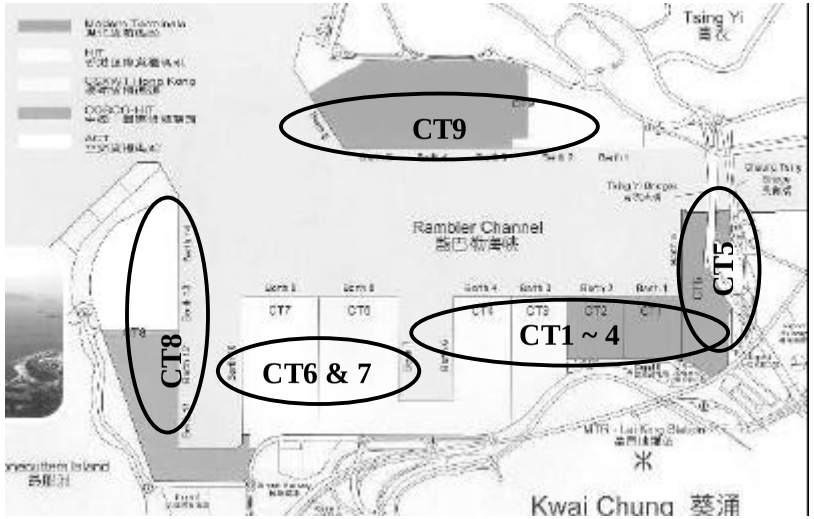
5-B-4 Characteristic of Terminal Operator & Terminal Operating System

1) Hong Kong

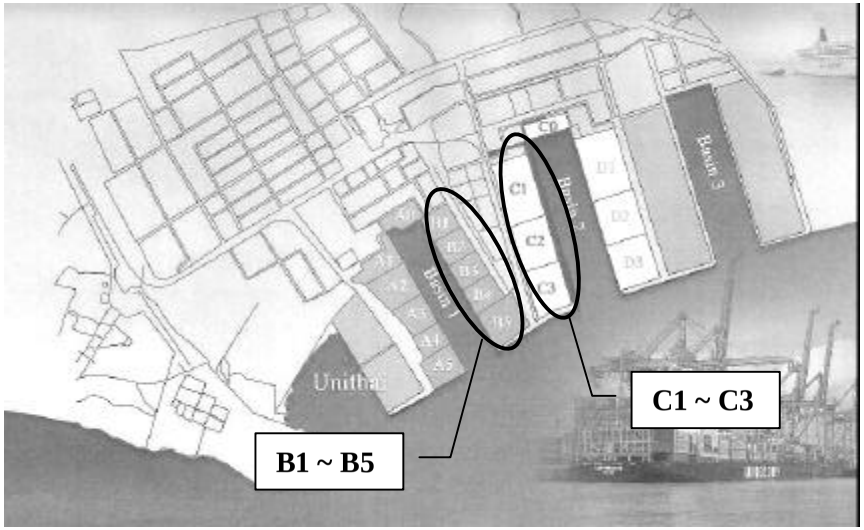
a) Administration of Port

333. Unlike other countries, there is no organization dedicated to port administration as is in other countries in Hong Kong. A very small organization called PMB (Hong Kong Port Maritime Board) with only about 20 staff members is functioning as a planning body and coordinating with the private sector.

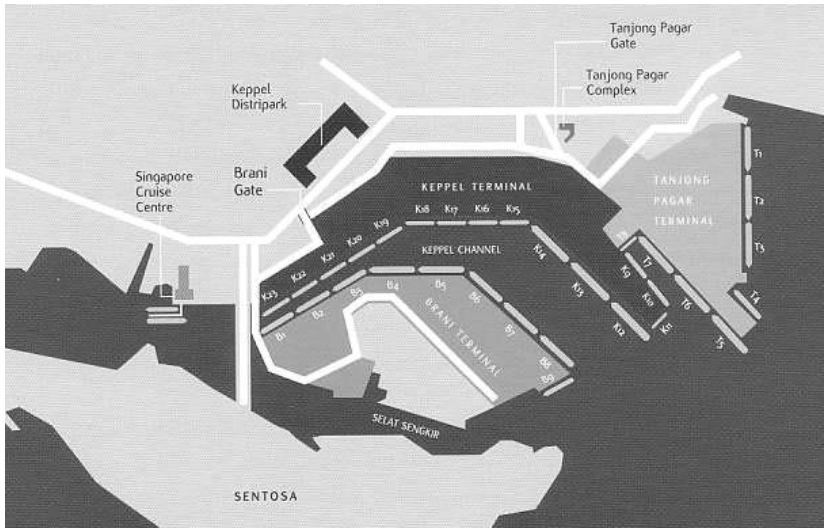
334. Director of Maritime is responsible. Under the director is the Port Operations Committee to support him. The director heads the Maritime Department.



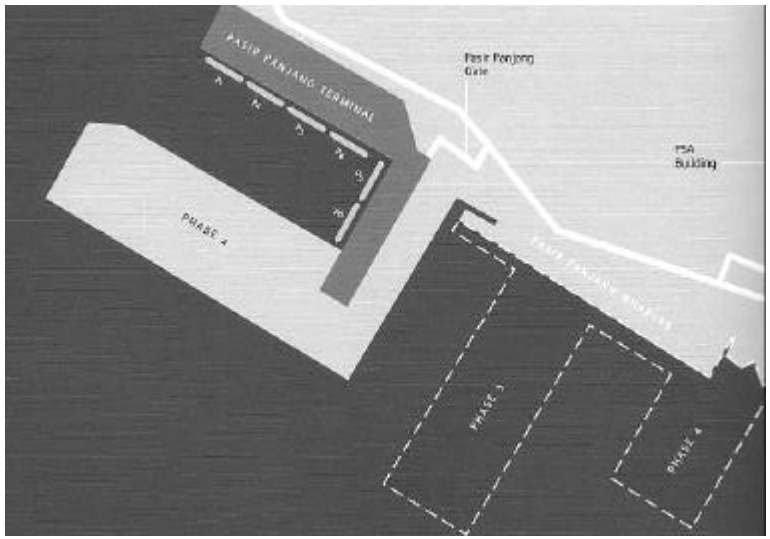
Hong Kong



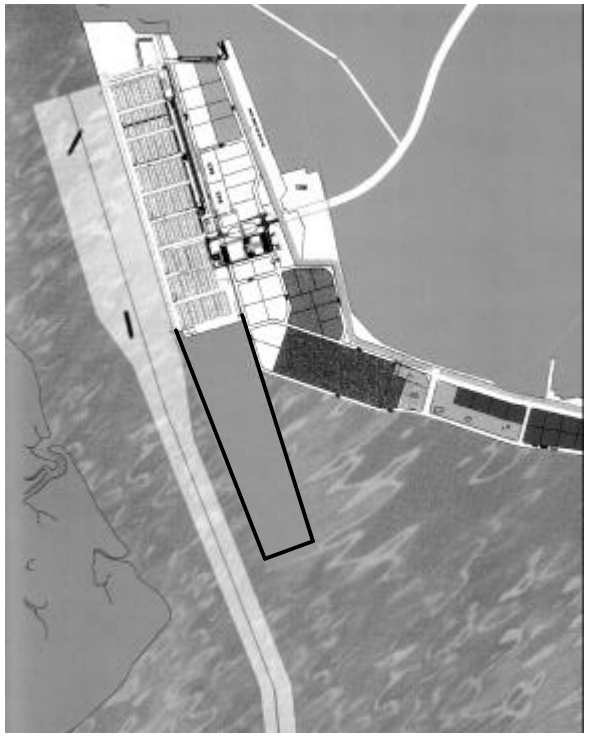
Laem Chabang



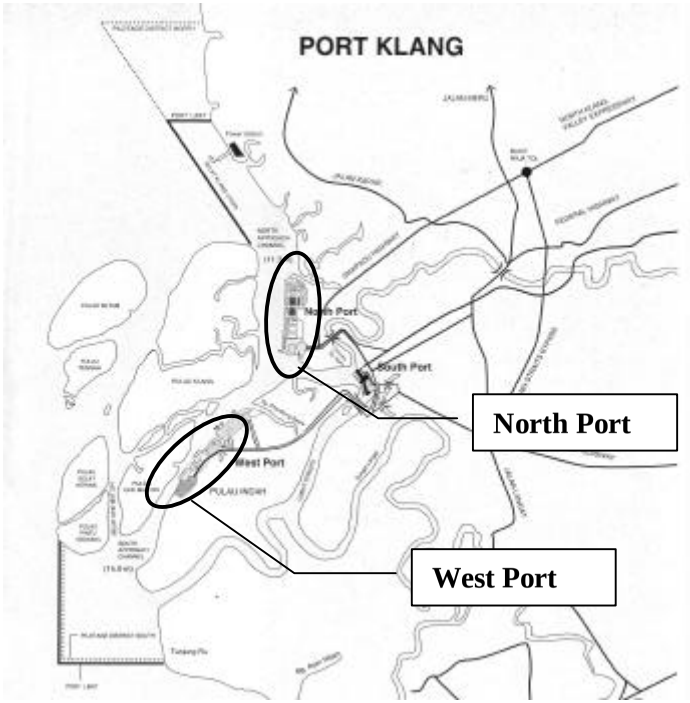
Singapore (Tanjong Pagar, Keppel, Brani)



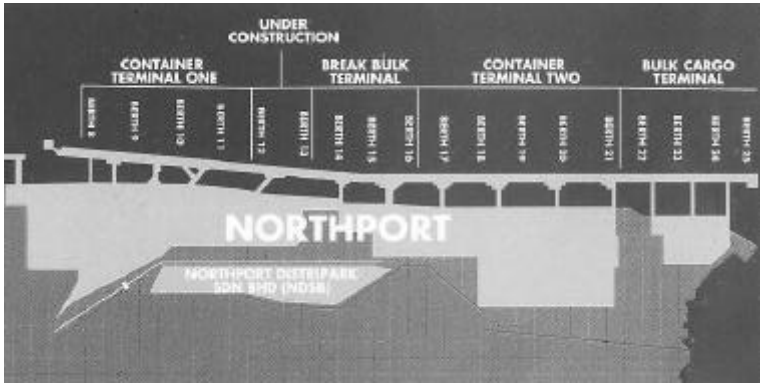
Singapore (Pasir Panjang)



Tanjung Pelepas



Port Kelang (North Port & West Port)



North Port, Port Kelang

335. In 1990, seven years before Hong Kong was returned to China, the Port Development Board was established and it is this board that actually decides the concession conditions for private participants for any long term port projects. Hong Kong is quite a rare port where a private organization is playing a central role for the development of the port. The Board consists of the representatives from port operation companies, shipping lines, shippers and other waterfront businesses. PMB and other administrative offices have minimal roles. In addition to the board, a new committee called SCLD (steering Committee on Logistics Development) was formed with effect from October 1, 2001.

336. After the completion of CT 9 (a new terminal) in April 2004, the new annual container handling capacity of Hong Kong will be about 18.5 – 19.0 million TEU

b) Container Terminal Operators

337. The largest terminal operator in Hong Kong is HIT (Hong Kong International Terminals Limited), a member company of HPH (Hutchison Port Holdings) operating 12 terminals including a joint terminal with COSCO. Next to HIT is MTL (Modern Terminal Limited) operating 6 terminals. The third is SCT (Sea-Land Container Terminal) operating one terminal. They are all commercial terminals and there is no public terminal in Hong Kong.

338. The remarkable point of container terminal operation in Hong Kong is that terminal operators are independent either from users or from the Special Provincial Government. As a rule, a terminal operator can load/unload, deliver/receive containers at their discretion. Generally, users' requests such as a request for a stacking slot in yard is not accepted.

339. All terminal using conditions including the specific conditions between Terminal Operator and User shipping lines such as berthing priority right and vessels quick dispatch clause exercised by Operator to User when a ship operation is delayed because of late arrival of containers are treated as direct negotiation items without any interference of PMB.

c) Stock holders' information of three Terminal Operators

Table 5-B-17 Stock Holder's Information

Operator	Stock Holders
HIT	HPH: 86.5%, Others not disclosed
COSCO-HIT	COSCO Pacific 56.75%, HPH 43.25%
MTL	Wharf Holdings 55%, China Merchants 22%, Swire 18%, Jebsen 5%
CSX	CSX Corporation 100%

Source: JICA Study Team

2) Laem Chabang

a) Administration of Port

340. The port administration body of Laem Chabang is PAT (Port Authority of Thailand), a public organization under control of the Ministry of Transportation. Established in 1951, the major responsibility of PAT was the administration and operation of the Port of Bangkok. When the new port of Laem Chabang was completed and opened in 1991, port administration matters of this port were added to the responsibilities of PAT.

341. In the Port of Bangkok, PAT administrates and operates directly by doing almost all port jobs itself. However, for Laem Chabang a new policy combining public and private elements was introduced to cope with the new tide of the world economy. Especially in

container terminals, a broad privatization system was introduced and all five terminals have been leased to five private companies under a long term lease contracts of 27 to 30 years.

b) PAT's Role in Privatization of the Container Terminals

342. In order to help private terminal operators by minimizing required initial investment, PAT constructed the infrastructure facilities of a public nature such as break-water and navigation safety system. The facilities which are considered to be profitably such as container terminals, CFS and warehouses are leased out for private operation. The maintenance operation for the facilities is in the hands of PAT.

c) Container Terminal Operators

343. In addition to the designated container terminals (B1~B5), there is another terminal (A2) which was originally planned for a conventional berth but converted to a container terminal and leased to Hutchison Port Holdings (HPH), thus the total number of container terminal operators in Laem Chabang is six as of end July 2002. Table 5-B-18 shows the details of each operator.

Table 5-B-18 Details of 6 Container Terminal Operators in Laem Chabang

Terminal Operator	Major Shareholders	Throughput (TEU)			Major Customers
		2000	2001	Change	
LCB Container Terminal 1	ESCO, MTL, Maersk Asia	439,044	475,885	8.4%	MSL, MSC, Kien Hung,Heung A
Evergreen Container Terminal (Thailand)	Evergreen	338,595	346,126	2.2%	Evergreen (Private Terminal)
Eastern Sea Laem Chabang Terminal Co. (ESCO)	Thai Port Ventures, Marubeni, Kamigumi	501,192	489,206	- 2.4%	K Line, Wan Hai, Yang Ming, Dongnama, Interasia, New Econ, Pendlum
TIPS Co Ltd	RCL, NYK, MOL, S. Paetra	516,446	526,518	2.0%	RCL, NYK, MOL
Laem Chabang Int'l CT	P&O Ports, NOL, Two others	398,461	526,733	32.1%	New World, Grand, PIL, COSCO, China Shipping, CMA CGM,
Thai LC Tmnl	HPH	NA	NA	NA	Heung A

Source: Bangkok Ship-owners Association

5-C PERFORMANCE OF MEGA CONTAINER TERMINAL OPERATOR IN THE SOUTH ASIA REGION

344. The history of international container terminal operating companies is not a long one. Table 5-C-1 shows how some of today's companies were born.

Table 5-C-1 Background and Outline of Major International Container Terminal Operators

	Background	Established	Stocks
HPH	Originally a port operation division of Wharf company, the biggest and oldest Company in HK. Started from HIT (Hong Kong International Terminal)l	1994	Not listed
PSA Corp.	Started from PSA (Port of Singapore Authority), a governmental organization which was privatized in 1996.	1997	Listed, but all stocks are owned by Government
P&O Ports	Started as a subsidiary company of P&O Australia, now going to be changed to P&O Ned. Group member.	1986	Not listed
SSA	Seattle based stevedoring company. Now quickly growing by active buying water-front companies abroad.	1987	Not listed
Eurogate	Two major German stevedoring companies merged to form a big company.	1999	Not listed
ICTSI	Some Philippine financial groups merged to form an international company.	1987	Listed
APM (AP Moller Terminal)	Originally started from a terminal planning division of AP Moller. After merging with SeaLand, the new terminal division quickly grew.	2001	Not listed
CSX World Terminals	When SeaLand was swallowed by Maersk, its international container terminals became independent to form CSX World Terminals.	1996	Not listed

Source: Mitsui O. S. K. Lines Business Research Division, JICA Study Team

345. Of the above big companies, HPH, P&O Ports, PSA and APM are called the New Big Four. Until recently, " Big Five " consisted of HPH, P&O Ports, PSA, Eurogate and SSA, but a new formation of APM has vaulted it into the top four. Table 5-C-2 shows the leading seven container terminal operators. The latest developments in the new big four are described below.

Table 5-C-2 International Container Terminal Operators' Global Volumes (million TEU)

Operators	1999	2000	2001	2001/2000 %
HPH	18.0	25.3	29.0	+ 14.6
PSA	17.9	19.8	19.1	- 3.2
APM Terminals	12.5	13.3	18.0	+ 35.3
P&O Ports	6.2	8.3	9.8	+ 18.0
Eurogate	6.3	7.0	8.6	+ 22.5
SSA	3.6	4.5	6.0	+ 33.3
CSX World T.	N/A	3.5	3.6	+ 2.9
Total	64.5 +	81.7	94.1	+ 15.2

Source: Containerization International March, 2002

5-C-1 HPH (Hutchison Port Holdings)

346. The world's number one container terminal operating company. HPH port network world wide handled 25.3 million TEU in the year 2000, a 40 % increase over 1999. This growth was due to increased volumes at existing container terminals such as Hong Kong, Shanghai, and Yantian, as well as substantial contributions from Jakarta' s Koja Terminal and KMT-Westport in Malaysia, both acquired in 2000. In the first half of 2001, HPH achieved a 5 % increase in

volumes compared with the same period in 2000, handling 12 million TEU. It was fortunate that the throughput at Koja, KMT and Yantian grew quickly. Especially at Yantian container volumes showed a big increase of 23 % and were offset by a 7 % decrease at its HIT terminal in Hong Kong, and a significant shrinking at Shanghai and Felixtowe.

347. HPH is active in many regions in the world. In Asia, HPH is part of a consortium that has reached an agreement to operate and develop Phase II of the Gwangyang Port near Busan, which will eventually have a capacity of 1.75 million TEU a year. HPH further expanded its involvement in South Korean container terminal business through a deal with HMM (Hyundai Merchant Marine) to buy out its interest in a number of container terminals in the country. HPH will continue to look for further opportunities to expand its global ports business.

5-C-2 PSA Corporation

348. As is shown in Table 5-C-2, PSA is the only company which marked a decrease in container handling in 2000/2001. PSA has suffered in its home market, Singapore, during 2001. A combination of a regional economic slowdown and severe competition from Tanjung Pelepas reduced container volumes through the port of Singapore by roughly 9 %, to around 15.52 million TEU.

349. However, the PSA's international terminals business turned out much better to partially offset for this negative trend, and volumes from these terminals in Asia, South East Asia, Middle East and Europe increased by almost 33 %, to 3.6 million TEU. But this was not enough to offset the heavy decrease in its home terminal in Singapore. The 19.1 million TEU handled worldwide by PSA in 2001 represents a 3.2 % decline compared with the previous 12 months.

350. A highlight of 2001 for PSA concerning the Asian terminal business was the establishment of a joint venture called Guangzhou Container Terminal (GCT), which manages six berths at Guangzhou, Huangpu, Xingang and Xinsha Container Terminals. PSA has the longest experience in container terminals management in the mainland of China. Guangzhou is PSA's third operation following on from earlier ventures in Dalian and Fuzhou.

351. In South Korea, PSA is a partner in the new Inchon container terminal project, which should be operational in 2003. The company is also taking a first step into Japan, acquiring a majority stake in a company that will operate the new Hibiki Terminal in Kitakyushu. Hibiki Terminal is the first terminal built through a new PFI law. Negotiations on the details of this project are still in progress.

352. Among the big four, PSA remains the only one without an interest in either North or South America. Most of the PSA terminals are located along the Europe-Asia (East-West) trade route, and it is widely believed that this focus has helped bring benefits to both PSA and its liner shipping customers.

5-C-3 APM Terminals

353. This company is the newest addition to the leading international operating companies. APM Terminals was set up by APMoller in 2001 as a separate brand within the group, and one of the aims has clearly been to position this part of the business as independent from Maersk-Sealand. Before the merger of both lines, each line had had a long experience in container terminal operation and administration. However, each line has a different peculiarity regarding terminal operation. SeaLand was a pioneer of the terminal business and one of the first shipping lines who willingly handled containers by third shipping lines. On the other hand,

Maersk Line virtually started the terminal business. For a long time, Maersk remained as plain user before realizing that a container terminal is strategically important, as well as profitable.

354. Right after the merger, most of the terminal men of Maersk-Sealand were ex-Sealand Staff, and there seemed Chinese Walls between investment groups and marketing groups. Whether there are longer-term plans to divest this part of the business completely, spinning it off from the APMoller group as a whole, remains to be seen but judging from the mega market of container throughput in the world and better profitability than the liner shipping business, it looks for sure that APMoller will pursue this direction.

355. APM may have handled a similar volume worldwide to the PSA in 2001. Containerization International suggest a combined throughput of at least 18 million TEU were handled at their terminals. There are no official figures declared by the company although they state that the total volume in 2001 was above 15 million TEU.

5-C-4 P&O Ports

356. The company was successful in increasing its global market share in 2001. The total container volumes jumped to 18 % from 2000, to 9.8 million TEU. According to the company, around 9 % of the growth was organic, while the rest was achieved by acquisition. In Asia, P&O Ports business has benefited from its involvement in India, where traffic moving through the Nhava Sheva International Container Terminal (NSICT) continues to increase strongly.

357. P& O Ports Asian business also benefited from the fact that its Laem Chabang terminal secured significant additional volumes in 2001. Its terminal attracted both Grand Alliance and New World Alliance loops. The company operates ATI in the Philippines and Surabaya Terminal in Indonesia.

358. The company was established by P&O Australia in 1986 and for a long time after the merger of P&O UK with Nedlloyd in 1996, the company remained independent with the head office in Sydney. But quite recently, it announced that it was shifting its head office to London. In addition, a new president has been assigned from P&O Nedlloyd. It is believed that P&O Nedlloyd is also aiming at container terminal industry.

359. Substantial investment is being made by the company in the Sri Lankan port of Colombo, where traffic was down 6 % for various reasons. Development of the South Asia Gateway Terminal (SAGT) is now well advanced and P&O Ports believes this facility is well planned to benefit from an improvement in volumes following renewed stability in Sri Lanka.

360. All of the major operators mentioned above are interested in the container terminal business in the South Asian Region, because the region is considered to be one of the most prosperous growing centers of the world economy. As is already shown in Table 5-C-1, the big three operators are originated from water-front business companies in the South Asia. Therefore, it is quite natural for them to be keenly interested in the container terminal operating business in South Asia as they have a good business relationship with many companies in related fields and unsurpassed information network in the related waterfront industry. Table 5-C-3 shows how they are doing business in the economic regions of the world. The Table includes some container terminals still under construction.

Table 5-C-3 Container Terminal Locations of Big Seven Companies

Region	Country	HPH	PSA	P&O Ports	SSA	APM Terminals	Eurogate
East Asia	Japan		●			●	
	S. Korea	●	●				
	H. K.	●	●			●	
	China	●	●	●			
South East Asia	Singapore		●				
	Malaysia	●				●	
	Brunei		●				
	Thailand	○		●			
	Myanmar	●					
	Philippines			●			
	Indonesia	●		●			
South Asia	Bangladesh				●		
	India		●	●			
	Pakistan	○		●			
	Sri Lanka			●			
Middle East	Yemen		●				
	S. Arabia	○					
	Oman					●	
Australia	Australia			●			
N. America	USA			●	●	●	
Central South America	Mexico	○					
	Panama	●			●		
	Bahamas	●					
	Brazil					●	
	Argentine	○		●			
	Chile				●		
North Europe	Germany						●
	Nether-land	●					
	Belgium		●	●			
	UK	●		●			
South Europe	Italy		●	●			●
	Portugal		●				●
	Spain					●	
Russia	Russia			●			
Africa	Mozambique			●			
	Tanzania	○					
	Egypt				●		

Source: Mitsui O. S. K. Lines Business Research Division, JICA Study Team
○ mark indicates terminals that were bought by HPH from ICTSI in 2001

361. South East Asia and South Asia are two big regions where many container terminals are in operation. In the South East Asian Region, ten terminals are being run, while in the South Asian Region eight terminals are handling many containers.

362. It is reported that the leading operators are making profits from container handling despite the slowdown in the world economy. Table 5-C-4 shows the result of the top five operators in the year 2000. APMoller Terminal and CSX world Terminals are excluded from the table due to lack of data.

Table 5-C-4 Results of Leading Five Terminal Operators in 2000

	Results			Profit/Total Turnover (%)	Container Handled (mil TEU)	Numbers of Terminals
	Currency	Total Turnover	Operating Profit			
HPH	US$ million	1,818.4	683.1			
	HK$ million	*14,226*	*5,341*	37.5 %	25.30	25
PSA	US$ million	2,458.3	1,146.4	46.6 %	19.77	13
P&O P	US$ million	793.2	152.9			
	S. pounds mil.	*531.6*	*102.5*	19.3 %	8.28	29
SSA	US$ million	900.0	n.a.	-	8.00	10
Eurogate	US$ million	308.4				
	G. Mark mil.	*648.5*	n.a.	-	7.66	5

Source: JICA Study Team based on the data prepared by Mitsui O. S. K. Lines Business Research Division.

5-C-5 Conditions of Concession Agreement for Terminal Operation

1) Framework of Standard Concession Agreement

363. The circumstances in a standard concession agreement is:

- The roles played by public and private sector are delineated clearly and public sector prepares the fundamental part of container terminal such as reclamation of the land, break water, wharf, sometimes purchasing quay cranes. Private sector (operator of container terminal) leases the basic facilities from public under a long term contract through a negotiation of a concession contract.
- Public sector (lesser of the facilities and in most cases port administration body) publish a port tariff for general port services such as pilot, tug and navigation safety measures and lessee has obligation to follow them.
- Public sector allows private container terminal operator right to charge various charges to terminal users necessary for administrating and operating container terminal and its affiliated facilities.
- Public sector (Port Administration Organization) plays the role of a land-owner and keep a neutral position. Its main responsibilities are maintenance and improvement infrastructure, planning for a long term port plan.

2) Types of Concession Agreement

364. There are different types of concession agreements in line with the situation in which a container terminal is built, leased and administered. In the case of Hong Kong, terminals are constructed by each terminal developer and in most cases, developers equal terminal operators, thus a concession agreement is not needed. Only contracts between Hong Kong Special Provincial Government and the terminal operators are long term land-lease agreements. On the other hand in Singapore, the only terminal operator in the port is PSA, which is a semi-governmental company. Although it cannot be confirmed, there must be a kind of a land use contract between the Singapore Government and PSA. In both of the above cases, there is no need for the parties concerned to enter a concession agreement in its original meaning.

365. It is possible to classify many concession agreements according to the degree in which private and public sectors are involved in the construction/operation. Hong Kong's is almost 100 % private as each terminal was built and is being operated at the private company's own discretion and risk, while Singapore's PSA is a semi governmental organization and is virtually

100 % public in nature. PSA is monopolizing the market using governmental assets and any concession agreement that may exist is just a formality.

366. Many other ports in the world fall between Hong Kong and Singapore. In Japan, the central government and municipal governments are involved in the terminal construction planning and building. After completion, private sector is invited to use it based on agreed upon conditions. A terminal operator invests only in buildings and some minor facilities for administration and operation. It also purchases container handling machinery and equipment. Thus the nature of a Japanese terminal is 50 % public and 50 % private in terms of construction/operation system. Table 5-C-5 shows the type-distribution of five ports according to concession agreements in terms of terminal building system.

Table 5-C-5 Terminal Concession Type-Distribution

	Administration	Operation	Total Privatization
Singapore	0	0	0
Tanjung Pelepas	50	50	50
Port Klang	70	80	75
Laem Chabang	70	100	80
Hong Kong	90	100	99

Source: Interview by JICA Study Team

Note: Above figures indicate the degree of private sector involvement

367. Singapore Type is government-controlled terminal although PSA is a limited company. 100 % of PSA stocks are owned by the Singaporean government and governmental organizations. Hong Kong Type are 99 % developed, owned and operated by private companies. The remaining three ports are located in between. Among the three Laem Chabang is more privatized than the other two ports.

368. Japanese Ports are similar to Port Klang and Laem Chabang, while US West Coast Ports such as Los Angeles, Long Beach and Oakland are similar to Hong Kong. On the US West Coast, all container terminals are developed by contract between port authorities and users. Construction and dredging works are carried out by the port. After completion of the terminal, administration and operation are left to the discretion of the operators' (terminal lessee).

3) Tanjung Priok

369. The Port of Tanjung Priok is rather difficult to categorize. It is a mixture of Singapore type and Hong Kong type. First of all, the Port Tariff is decided by the Ministry of Communication and given to the Terminal Operators. There are two large scale container terminals, i.e., JICT (Jakarta International Container Terminal) and TPK (Terminal Petikemas Koja). Besides them, there are one small scale terminal (MTI: Multi Terminal Indonesia) and 14 conventional type quay terminals handling containers. In this report, we will focus on the concession agreements of the two large-scale container terminals, JICT and TPK Koja.

370. In Indonesia, the Minister of Communication has the authority to decide all the charges pertaining to the port services of container/conventional operation. Accordingly, it would be natural to conclude that the public sector has a large influence over port administration. On the other hand, the operation of the two container terminals are the responsibility of the private companies, JICT and TPK Koja, although both companies are joint venture of Pelindo II and HPH.

371. The Concession Agreement of JICT and TPK Koja, therefore, can be categorized as a very special mixture of the Singapore Type (actual administration and operation by Public Sector) and the Hong Kong Type (nearly complete free enterprise).

CHAPTER-6. CURRENT SITUATION OF PORTS IN THE STUDY AREA

6-A OVERVIEW OF PORT ADMINISTRATION SYSTEM IN THE STUDY AREA

6-A-1 Number of Ports and their Location

372. Number and classification of ports, which were initially identified in the Shipping Law (UU No.21/1992), have been changed and modified in line with the activities of each port. However, regarding the actual number of ports at present, there appears to be some confusion and discrepancy among governmental documents. In spite of that, the Study team has attempted to count the number of the ports in the Study Area based on several documents as shown in Table 6-A-1. The detail list of the ports in the Study Area is shown in Table 6-A-2 and Table 6-A-3.

Table 6-A-1 Number of the Ports in the Study Area

Province	Public Port			Special Wharf/Port			Ferry Port	Total
	(IPC2)	(Gov.)	Total	(IPC2)	(Gov.)	Total	(Gov.)	
Jakarta DKI	2	3	5	5	4	9	0	14
Banten	1	6	7	33	4	37	1	45
West Java	1	9	10		4	4	0	14
Total	4	18	22	38	12	50	1	73

Source: DGSC, IPC2

Table 6-A-2 List of Public Ports in the Study Area

Table 6-A-3 List of Private Ports/Wharves in the Study Area

373. Public ports which are used commercially (called commercial ports) are managed and operated by IPC, while non-commercial public ports are under the management of the central government. (Recently, the role of local government on the port management has been discussed and some ports will be expected under the control of local government in the stream of decentralization. In the Study area, commercial ports count five (5), i.e., Tanjung Priok, Sunda Kelapa, and Kalibaru in Jakarta DKI, Banten/Ciwandan in Banten province, and Cirebon in West Java province. In Table 6-A-1, it is noted that many special dedicated private wharves/ports are located in Banten province, especially concentrating in the Banten peninsula where it is easy to secure a sufficient water depth. Figure 6-A-1 shows the location of the public ports.

Figure 6-A-1 Location of the Public Ports in the Study Area

374. Concerning classification of the ports, although several ideas have formulated and examined so far, nothing has been authorized yet except international/local classification stipulated in Shipping Law. Currently, DGSC is working on establishment of National Port System based on the Port Regulation (PP No.69/2001), in which new port classification will be made according to roles and functions of ports.

Public Port (DKI, West Java and Banten)

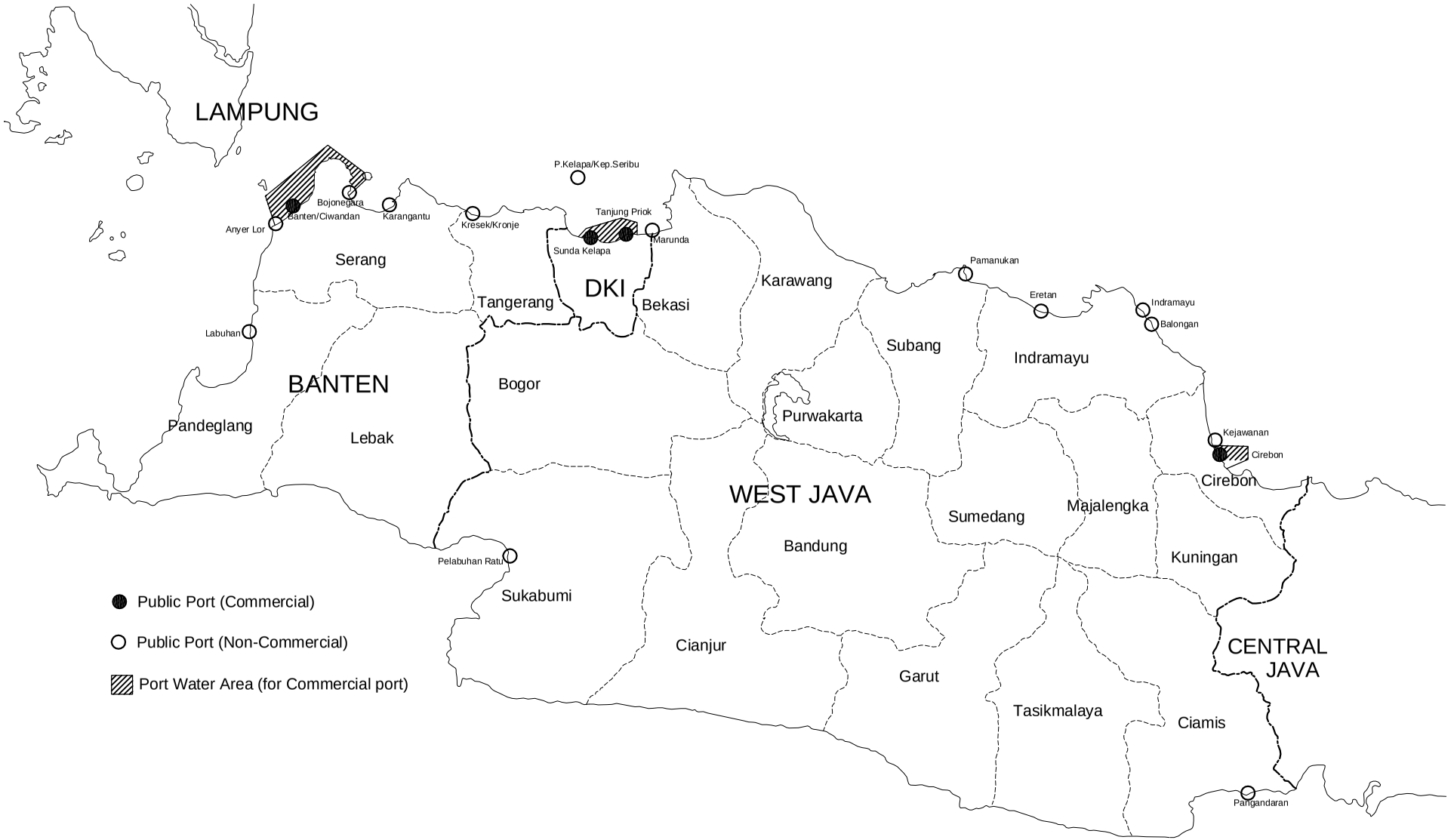
No.	Name of Port/Location	Province	Jurisdiction	Status KM No.35/1993	Berth L (m)	Berth D (m)	Storage (m2)	Op. yard (m2)	Breakwater (m)	year 2000 Shipcall (unit)	Shipcall (GT)	Cargo unload	Cargo load	Pass. Disemb.	Pass. Emb.
1	Banten/ Ciwandan	Banten	Pelindo II												
2	Anyer Lor	Banten	Government	Kanpel				400	75; 180	247	1,939		819	819	48
3	Labuhan	Banten	Government	Kanpel				3,200	130; 220; 400; 120	377	2,385		1217	1,217	
4	Karangantu	Banten	Government	Kanpel	200	3.00			300	288	38,380	61,625			
5	Bojonegara	Banten	Government	Kanpel											
6	Kresek/Kronje	Banten	Government	Satker											
7	Muara Binuangen	Banten	Government	Satker					200						
8	Tg. Priok	DKI	Pelindo II												
9	Sunda Kelapa (inc. Kalibaru)	DKI	Pelindo II												
10	P. Kelapa/Kep.Seribu	DKI	Government	non status											
11	Marunda	DKI	Government	non status											
12	Muara Baru	DKI	Government	non status											
13	Cirebon	West Java	Pelindo II												
14	Pelabuhan Ratu	West Java	Government	Kanpel	200	4.00				109	393		560	560	
15	Pangandaran	West Java	Government	Kanpel				1,750	350	104	667	184			
16	Pamanukan	West Java	Government	Kanpel	50				100; 400	348	9,627				
17	Indramayu	West Java	Government	Kanpel					150	449	98,387				
18	Eretan	West Java	Government	Satker				400							
19	Balongan	West Java	Government	Satker						19	415,717				
20	Kejawanan	West Java	Government	Satker											
21	Karangsong	West Java	Government	Satker						110	698				
22	Juntinyuat	West Java	Government	Satker						291	11,433				

Special Dedicated Private Port / Berth (DKI Jakarta, West Java and Banten)

No.	Name of Company	Status *1)	Province	Name of Port/ Location *2)	Commmodity (Indonesia)	Commmodity (English)	Berth L (m)	Berth D (m)	Storage (m2)	Op. yard (ha)
1	PT. CARITA KRAKATAU INTERNATIONAL	PELSUS	Banten	Anyer Labuan *	WISATA	Tourist Passenger				
2	PT. INTI KARSA DAKSA	PELSUS	Banten	Anyer Labuan *	WISATA	Tourist Passenger				
3	PT. BANTEN WEST JAVA	PELSUS	Banten	Banten	WISATA	Tourist Passenger				
4	PT. KARANG BOLONG ARSILA BEACHHILL RESORT	PELSUS	Banten	Banten	WISATA	Tourist Passenger				
5	PT. KRAKATAU STEEL	DUKS	Banten	Banten	BAJA	Steel	1,168	-16.0	6,600	10.00
6	PT. ARCO CHEMICAL INDONESIA	DUKS	Banten	Banten	KIMIA	Chemical	255	-9.0	-	1.50
7	PT. RHONE POULENC INDOLATEX	DUKS	Banten	Banten	KIMIA	Chemical	452	-11.0	-	2.00
8	PT. TRI POLYTA INDONESIA	DUKS	Banten	Banten	KIMIA	Chemical	410	-16.0	4,800	5.00
9	PT. CHANDRA ASRI	DUKS	Banten	Banten	KIMIA	Chemical	75	-8.0	-	15.00
10	PT. INDAH KIAT PULP & PAPER CORPORATION	DUKS	Banten	Banten	KERTAS	Paper	825	-13.0	1,600	3.00
11	PLN	DUKS	Banten	Banten	PLTU	Electricity				
12	PT. UNGGUL INDAH CAHAYA	DUKS	Banten	Banten	KIMIA	Chemical	160	-8.0	3,200	2.00
13	PT. BATU ALAM MAKMUR	DUKS	Banten	Banten	BAHAN GALIAN "C"	Sand & Stone	70	-12.0	-	3.00
14	PT. CIREGON FABRICATOR	DUKS	Banten	Banten	BAJA	Steel	30	-4.0	-	4.00
15	PT. SARI SARANA KIMIA	DUKS	Banten	Banten	KIMIA	Chemical	340	-11.0	-	1.50
16	PT. CONTINENTAL CARBON INDONESIA	DUKS	Banten	Banten	KIMIA	Chemical	90	-7.0	-	1.00
17	PT. PROINTAL	DUKS	Banten	Banten	KIMIA	Chemical	48	-8.0	-	3.00
18	PT. BAKRIE KASSEI CORPORATION	DUKS	Banten	Banten	KIMIA	Chemical	160	-8.0	1,600	2.00
19	PT. RISYAD BRASALI STYRINDOMONO	DUKS	Banten	Banten	KIMIA	Chemical	150	-9.0	1,800	1.50
20	PERTAMINA TG GEREM	DUKS	Banten	Banten	BBM	Oil	150	-8.0	-	2.50
21	PLN SURALAYA	DUKS	Banten	Banten	PLTU	Electricity	480	-12.0	-	23.00
22	PT. DOVER CHEMICAL	DUKS	Banten	Banten	KIMIA	Chemical	150	-11.0	-	1.50
23	PT. MEISEI SARANA KIMIA INDONESIA	DUKS	Banten	Banten	KIMIA	Chemical				
24	PT. INDAH KIAT PULP & PAPER SERANG MILLS	DUKS	Banten	Banten	KERTAS	Paper	30	-6.0	-	0.25
25	PT. INDAH KIAT PULP & PAPER SERANF MILLS	DUKS	Banten	Banten	BATUBARA	Coal				
26	PT. TOMINDOMAS BULK TANK TERMINAL	DUKS	Banten	Banten	KIMIA	Chemical	120	-13.0	-	0.25
27	PT. SANTA FE POMEROY	DUKS	Banten	Banten	(OFF SHORE)		253	-7.0	7,000	2.00
28	PT. POLYCHEMLINDO INC	DUKS	Banten	Banten	KIMIA	Chemical	130	-7.0	1,600	-
29	PT. KUSUMA RAYA UTAMA	DUKS	Banten	Banten	BAHAN GALIAN "C"	Sand & Stone	24	-6.0	-	3.00
30	PT. GUNA UTAMA FABRICATOR	DUKS	Banten	Banten	BAJA	Steel	100	-7.0	1,600	4.00
31	PT. PETROKIMIA NUSANTARA INTERINDO	DUKS	Banten	Banten	KIMIA	Chemical				
32	PT. TRANS BAKRIE	DUKS	Banten	Banten	BAJA	Steel				
33	PT. SULFINDO ADIUSAHA	DUKS	Banten	Banten	KIMIA	Chemical				
34	PT. KARBON INDONESIA	DUKS	Banten	Banten	KIMIA	Chemical				
35	PT. GT PETROCHEM INDUSTRI	DUKS	Banten	Banten	KIMIA	Chemical				
36	PT. LYONDELL INDONESIA	DUKS	Banten	Banten	KIMIA	Chemical				
37	PT. ASAHIMAS CHEMICAL	DUKS	Banten	Banten	KIMIA	Chemical				
38	PT. ALFA KARSA PERSADA	PELSUS	DKI	Tg. Priok	(OFF SHORE)					
39	PT. KAWASAN BERIKAT NUSANTARA	PELSUS	DKI	Tg. Priok	ANEKA INDUSTRI	Industrial Materials				
40	PT. INDOFOOD SUKSES MAKMUR	DUKS	DKI	Tg. Priok	TERIGU	Wheat				
41	PT. PERTAMINA WIDURI	DUKS	DKI	Tg. Priok	BBM	Oil				
42	PT. PEMBANGUNAN JAYA ANCOL	DUKS	DKI	Tg. Priok	WISATA	Tourist Passenger				
43	PT. PERTAMINA	DUKS	DKI	Tg. Priok	BBM	Oil				
44	PT. ADHI GUNA SHIP BUILD & ENG	DUKS	DKI	Tg. Priok	KAPAL	Ship				
45	PT. KARYA TEKNIK UTAMA	PELSUS	DKI	Marunda	KAPAL	Ship				
46	PT. PERTAMINA	PELSUS	DKI	Cengkareng *	BBM	Oil				
47	PT. PERTAMINA	PELSUS	West Java	Indramayu	BBM	Oil				
48	PLN MUARA TAWAR	PELSUS	West Java	Pamanukan	LISTRIK	Electricity				
49	PT. PUPUK KUJANG	PELSUS	West Java	Pamanukan	PUPUK	Fertilizer				
50	PT. DESAKUASRI GRIYABANGUN	PELSUS	West Java	Tegal papak *	WISATA	Tourist Passenger				

*1) PELSUS: Government jurisdiction, DUKS: Pelindo's jurisdiction

*2) Location is indicated by *.


LAMPUNG
P.Kelapa/Kep.Seribu
Bojonegara
Banten/Ciwandan
Karangantu
Anyer Lor
Kresek/Kronje
Tanjung Priok
Marunda
Sunda Kelapa
Serang
DKI
Karawang
Pamanukan
Tangerang
Bekasi
Eretan
Indramayu
Balongan
Labuhan
Subang
Indramayu
BANTEN
Bogor
Purwakarta
Pandeglang
Lebak
Kejawanan
Cirebon
Cirebon
WEST JAVA
Majalengka
Sumedang
Bandung
Kuningan
Pelabuhan Ratu
Sukabumi
Public Port (Commercial)
Public Port (Non-Commercial)
Port Water Area (for Commercial port)
Cianjur
CENTRAL
JAVA
Garut
Tasikmalaya
Ciamis
Pangandaran

6-A-2 Port Area

375. According to the Port Regulation, there are two kinds of port area, i.e., Port Working Area (DLKR) and Port Interest Area (DLKP) for both of water area and land area. They will be defined based on Master Plan of the port, which currently being formulated by related organizations. The definition of those areas is described in the Port Regulation as follows.

- Port Working Area (DLKR): The waters and land area in the public port used directly for port activity.
- Port Interest Area (DLKP): The waters area surrounding waters working area of the public port used for guarantying the ships safety.

376. At this moment, DLKR and DLKP of each port has not always clearly authorized yet, and it seems that just the sole waters area has been defined for each commercial port. In the Study area, existing port waters area are defined for four (4) public commercial ports with decrees of SK.146/0/1972 for Tanjung Priok, SK.146/0/1972 for Sunda Kelapa including Kalibaru, KP25/AL106/PHB1988 for Cirebon, KM31/AL101/PHB1986 for Banten. Figure 6-A-1 also describes these port working areas for water. Banten has a large port water area for the sake of providing unified service of safety operation in the area and its future development in the area. However, commercial port itself is just located in Ciwandan, while many special wharves are located in the Banten port area.

6-A-3 Port Administration

377. The four (4) public commercial ports in the Study area are directly managed by four branch offices (*Cabang*) of IPC-II in Tanjung Priok, Banten, Cirebon and Sunda Kelapa. Kalibaru, a small port on the east side of Tanjung Priok, is under the jurisdiction of Cabang Sunda kelapa. The branch office also has responsibility for special wharves located in the port working/interest area in order to provide unified and safe servoces. The other public ports, i.e., non-commercial ports, are managed by the transportation office (*Dinas Perhubungan*) of the local government, although this function formerly belonged to the central government branch office called *"Kanwil"*.

378. Special port/wharf is governed by central/local government (called "special port") or IPC (called "special wharf"), depending on whether it is located within the Port Working/Interest Area of commercial port or not. Ferry port is governed by DGLC - MOC as a part of the road infrastructure network.

6-B PORT MANAGEMENT IN THE STUDY AREA

6-B-1 Organization Structure of IPC2

379. IPC2 is one of the state owned port corporations under the Government consisting of the Ministry of Communications and Ministry of State-Owned Enterprise. IPC2 manages and operates the Head office, 12 branches (Ports of TG. Priok, Panjang, Palembang, Teluk Bayur, Pontianak, Cirebon, Banten, Jambi, Bengkulu, Sunda Kelapa, TG. Pandan and Pangkal Balam), 1 port training center and 6 affiliated companies. Its objective is to conduct the business pertaining to the port or the interest of the state and the public by implementing development plans in line with the national economic and social development plan and to render efficient services and facilities to all port users on a fair basis.

1) IPC2 Head Office

380. Figure V.B.1-1 shows the organization chart of head office of IPC2. Head office is managed by the Board of Commissioners and Managing Director, assisted by Board of Directors, Corporate Secretary, Head of Internal Supervision Unit and Senior Managers of the various service and operational departments who are responsible for day to day management and operations. IPC2 head office has commercial, technical, financial and personnel and general affairs departments. There are about 3,300 permanent employees.

Figure 6-B-1 Organization Chart of Head Office of IPC2

381. *Managing Director* administrates the general policy and the strategic decision of company and works as the Coordinator of Management Board. Managing Director has a responsibility for:

- Business and operational activity
- Financial activity
- Personnel and general affairs activity,
- Technical activity
- Head of Internal Supervision Unit and corporate secretary activity
- Branch/unit activity
- Joint business, management and operation with the third party.

382. Managing Director also supervises the Commercial Director, Technical Director, Financial Director, Personnel and General Affairs Director, and assisted by the Head of Internal Supervision Unit and Corporate Secretary.

383. Functions of *Head of Internal Supervision Unit* are to review and appraise the soundness, adequacy and application of accounting procedures and financial controls in the organization and ascertain the extent of compliance with established policies, systems, programs and procedures of such financial controls.

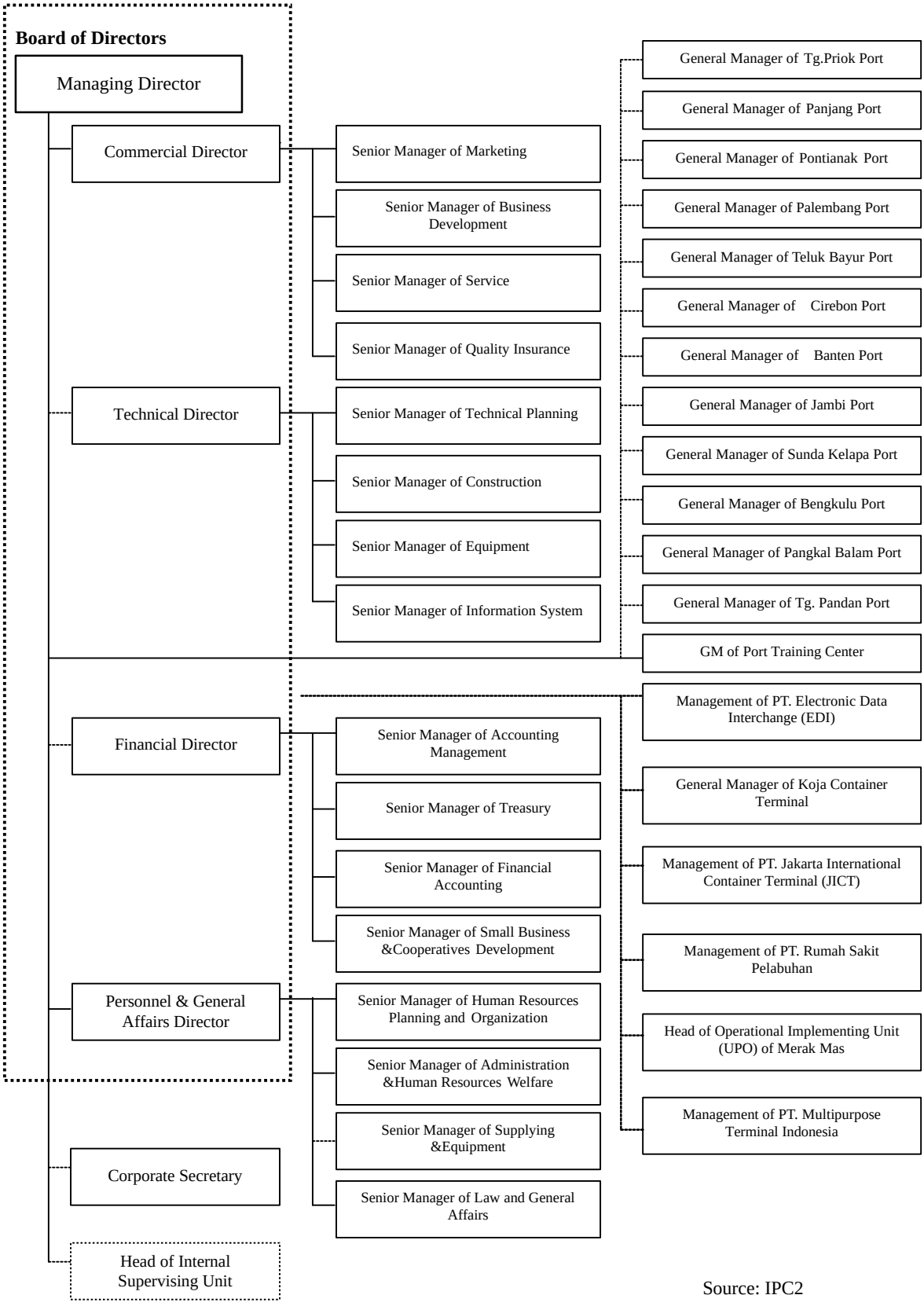
384. Functions of *Corporate Secretary* are to act as coordinator between Managing Director and the Board of Directors and arranges the meetings and performs all functions relating to the Board of Director.

385. *Commercial Director* has a responsibility for:

- Formulation of the regulations concerning the development of marketing, business improvement, service and quality guarantee that is further decided by the Minister's Decree.
- Development of marketing, business, service and commercial quality guarantee.
- Keeping the highest condition for the management of commerce.
- Implementation of company business and activity
- Development and maintenance of the commercial quality management system.
- Conducting restudies on the commercial quality management system.
- Reforming the commercial quality system.

386. *Financial Director* has a responsibility for:

- Formulation of the regulations concerning the financial development plan relating with the activities of budget control, accounting and company financial report and treasury



Source: IPC2

Organization Chart of Head Office of IPC2

- Development of cooperatives and small business.
- Coordination of the financial development of branch/unit in the company area.
- Keeping the highest condition for the management of finance.
- Implementation of business and company activity.
- Implementation of the development and maintenance of the financial quality management system
- Implementation of the effective financial quality guarantee system.
- Conducting restudies on the financial quality management system.
- Reforming the financial quality system.

387. Personnel and General Affairs Director has a responsibility for:

- Formulation of the stipulations or regulation concerning the development of human resources and organization, supplying, law and general fields decided with the Management's Decree.
- Coordination of the operational development for functional organization.
- Keeping the highest management of Personnel and General Affairs.
- Coordination of the organization and implementation of business and company activity.
- Implementation of the development and maintenance of the quality management system.
- Implementation of the quality guarantee system.
- Conducting restudies on quality management system of the personnel and general affairs.
- Reforming the personnel and general affairs quality system.

388. *Technical Director* has a responsibility for:

- Formulation of the regulations for the policy of technical planning, construction, equipment, and information system.
- Coordination of the implementation of technical planning, construction, equipment, and information system.
- Keeping the highest management of the technical fields.
- Coordination of the business and company activity.
- Implementation of the development and maintenance of the technical quality system.
- Conducting restudies on the technical quality management system.
- Reforming the quality system for the technical management field.

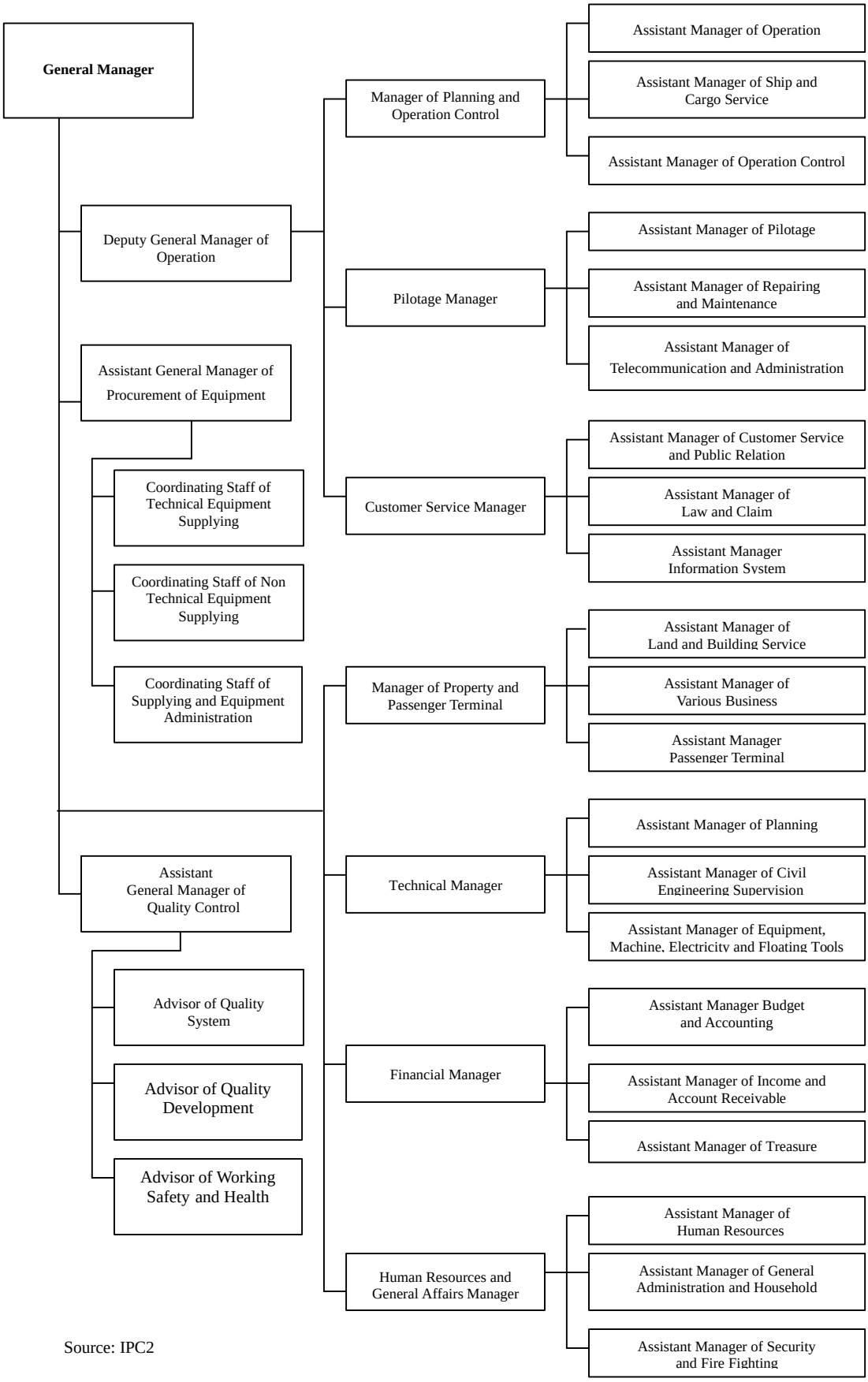
2) Tanjung Priok Port Branch

a) Organization

389. Figure 6-B-2 shows the organization chart of Tanjung Priok Port Branch. Tanjung Priok port is managed by the General Manager, who is assisted by Assistant General Manager of Quality Control and Assistant General Manager of Procurement. The main functions of each manager are as follows.

Figure 6-B-2 Organization Chart of Tanjung Priok Port Branch

390. *General Manager* has a responsibility for the operational policy of Tanjung Priok Port Branch covers the planning and controlling of operation, piloting, customer service, terminal business, property, technique, human resources and general affairs, supplying and equipment, quality control as follows,



Source: IPC2

Organization Chart of Tg. Priok Port Branch

- Implementation of working program in the fields of planning and operation control, pilotage, customer service, terminal business, property, technique, finance, human resources and general affairs, quality control, procurement and equipment.
- Arrangement of budget to Tanjung Priok Port Branch and report for the implementation of budget.
- Application of integrated management information system in Tanjung Priok Port Branch.

391. *Deputy General Manager Operation* has a responsibility to assist General Manager for the activity in the fields of planning and operation control, pilotage, and customer service for the policy of Genereal Manager as follows,

- - Implementation of working program in the fields of planning and operation control.
- - Implementation of working program in the fields of pilotage and tug.
- - Implementation of working program in the fields of customer service.
- - Application of operational management information system for the assistance of General Manager.

392. *Planning and Operation Control Manager* has a responsibility for the working program of operation planning, operation control, monitoring of cargo and ship service, and information system operation for the policy of General Manager as follows,

- Implementation of working program in the fields of operation planning.
- Implementation of working program in the fields of operation control
- Implementation of monitoring cargo and ship service.
- Implementation of working program in the fields of operation.
- Application of management information system for the planning and operation control.

393. *Pilotage Manager* has a responsibility for the working program in the fields of ship service, pilotage, tug, and telecommunication for the policy of General Manager as follows,

- Implementation of working program in the fields of ship service.
- Implementation of working program in the fields of tug and pilotage.
- Implementation of working program in the fields of telecommunication and pilotage administration.
- Preparation for tugboat, pilot boat, and mooring boat.
- Implementation of monitoring activity such as maintenance and repair of tugboat, pilot boat and mooring boat, and preparation of report to Directorate of Technique.
- Application of management information system for the pilotage.

394. *Customer Service Manager* has a responsibility for the working program in the fields of customer service, public relation, law, claim, and insurance and preparation of the report for the policy of General Manager as follows,

- Implementation of working program in the fields of customer service and public relation.
- Implementation of working program in the fields of law, claim, and insurance.
- Implementation of working program in the fields of data and report.
- Application of management information system for the customer service.

395. *Terminal Business Manager* has a responsibility for the working program in the fields of planning and terminal service, stacking/CFS, administration of equipment for the policy of General Manager as follows,

- Implementation of working program for planning and service of container and non-container terminal.
- Implementation of working program for of stacking/CFS.
- Implementation of working program for the administration of terminal equipment.
- Application of management information system for the terminal business fields.

396. *Property Manager* has a responsibility for the rental of land and building and the other businesses for the policy of General Manager as follows,

- Implementation of program for the rental of land and building.
- Implementation of program for the various businesses: electricity supply, water supply, port pass, telephone, garbage retribution.
- Application of the property management information system.

397. *Technical Manager* has a responsibility for the working program in the fields of civil engineer, equipment, machine, electricity, telecommunication and information for the policy of General Manager as follows,.

- Implementation of program for civil engineering.
- Implementation of working program for equipment, machine, electricity, and water supply.
- Implementation of program for telecommunication and information.
- Preparation of working program in the fields of civil engineering, equipment, machine, electricity, water supply, telecommunication and information.
- Implementation of technical administration management.
- Implementation of monitoring for the maintenance and repair activities of equipment, machine, electricity, water supply, telecommunication.
- Application of the technical management information system.

398. *Financial Manager* has a responsibility for the budget, accounting, revenue, debit and credit, and treasury for the policy of General Manager as follows,

- Implementation of program for the budget and accounting.
- Implementation of program for the revenue and debit/credit.
- Implementation of program for the treasury.
- Application of the financial management information system.

399. *Human Resources and General Affairs Manager* has a responsibility of working program in the fields of human resources, general affairs, households, security, and fire officer unit, spelled out from the policy of General Manager as follows:

- Implementation of program for the human resources.
- Implementation of program for the general affairs and households.
- Implementation of program for security and fire officer unit.
- Application of the personnel and general affairs management information system.

400. *Assistant General Manager of Supplying* has a responsibility to assist the General Manager and implements the program for the procurement of technical equipment and non-technical equipment, logistic and service administration as follows:

- Implementation of program for the procurement of technical equipment.
- Implementation of program for the procurement of non-technical equipment.
- Implementation of program for the logistic and service administration.
- Application of the procurement management information system.

401. *Assistant General Manager of Quality Control* has a responsibility to assist General Manager in implementing the working program in the fields of planning, coordination, supervising, and quality control to service, and development and maintenance of ISO Certification, spelled out from the policy of General Manager as follows:

- Implementation of monitoring and supervising to port service quality.
- Implementation of development and maintenance of ISO certification.
- Implementation of analysis, evaluation, and proposal to port service quality improvement.
- Application of the quality control management information system.

b) Personnel of Tanjung Priok Port Branch

402. The employees of Tanjung Priok Port branch are basically classified into permanent employees and casual employees. The employees at each educational level are shown in Table 6-B-1. The majority educational level of employees is senior high school.

Table 6-B-1 Employees at each Educational Level

	Year									
	1996		1997		1997		1999		2000	
	O	NO	O	NO	O	NO	O	NO	O	NO
Elementary School	177	4	159	4	138	4	112	9	88	14
Junior High School	291	6	284	2	253	2	224	12	203	20
Senior High School	871	253	849	256	898	226	799	213	770	179
Academy	68	0	66	0	65	0	109	10	119	5
University	53	0	59	0	56	0	90	9	95	6
Master	6	0		0	8	0	10	0	12	0
Sub-total	1.466	263	1.423	264	1.418	232	1.344	253	1.287	224
Total	1.729		1.687		1.650		1.597		1.511	

Note; O=Permanent employee, NO=Casual employee
Source: IPC2

403. Age Structure of branch of Tanjung Priok Port employee is shown in Table 6-B-2. The majority of age is 36-45 and 46-54 years old.

Table 6-B-2 Age Structure of Employees

	Year									
	1996		1997		1998		1999		2000	
	O	NO	O	NO	O	NO	O	NO	O	NO
< 25 years	138	34	98	23	102	20	76	78	63	30
25 – 35 years	214	108	215	111	240	95	255	158	279	166
36 – 45 years	637	121	636	130	581	117	530	11	464	21
46 – 54 years	443	0	421	0	437	0	425	6	431	6
> 55 years	34	0	53	0	58	0	58	0	50	1
Sub-total	1.466	263	1.423	264	1.418	232	1.344	253	1.287	224
Total	1.729		1.687		1.650		1.597		1.511	

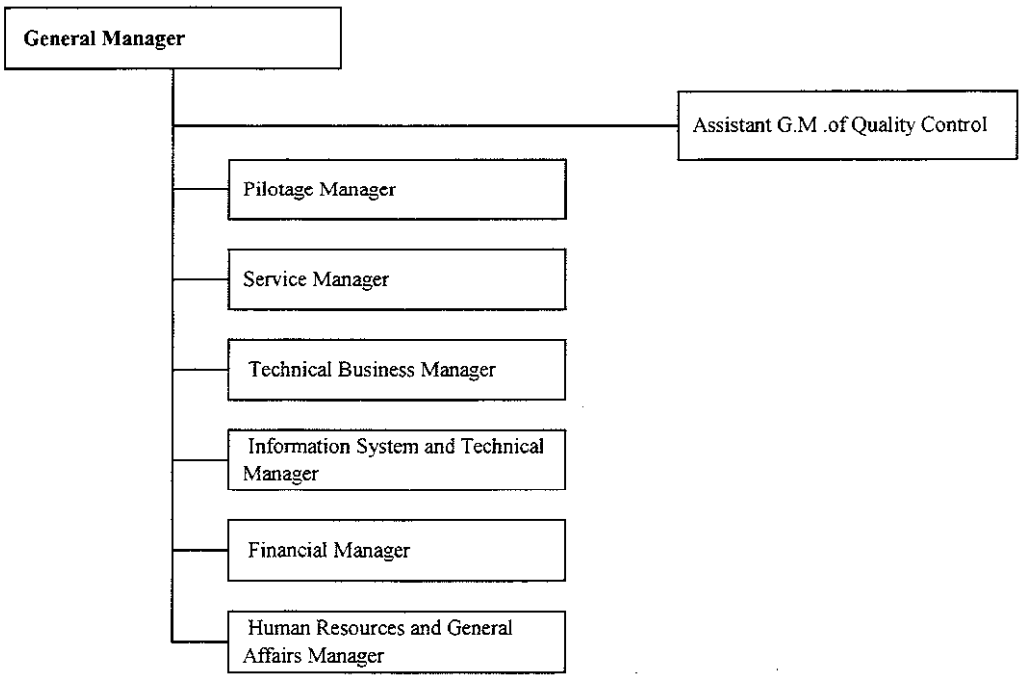
Note; O= Permanent employee , NO= Casual employee
Source: IPC2

3) Other Port Branches in the Study Area

404. Head office of IPC2 manages 12 branches as mentioned above, there are three branches of IPC2 in the Study Area such as Cirebon Port and Sunda Kelapa port in the West Java province and branch of Banten port in the Banten province as follows.

a) Banten Port Branch

405. Figure 6-B-3 shows the organization chart of Banten Port Branch. Banten Port Branch is managed by General Manager, assisted by Assistant General Manager of Quality Control. General Manager supervises six directors: Pilotage Manager, Service Manager, Technical Manager, Information System and Technical Manager, Financial and Human Resources and General Affair Manager. There are about 144 permanent employees in year 2001.

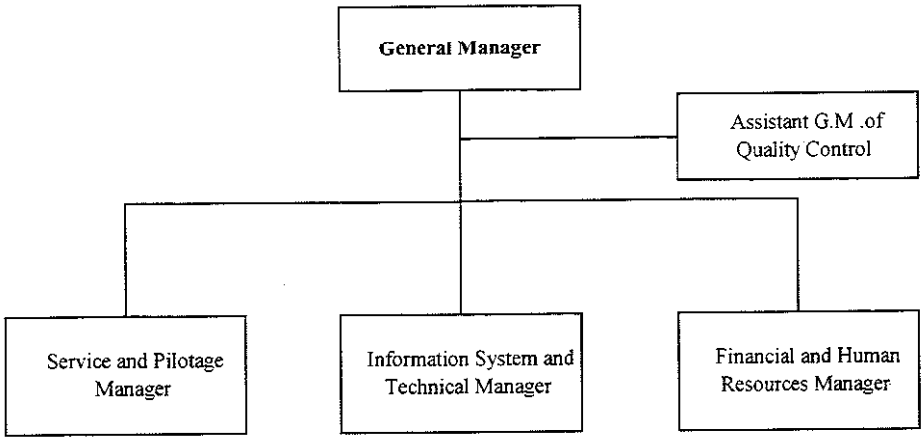


Source: IPC2

Figure 6-B-3 Organization Chart of Banten Port Branch

b) Cirebon Port Branch

406. Figure 6-B-4 shows the organization chart of Cirebon Port Branch. Cirebon Port Branch is managed by General Manager, assisted by Assistant General Manager of Quality Control. General Manager of Cirebon Port Branch supervises three directors: Service and Pilotage Manager, Information System and Technical Manager and Financial and Human Resources Manager, There are about 117 permanent employees in year of 2001.



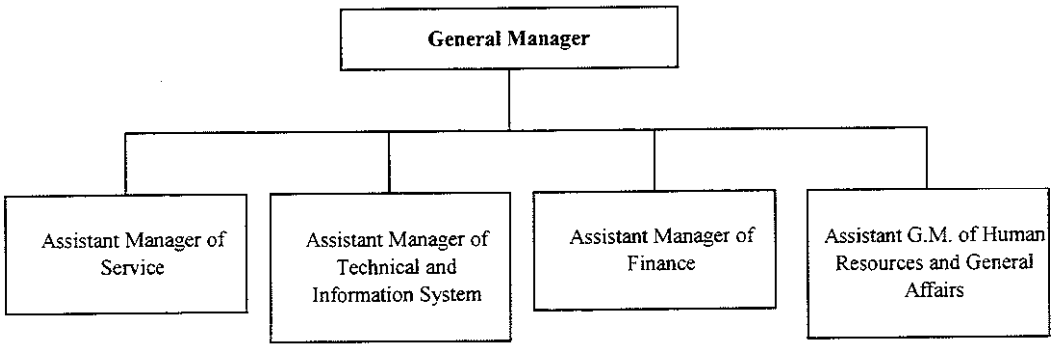
Source: IPC2

Figure 6-B-4 Organization Chart of Cirebon Port Branch

c) Sunda Kelapa Port Branch

407. Figure V.B.1-5 shows the organization chart of Sunda Kelapa Port Branch. Sunda Kelapa Port Branch is managed by General Manager, assisted by four Assistant Managers of Service, Technical and Information System, Finance and Human Resources and General Affairs. There are about 106 permanent employees in year of 2001.

408. The branch office of Sunda Kelapa manages another port, Kalibaru, which located just next to the east side of Tanjung Priok. It is a very small port with a limited basin, while many small boats are mooring in the basin. There may be some historical reason why the port is managed by Sunda Kelapa branch office, however its management should be under the Port of Tanjung Priok for the sake of comprehensive way of management and future development as one port.



Source: IPC2

Figure 6-B-5 Organization Chart of Sunda Kelapa Port Branch

4) Port Training Center of IPC2

409. The Port Training Center of IPC2 implements all IPC training programs. The Port Training Center plans training courses according to the port performance needed for port workers. Table 6-B-3 shows the training program at year of 2002

Table 6-B-3 the training program at year of 2002

	Kinds of Training	Days /time	Times /year
1	Improving Port Performance-1	22	3
2	Improving Port Performance-2	14	1
3	Improving Port Performance-3	14	1
4	Shipping, Export/Import Service	9	2
5	Port Operation Management	8	2
6	Conventional Terminal Operation	8	2
7	Container Terminal Operation	7	2
8	Supervisor for Operation	7	2
9	Warehousing	5	2
10	Forklift Maintenance	5	1
11	Forklift Operator	5	2
12	Sea Transportation Service Tariff	4	3
13	Dangerous Cargo Handling	4	2
14	Bulk Goods Handling for Operator Level	6	1
15	Bulk Goods Handling for Supervisor Level	6	1
16	Bulk Goods Handling for Manager Level	6	1
17	Stuffing and Stripping	4	1
17	Warehouse Administration	4	1
18	Basic Technique of Conventional Cargo Handling	3	1
19	Warehouse Crane in the Conventional Terminal	2	1
20	Ship Planning	2	1
21	Yard Supervisor	2	1

Source: IPC2

5) Affiliated Companies of IPC2

410. IPC2 is engaged in a wide range of businesses, such as the provision of water, electric and fuel supplies, management of hospital and port training center. Further, IPC2 has affiliated companies which are engaged in port services and to which IPC2 is extending investment, joint operation and joint-venture or dispatch of a supervisor or director. These affiliated companies are shown in Table 6-B-4.

Table 6-B-4 List of Affiliated Companies of IPC2

411. Conventional terminal operations including stevedoring work (wharf, yard and yard) is undertaken by the affiliated company (PT. Multipurpose Terminal Indonesia for Berth No. 009) and 14 terminal operators. Terminal operators are private companies and obtain the right of operation for the each conventional berth from IPC II through a five-year contract.

6-B-2 Port Management System

1) Organizations Related to Port Activity

412. Port activity covers various functions. Figure 6-B-6 shows flowchart of planning process of ship and cargo service and Table 6-B-5 shows necessary documents for ship and cargo service. There are many port related government agencies as in Table 6-B-6.

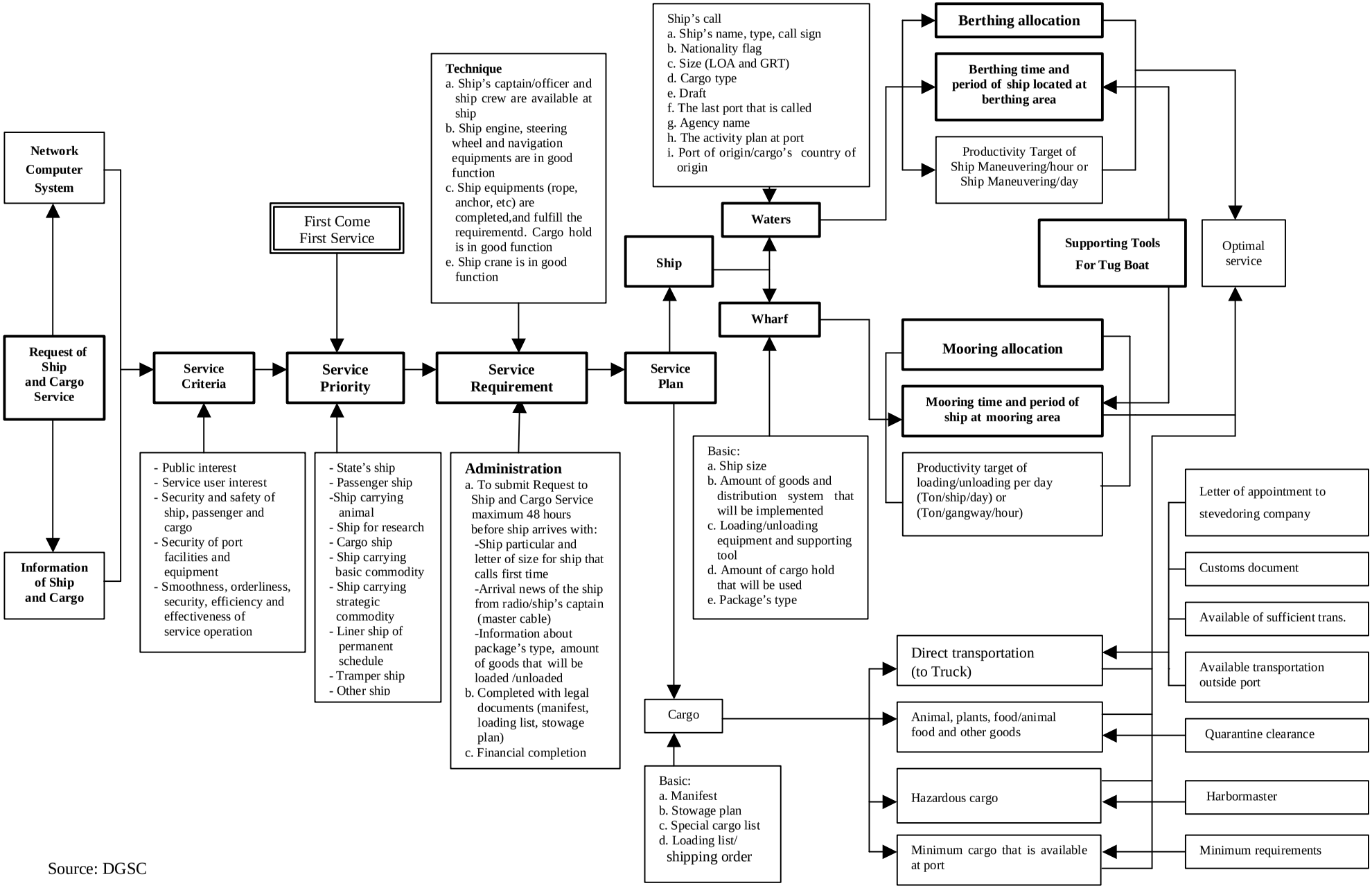
Figure 6-B-6 Flowchart of Planning Process for Ship and Cargo Service

Table 6-B-5 Necessary Documents for Ship and Cargo Service

List of Affiliated Companies of IPC2

Description	Joint Operation/Management		Legal Entity in association with Cooperative of Maritime Employee		Legal Entity in association with Private/Foreign	
Name	KOJA Container Terminal	Merakmas Terminal	PT. Port Hospital	PT. Multi Terminal Indonesia	PT. Jakarta International Container Terminal	PT. Electronic Data Interchange Indonesia
Kind of Service	Container terminal	Multipurpose terminal	Hospital	Conventional terminal and other cargo handling	Container terminal	EDI Indonesia
Establishment	March 26, 1999	February 10, 1999	May 1, 1999	April 10, 2002	October 6, 1998	January 23, 1996
Persons from IPC2	510 Persons	4 Persons	260 Persons	112 Persons	2 Persons	4 Persons
Position on management level from IPC2	General Manager Deputy GM of Operation Manager of Human -Resources Department Operational Manager MTO Manager	Head of Operation Implementing Unit Head of Terminal Head of Yard and Ship Operation. Head of Service and Administration.	All Managements Level	All Management Level	Administrative Director Commercial Director	Trading Director Manager of Surabaya Corporate Secretary Assistant Manager
Administration Scheme	Decided by PT. Pelindo II	Decided by Affiliated Company	Decided by PT. Pelindo II	Decided by PT. Pelindo II	Decided by Affiliated Company	Decided by Affiliated Company
Promotion	Decided by PT. Pelindo II	Decided by Affiliated Company	Decided by PT. Pelindo II	Decided by PT. Pelindo II	Decided by Affiliated Company	Decided by Affiliated Company

Source: IPC2



Source: DGSC

Flowchart of Planning Process to Ship and Cargo Service

Necessary Documents for Ship and Cargo Service

No	Kinds of Document	Sources of Document	Document User											
			IPC2	Ship. Agent	Custom	T. O	ADPEL	Quarantine			Immig -ration	Bank	JICT	TPKK
								Health	Plants	Animal				
1	Information of ship's call	Shipping Agent	PA/PD	-	PA	PD	PD	PD	ID	PD	ID	-	PD	PD
2	Unloading manifest	Shipping Agent	PA/PD	-	PA	PD	PD	PD	PD	PD	-	-	-	-
3	Passenger list (Debarkation)	Shipping Agent	PD	-	PD	PD	PD	PD	-	-	PA	-	-	-
4	Unloading Bay Plan/Stowage Plan	Shipping Agent	PD	-	ID	PA	ID	-	-	-	-	-	PA	PA
5	Clearance for Quarantine	Quarantine		PA	-	-	PD	-	-	-	-	-	-	-
6	Mooring Plan/ Operation Plan (OP)	TO (PBM)/ ICT/TPKK	PA	PD	-	-	ID	ID	ID	ID	ID	-	-	-
7	Request of Ship and Cargo Service	Shipping Agent	PA	-	-	-	-	-	-	-	-	-	-	-
8	Decision of PPKB	IPC2	-	PA	ID	PD	ID	ID	ID	ID	ID	-	IA	IA
9	Letter of Mooring (2A4)	IPC2	-	PA	ID	-	ID	ID	ID	ID	ID	-	-	-
10	Loading/Unloading Plan	TO (PBM)/JICT/TPKK	PA	PD	PD	-	ID	ID	ID	ID	ID	-	-	-
11	Letter of Unmooring	Shipping Agent	-	PA	ID	-	ID	ID	ID	ID	ID	-	-	-
12	Loading Manifest	Shipping Agent	PA/PD	-	PA	-	ID	ID	ID	ID	-	-	-	-
13	Passenger list (Embarkation)	Shipping Agent	PD	-	PD		PD	ID	-	-	PA	-	-	-
14	Load Bay Plan/Loading List	IPC2	PD	-	-	PA	PD	-	-	-	-	-	PA	PA
15	Billing Note for Ship Service (4A)	IPC2	-	PA	-	-	-	-	-	-	-	PA	-	-
16	Credit Note (4A)	Bank	PA	-	-	-	-	-	-	-	-	-	-	-
17	Note of Navigation Aid Fee, etc	ADPEL	-	PA	-	-	-	-	-	-	-	PA	-	-
18	Credit Note of Navigation Aid Fee,	Bank	-	-	-	-	PA	-	-	-	-	-	-	-
Number of necessary documents														
	a. Process and destination of document: **PA**		7	6	3	2	1	0	0	0	2	2	2	2
	b. Process and copy/distribution of document: **PD**		4	2	3	4	6	3	1	2	0	0	1	1
	c. Information and destination of document: **IA**		0	0	0	0	0	0	0	0	0	0	1	1
	d. Information and distribution of document: **ID**		0	0	4	0	7	7	7	6	6	0	0	0
	Total documents		11	8	10	6	14	10	8	8	8	2	4	4

Note; TO: Terminal Operator (PBM: Stevedoring Company), PPKB: Request of Ship and Cargo Service, JICT: Jakarta International Container Terminal, TPKK: Koja Container Terminal, ADPEL: Port Administrator

Source: Branch of Tj. Priok Port

Table 6-B-6 Port Related Government Agency

Government Agency	Explanation
Port Administrator	Port Administrator (ADPEL) is responsible for coordinating all institutions at port. ADPEL is also responsible for the safety of shipping, supplying of navigation aids and the security.
Harbormaster	Harbormaster is responsible for ensuring the safety of port activities.
Coast Guard	Coast Guard is responsible for sea and coast security. Coast Guard is under the coordination of DGSC (Directorate General of Sea Communication).
Customs	Customs is responsible for foreign exchange /import duty on import commodities.
Port Police	Port Police coordinates the security at port for government and private interest.
Immigration	Immigration is responsible for the migration legality inspection proved by the legality of passport.
Quarantine	Quarantine carries out cargo/animal inspection in order to prevent the spread of diseases.
Port Health Center	Port Health Center provides medical check for ships' crews.

2) Kinds of Port Related Services

a) Berth Allotment

413. "First Come, First Serve" policy is adopted for vessels calling at Tanjung Priok port. The allocation of conventional berth is decided by the assistant manager of ship and cargo service division according to the information for ship's call prepared by shipping agent, which must submitted 24 hours before the arrival of vessel.

b) Cargo Handling Service

414. Tanjung Priok port, cargo handling service is provided by the Terminal Operators except the passenger terminal. An outline of cargo handling service is presented below.

i) Working hours

415. The cargo handling operation is carried out in three shifts according to the following timetable.

- The first shift: 08:00-16:00
- The second shift: 16:00-24:00
- The third shit: 24:00-08:00

ii) Passenger Service

416. The passenger terminal is situated at the Nusantara Pura at next to the berth of conventional cargo vessel, and its terminal service is carried out by PT. PELNI for the passenger services. IPC2 provides the passenger terminal facility for the public use and imposes related port charges on the passenger vessels.

iii) Conventional Cargo Handling Service

417. Discharging/loading of cargoes from/to vessels to/from landside/waterside is carried out by the terminal operators. The terminal operator is in charge of shifting cargoes between quay and sheds/warehouses/open storages by forklifts, trucks and trailers. Cargo is transported from/to yards and shed to/from forwarders by the trucking companies.

iv) Container Cargo Handling Service

418. Discharging/loading of containers using gantry cranes and ship cranes is carried out by the terminal operators including JICT and Koja Container Terminal. The terminal operators also transport imported containers from quay side to CY/shed, while export containers are moved from stuffing areas/CFS to CY by the trucking companies.

c) Other Port Services

i) Hydrographic Survey and Dredging

419. Tanjung Priok IPC2 carries out the hydrographic survey of the basin and channels for the maintenance dredging work. After the hydrographic survey, they decide the areas to be dredged and prepare the navigation charts.

420. Dredging work is done by PT. RUKINDO (Indonesia Dredging State Limited Company) at every year. IPC2 is not financially supported from the governmental agencies and annual maintenance dredging fee is paid to PT. RUKINDO as follows,

1996	Rp. 1,933,565,274
1997	Rp. 1,802,623,595
1998	Rp. 1,302,602,000
1999	Rp. 1,875,154,000
2000	Rp. 5,627,728,000
2001	Rp. 6,315,369,000
2002	Rp. 6,757,000,000

ii) Information System

421. Tg Priok port provides with a computerized port services system. More then 15 organizations are connected with Electronic Data Interchange Indonesia (EDI Indonesia) to obtain the information of "ship and cargo services".

422. Electronic Data Interchange Indonesia (EDI Indonesia) was founded on June 1, 1995 as a joint venture owned by IPC2 and PT. Sisindosat as a affiliated company of IPC2, and its details are described the following Charter.

iii) Vessel Traffic Information Services (VTIS)

423. Tanjung Priok port provides with the Vessel Traffic Information Services (VTIS) to facilitate the safe and efficient movement of vessel and provide surveillance of loading and unloading cargoes through the port.

iv) Pilotage and Tug service

424. Tanjung Priok port has implemented a pre-active services for pilotage and towage for 24 hours a day to the incoming and out-coming vessels in order to accelerate the vessel movement through the port. The pilotage and tug services are provided with 9 units of pilotage boat and 11 units of facilities such as mooring buoy, water, waste and oil barges to keep the sea safe and clean.

v) Water and Electricity Supply and Telephone Service

425. Water and Electricity Supply and Telephone Service are supplied by Tanjung Priok port branch

vi) Customs Clearance

426. There are three Customs Offices in the Tg, Priok port, these administrative area are divided into three areas at the port area as follows,

Table 6-B-7 Customs Offices in Tanjung Priok

Customs office I:	between Berth No. 001, JICT II and Cargo Distribution Center(CDC)
Customs office II:	between Gate-Bitong, Berth Nos. 207-305, JICT II, Agung Raya and Gate-9
Customs office III:	Koja Container Terminal and Container-depots.

3) Roles and Functions of IPC2 and Related Organization

427. According to the Deed Notary of IPC2, IPC2 has the powers to act within the scope of its objectives and such powers shall include,

- To construct, purchase, acquire, dispose of, hire, let and operate port equipment, services and facilities,
- To purchase, acquire, lease, hire, let, own, possess, dispose of or operate movable and immovable properties,
- To determine charges for the use of its ports, services and facilities, and to issue regulations regarding the method of payment and such charges,
- To issue regulations regarding safety, the use of its port services and facilities,
- To borrow money
- To dredge and maintain the basin in the port area,
- To control, develop and provide facilities in the port area,
- To fix the rate of various charges within the port area.

428. As ports are very important infrastructures for socioeconomic development and IPC2 is the state owned corporation, some important activities of IPC2 are controlled by the Government as follows.

- To approve the construction of new ports
- To approve the increase or deduction of capital
- To approve the capital budget
- To receive the reports on the operating budget
- To approve the loans
- To approve the disposal of immovable properties
- To approve the rules and regulation concerning the management of provident funds for the staff

429. Table 6-B-8 shows the summary of financial, physical and operational aspects of IPC2 and related organizations.

Table 6-B-8 Summary of Financial, Physical and Operational Aspects of IPC2 and Related Organizations

	MOC/Gov Institution	DGSC	IPC2	Terminal Operator	Others
Port Administration					
1.Long-Term Port Development Policy & Plan	○	○	○		
2.Enforcement of Regulation for Port Development	○	○	○		
3.Coast Guard	○				
4.Control of Entrance/exit of Ships	○	○			
5.Customs Clearance	○				
6.Quarantine	○				
7.Immigration	○				
8.Maintenance of Navigational Aids	○	○			
Port Management and Operation					
1.Planning of Port Development and Improvement	○	○	○		
2.Security Control in Port Area	○	○	○	○	
3.Charge, Due Collection			○		
4.Berthing Arrangement			○		
5.Permission for Use			○		
6.Construction & Maintenance of Infrastructure					
1) Channel	○	○			
2) Basin			○		
3) Berth			○		
4) Yard			○		
5) Road			○		
7.Construction & Maintenance of Superstructure					
1) Warehouse & CFS			○		○
2) Equipment for Loading/Unloading			○	○	○
Port Service					
1.Pilotage			○		
2.Towage			○		○
3.Cargo Handling			○	○	
4.Lighterage			○	○	○
5.Mooring			○		
6.Water Supply			○		
7.Garbage Collection			○		
8.Bunkering					○

Source: Study Team

6-B-3 Port Dues & Tariff for Container Cargo

1) General

430. The current port tariff system of Indonesia was revised in 2000 resulting in an average tariff hike of 30%. The new tariff system reflects handling efficiency and the situation of surrounding ports. As for the application of the new tariff system, details were provided in the decree signed by the president director of IPC.

431. The port tariff system is composed of the following 4 items.

- Decree of the Ministry of Communications
- Tariff on Shipping Service
- Tariff on Cargo and Container in a Container Terminal
- Tariff on Other Services in a Port

432. According to the Decree of Director (HK. 56/2/3/PI. II-2000, May, 2000), tariff on international cargo in in US$ while that for domestic is in Rupiah. The latter is basically set at 50% of the former. However, since the exchange rate is not stable, independent tariff is applied.

433. Comparing tariff tables of JICT and the ports of Semarang and Surabaya, port tariffs are basically uniform across the country. However, some discrepancies are found in tariffs for domestic services. Those differences arise from different exchange rates used to convert Rupiahs to US Dollars when a domestic tariff is published in Rupiah by an independent Port Corporation. For example, there is a 14% discrepancy in the container service tariff for domestic cargo between Tanjung Priok and Makassar as shown in the following table.

Table 6-B-9 Loading/Unloading Charge of Domestic Container Cargo

(Rp/TEU)

Name	FCL	LCL	Transshipment
Tanjung Priok	240,000	400,000	155,000
Makassar	201,500	338,000	130,000

2) Container Handling Service Tariffs at Container Terminal

434. The port tariff of IPC II was raised by 30% in May 2000. And then, in October 2002, the tariff rates of international container terminal such as JICT and KOJA were increased by 15%. Loading and unloading service tariffs of ICP II are given in the attached table.

Table 6-B-10 Loading/Unloading of Container

Unit: US$

No	Description	JICT & Koja		Others		Remarks
		20'	40'	20'	40'	
1	FCL Container					
	a. With terminal crane	93	139	81	121	Per Box
	b. With ship's Gear	83	125	73	109	Per Box
2	LCL Container					
	a. With terminal crane	155	233	135	203	Per Box
	b. With ship's Gear	140	210	127	191	Per Box
3	Transshipment Container					
	a. With terminal crane	56	84	52	78	Per Box
	b. With ship's Gear	50	75	44	66	Per Box
4	Shifting Container					
	a. With terminal crane					
	1) Without landing	34	51	30	45	Per Box
	2) With landing	58	87	51	76	Per Box
	b. With ship's Gear					
	1) Without landing	25	39	23	35	Per Box
	2) With landing	49	73	43	64	Per Box

Note) As of October 2002

Table 6-B-11 Loading/Unloading of Uncontainerized Cargo and Overheight/Overwidth/Overlength Container

Unit:US$

No	Description	Tariff		Remarks
		Gross Weight < 20 tons	Gross Weight 20 tons > 35 tons	
1	Uncontainerized Cargo			
a	Uncontainerized Cargo			
1)	Unloaded on Chassis/Trailer or loaded from Chasis/Trailer's user	293	406	Per Unit
2)	Shifting			
a)	Without landing	293	406	Per Unit
b)	With landing	436	604	Per Unit
b	Transshipment	176	244	Per Unit
2	Overheight/Overwidth/Overlength Container			
a	FCL	267	400	Per Box
b	LCL	333	499	Per Box
c	Transshipment	135	203	Per Box
d	Shifting container for Overheight/Overwidth/Overlength			
1)	Without landing	135	203	Per Box
2)	With landing	228	341	Per Box
3	Opening and Closing Hatch	48	48	Per Hatch

Table 6-B-12 Other Service Tariff for Container Handling

Extra Movement and Behandle Services

Unit: Rupiah

No	Description	Tariff		Remarks
		20'	40'	
1	Full Container	6,500	13,000	Per Box/Day
2	Empty Container	3,250	6,500	Per Box/Day
3	Overheight/Overwidth/Overlength Container	11,700	23,400	Per Box/Day
4	Reefer Container	11,700	23,400	Per Box/Day
5	Chassis (Without Cargo)	5,000	10,000	Per Chassis/Day
6	Chassis (With Cargo) plus additional 1, 2 or 3	5,000	10,000	Per Chassis/Day
7	Uncontainerized Cargo	11,700	23,400	Per Unit/Day

Extra Movement and Behandle Services

Unit: Rupiah

No	Description	Tariff		Remarks
		20'	40'	
1	Without supporting devices	48,750	72,800	Per Box
2	With supporting devices (sling)	98,500	146,250	Per Box
3	Transfer charges T-1 to T-Koja	120,000	170,000	Per Box
4	Behandle *)	98,000	135,500	Per Box

*) JICT's decree : KU.301/1/3/JICT-2000

Lift On/Lift Off Services

Unit: Rupiah

No	Description	Tariff		Remarks
		20'	40'	
1	Full Container	27,300	40,950	Per Box
2	Empty Container	13,650	20,800	Per Box
3	Overheight/Overwidth/Overlength Container	91,000	136,500	Per Box
4	Uncontainerized Cargo	91,000	136,500	Per Unit

Cancellation Charges Unit: Rupiah

No	Description	Tariff		Remarks
		20'	40'	
1	Full Container	71,500	107,250	Per Box
2	Empty Container	35,750	53,950	Per Box
3	Cancellation Document	5,000	5,000	Per Box

Reefer Container Unit: Rupiah

No	Description	Tariff		Remarks
		20'	40'	
1	Reefer Storage	70,000	105,000	Per Box/8 Hours or part thereof
2	Monitoring	21,000	31,500	Per Box/8 Hours or part thereof

3) Container Handling Service Tariffs at Conventional Terminal

435. The basic rule of the tariff system regarding the container handling service at the conventional terminals of the ports in IPC II is determined by decree of the Ministry of Communications (The Ministerial Decree of Communications Number: KM62/1996- Container Handling Tariff at Conventional Terminal of Commercial Ports). According to this, the ports in IPC II are classified into three types. The port of Tanjung Priok belongs to the first type while the ports of Panjang, Palembang and Pontianak belong to the second. The remaining port falls into the third class.

Table 6-B-13 Outline of Tariff System at Conventional Terminal

Unit: Rupiah

No	Description	Tanjung Priok		Panjang, Palembang, Pontianak		Others	
		20'	40'	20'	40'	20'	40'
1	FCL Container	110,000	165,000	104,000	156,000	100,000	150,000
2	LCL Container	179,000	268,500	170,500	255,750	163,000	244,500
3	Tariff according to Activities						
	a.Stevedoring	40,000	60,000	39,000	58,500	37,000	55,500
	b.Hauling/Trucking	25,000	37,500	23,000	34,500	22,000	33,000
	c.Lift on/Lift off	21,000	31,500	21,000	31,500	20,000	30,000

4	Tariff of Other Services						
	a.Container Shifting						
	- With Landing on Wharf	60,000	90,000	58,500	87,750	55,500	83,250
	- Without Landing on Wharf	38,000	57,000	37,000	55,500	35,000	52,500
	b.Transhipment Container	58,000	87,000	52,500	78,750	46,000	69,000
	---------						
	g. Overweight/overwidth/overlength						
	1) FCL	220,000	330,000	208,000	312,000	185,000	277,500
	2) LCL	358,000	537,000	341,000	511,500	300,000	450,000
	3) Shifting						
	- With Landing on Wharf	131,000	196,500	116,000	174,000	106,000	159,000
	- Without Landing on Wharf	201,000	301,500	182,500	273,750	166,000	249,000

436. Under this regulation, second class ports are subject to 92 % of first class charges while third class ports are subject to 83%.

437. How discounts are applied is unknown at the present stage. But special treatment is recognized for the port of Pontianak. The exchange rate of Rupiah to US Dollar is set at 6,000

instead of the normal 9,000 (refer to Letter of Director KU. 30/4/2/PI. II-01 August 2001, Tariff for Container Service in Container Terminal of Pontianak Port).

438. Conversely, a 15% increase to the container handling tariff was applied to JICT and Koja container terminal in October 2002 due to the higher handling productivity at these terminals.

4) Ship Service Tariffs

439. The shipping service tariff counted on the cases of entrance and departure to/from a port/anchoring etc. is collected by the Decree of Director-(HK. 56/2/2/PI. II-2000, May, 2000) Shipping Service Tariff in Indonesia-Indonesia Port Corporation II. Anchorage and Mooring service, Piloting service, Towing service, Stockpiling service etc. are the service items subject to charges.

Table 6-B-14 Ship Service Tariff in Major Port in IPC II

(unit:US$)

Kind of Service		Major Port	Explanation
Anchorage		0.086	Per GT per 10 Days
Mooring	-pier(concrete,iron/woden)	0.113	Per GT per 24Hour
Piloting	-Tanjung Priok	40.0	Per Ship per Move.
Towing	-over8000 upto14000 GT	600.0	Per Ship per Hour

6-B-4 Financial Situation of Each Port

1) Financial Report of IPC II

440. The financial soundness of ports in IPC II is reviewed historically from 1993 to 2001. For this purpose operational revenue and cost, profit and net income, tax and asset etc. are collected and examined. Relevant data from 1997 to 2001 are available by Annual Report of IPC II and those of 2002 are obtained from the budget statement. Those before 1997 are based on JICA's report(The Study on the Port Development Strategy in the Republic of Indonesia) Financial data collected are listed in the following Table together with Figure.

Table 6-B-15 Trends of Financial Performance of IPC II

Figure 6-B-7 Financial Performance of IPC II

Figure 6-B-8 Cargo and Operation Revenue (1993-1997)

Figure 6-B-9 Cargo and Operation Revenue (1993-2001)

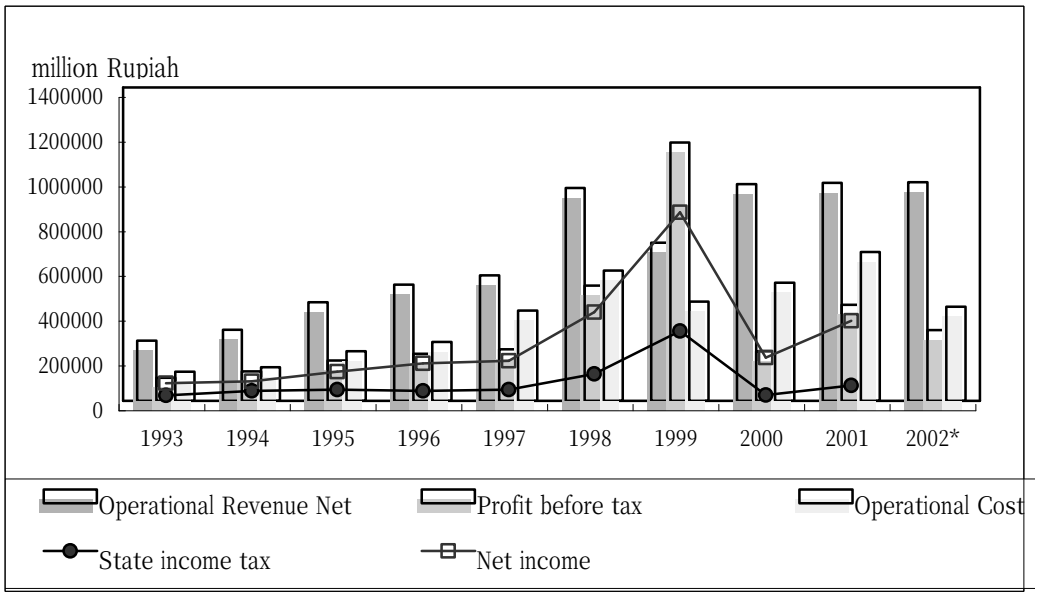
441. All futures were increasing year by year till 1997 but this trend was interrupted in 1998 due to the Asian crisis. In 2001 financial indicators look stable but a more detailed check is necessary.

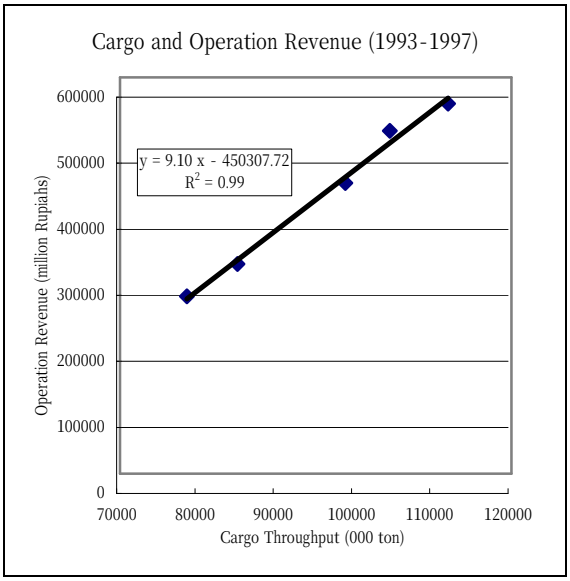
442. Operating Revenue-Net increased suddenly in 1998 and returned to its traditional level in 1999. The 1998 level was regained in both 2000 and 2001. Since there have been sharp changes in the exchange rates of foreign currency, more examination is necessary to determine the relevance of the same level of revenue in these three years.

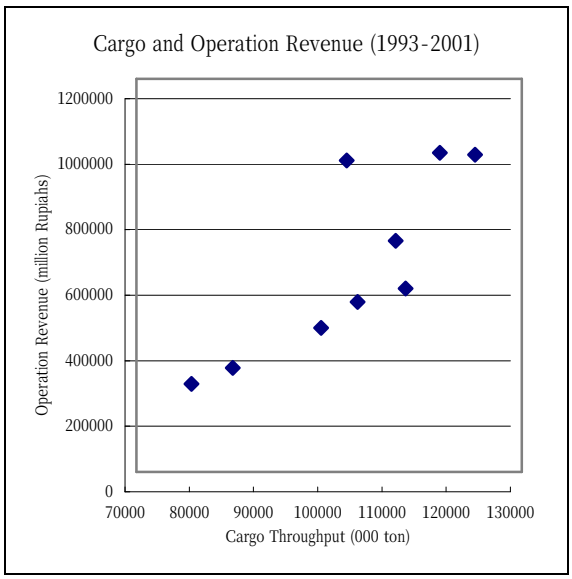
443. Operational Cost also increased in 1998 but returned to historical levels after 1999. However, there has been a decline since last year according to the Budget Statement in 2002.

Unit: Million Rupiah

Item	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002*
Operational Revenue Net	268,576	317,656	440,198	519,062	560,362	951,191	705,906	968,690	974,492	976,293
Operational Cost	130,129	150,624	221,830	263,359	403,218	581,806	443,271	527,713	665,130	420,173
Profit before tax	103,539	130,929	179,913	210,406	230,580	515,479	1,154,145	222,272	428,719	316,192
Depreciation cost	n.a.	n.a.	n.a.	n.a.	45,009	69,092	▲ 4,567	95,277	106,164	71,538
State income tax	24,754	43,784	49,739	43,758	50,278	119,818	311,375	25,476	67,948	n.a.
Net income	78,785	87,145	130,174	166,648	179,008	395,661	842,770	193,281	357,145	n.a.
Total assets	2,684,622	2,822,010	2,960,103	3,316,921	3,942,013	3,343,099	4,500,252	4,334,076	4,175,343	n.a.
Net Income/Total Asstes(%)	3%	3%	4%	5%	5%	12%	19%	4%	4%	n.a.
Cargo throughput (000 ton)	78,555	84,998	98,766	104,457	111,925	102,748	110,388	122,707	117,221	n.a.
Average prices of US Doller o f December (Rupiah)	2,118	2,205	2,305	2,385	5,700	8,100	7,161	9,385	10,450	n.a.







444. Operating Revenue-Net has increased corresponding to Cargo Throughput from 1993 to 1997. The correlation between the two is indicated by the following formula: (Figure 6-B-8)

- Y=9.10*X-450307 (R^2=0.99)

445. But after1998, Revenue did not reflect the volume of Cargo Throughput. Revenue in 1998, 2000, 2001 and 2002 are almost the same value. (Figure 6-B-9)

446. Unclear data are found in the table. For example, in 2001, Operating Revenue-Net and, Profit Before Tax, Net Income and Exchange Rate are almost double those in 1997, but Cargo Throughput is the same level. During surveying years, privatization and containerization trends have been observed. Sudden increase in 1999 and decrease in 2000 of Profit Before Tax seem to be influenced by the above trends.

2) Comparison between IPC II and other IPCs

447. The following financial information that was contained in the Annual Report for 2001;

- The Operation Revenue-Net of IPC II is the largest among IPCs followed closely by IPC III. And that of IPC I is 30% of IPC II and IPCIV is 14%.
- However, IPC II and IPC I are almost equal in Profit Before Tax, and that of IPC III is 2.2 times of IPC II. Productivity of IPC III is thought to be efficient but Net Income is small.
- Investment efficiency evaluated by Net Income to Total Assets is around 1- 5% (other than 17% of IPC I)
- Investment profit earned by Net Income per Cargo is estimated roughly at around 1500 to 2000 Rupiahs per ton.

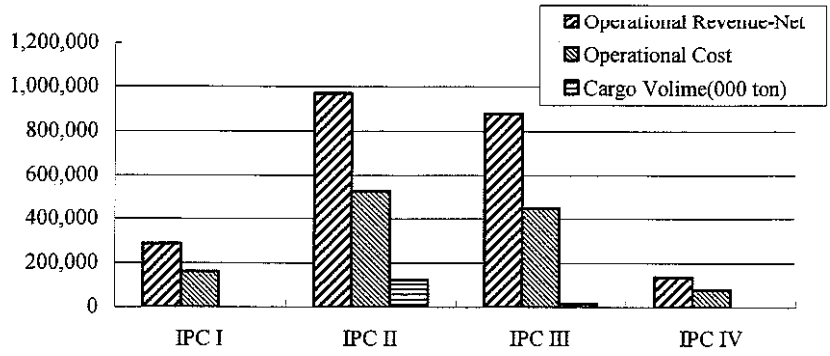
Table 6-B-16 Financial Performance of IPC in 2000

Unit: million Rupiah

Item	IPC I	IPC II	IPC III	IPC IV
Operational Revenue-Net	286,797	968,689	876,846	135,761
Operational Cost	161,963	527,713	446,652	78,754
Cargo Volime(000 ton)	n.a.	122,707	13,953	n.a.
Profit before tax	222,912	222,272	494,092	35,805
State income tax	62,385	25,476	148,667	13,442
Net income	160,527	193,281	25,267	22,362
Total assets	920,561	4,334,076	2,233,380	697,551
Net Income/Total Asstes(%)	17%	4%	1%	3%
Net Income/Cargo Volume(Rp./ton)	n.a.	1,575	1,811	n.a.

Source:Auual Reports and Financial Reports of IPC I-IV

Figure 6-B-10 Revenue and Expense in 2000



3) Financial Performance of Ports in IPC II

448. Branch ports in IPC II submit budgets to the headquarters and report financial indicators at the end of the fiscal year under the Indonesian format.

449. Net Profit Before Tax, Account Receivables, Doubtful Accounts, Personnel Expense and Other Charges are major items to be reported.

450. The port of Tanjung Priok dominates in all items. Concerning Profit Before Tax, the port occupied 48% and 53% in 2000 and 2001 respectively among branch ports that reported positive balances. Other than Tanjung Priok, the ports of Panjang and Banten are recognized as successful. The port of Panjang contributed 7.4% and 9.4% while the port of Banten contributed 9.5% and 4.5% on the same profit. The port of Tanjung Priok accounted for 84% and 72% of personnel expenses, while the port of Panjang occupied 3 to 4% and the port of Banten only 1.2% of all personnel expenses.

451. Checking the relation between Revenue (=Accounting Receivables) and Port Traffic, typical characteristic is recognized by 12 data items. Correlation formula is found as follows:

- $Y=486*X-459662000$ ($R^2=0.91$).

452. But the port of Tanjung Priok indicates another characteristic. Cargo Throughput in 2000 and 2001 is almost the same, but revenue of 2001 is 1.6 times of that of 2000. Therefore, analysis of the revenue component is required.

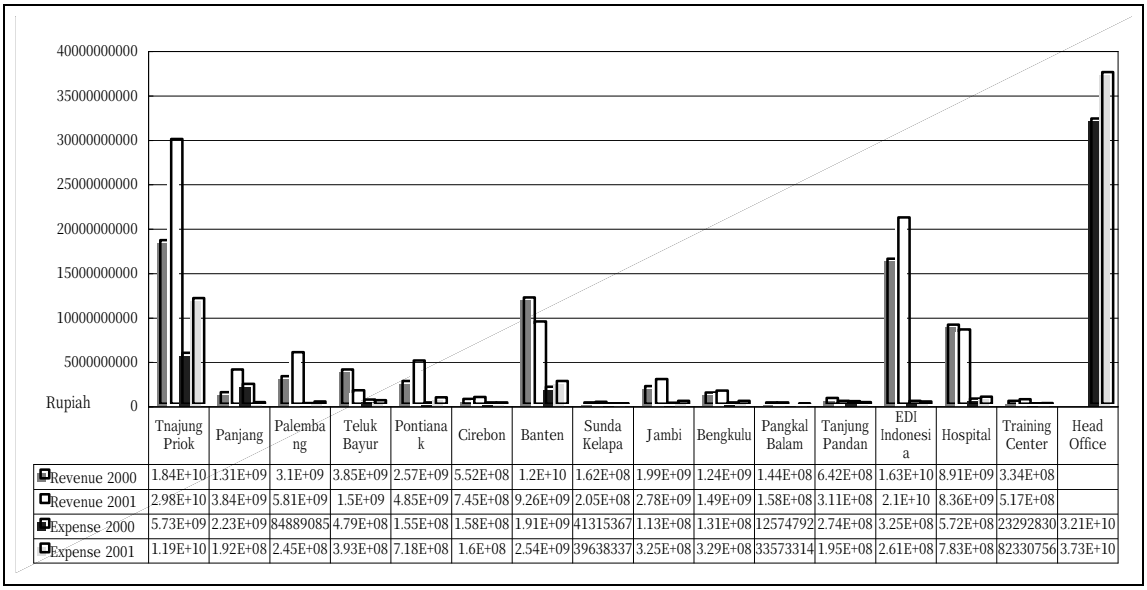
Figure 6-B-11 Revenue and Expense by Branch in IPC II

Figure 6-B-12 Net Profit Before Tax

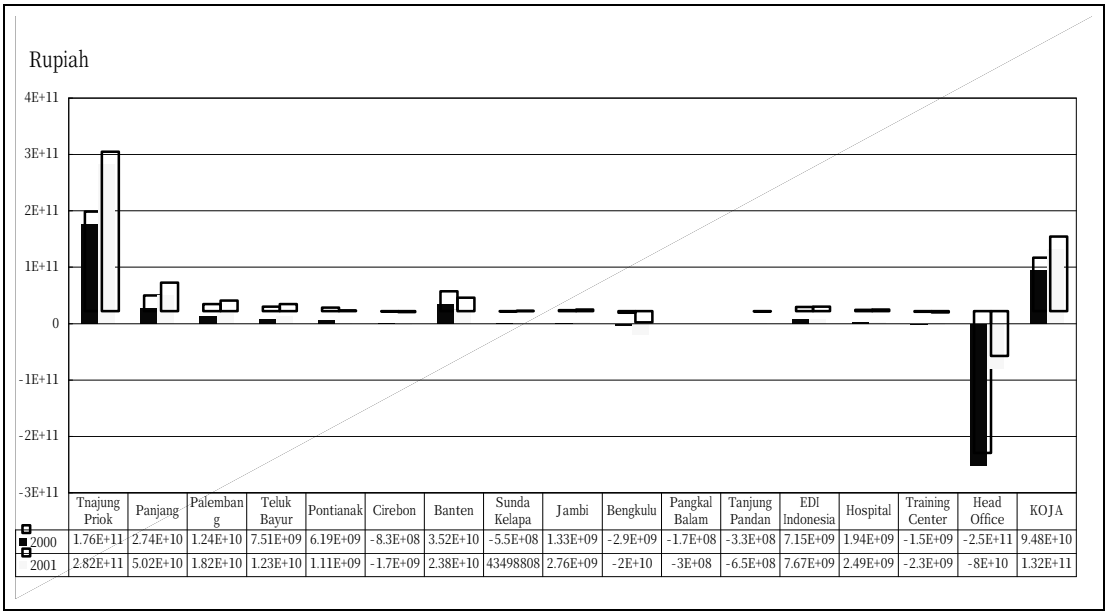
Figure 6-B-13 Correlation between Port Revenue and Traffic

Table 6-B-17 Port Revenue and Traffic in IPC II

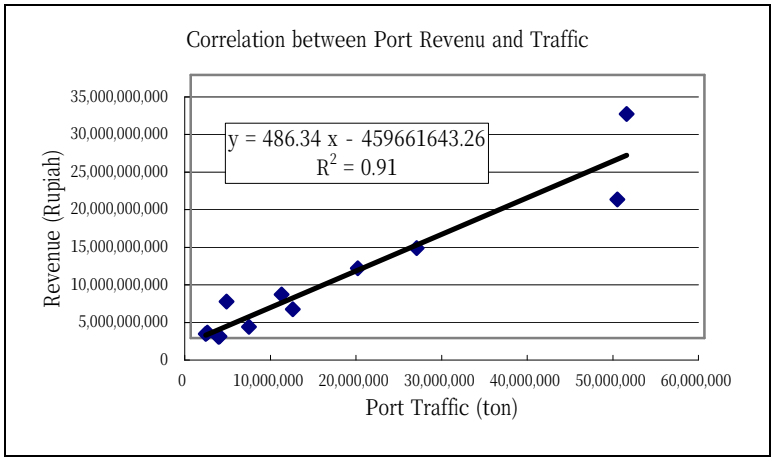
Table 6-B-18 Financial Indicators by Branch in IPC II (2000 & 2001)



	Tnajung Priok	Panjang	Palembang	Teluk Bayur	Pontianak	Cirebon	Banten	Sunda Kelapa	Jambi	Bengkulu	Pangkal Balam	Tanjung Pandan	EDI Indonesia	Hospital	Training Center	Head Office
Revenue 2000	1.84E+10	1.31E+09	3.1E+09	3.85E+09	2.57E+09	5.52E+08	1.2E+10	1.62E+08	1.99E+09	1.24E+09	1.44E+08	6.42E+08	1.63E+10	8.91E+09	3.34E+08	
Revenue 2001	2.98E+10	3.84E+09	5.81E+09	1.5E+09	4.85E+09	7.45E+08	9.26E+09	2.05E+08	2.78E+09	1.49E+09	1.58E+08	3.11E+08	2.1E+10	8.36E+09	5.17E+08	
Expense 2000	5.73E+09	2.23E+09	84889085	4.79E+08	1.55E+08	1.58E+08	1.91E+09	41315367	1.13E+08	1.31E+08	12574792	2.74E+08	3.25E+08	5.72E+08	23292830	3.21E+10
Expense 2001	1.19E+10	1.92E+08	2.45E+08	3.93E+08	7.18E+08	1.6E+08	2.54E+09	39638337	3.25E+08	3.29E+08	33573314	1.95E+08	2.61E+08	7.83E+08	82330756	3.73E+10



	Tnajung Priok	Panjang	Palembang	Teluk Bayur	Pontianak	Cirebon	Banten	Sunda Kelapa	Jambi	Bengkulu	Pangkal Balam	Tanjung Pandan	EDI Indonesia	Hospital	Training Center	Head Office	KOJA
2000	1.76E+11	2.74E+10	1.24E+10	7.51E+09	6.19E+09	-8.3E+08	3.52E+10	-5.5E+08	1.33E+09	-2.9E+09	-1.7E+08	-3.3E+08	7.15E+09	1.94E+09	-1.5E+09	-2.5E+11	9.48E+10
2001	2.82E+11	5.02E+10	1.82E+10	1.23E+10	1.11E+09	-1.7E+09	2.38E+10	43498808	2.76E+09	-2E+10	-3E+08	-6.5E+08	7.67E+09	2.49E+09	-2.3E+09	-8E+10	1.32E+11



Rupiah

Branch	Revenue		Port Traffic	
	Revenue 2000	Revenue 2001	Cargo 2000	Cargo 2001
Tnajung Priok	18,429,042,730	29,784,985,681	49,816,000	50,913,000
Panjang	1,312,238,231	3,838,708,475	n.a.	11,920,000
Palembang	3,101,526,566	5,810,418,711	n.a.	10,600,000
Teluk Bayur	3,848,774,397	1,500,391,300	n.a.	6,800,000
Pontianak	2,570,864,805	4,850,107,557	n.a.	4,200,000
Cirebon	551,905,067	744,701,456	1,752,000	1,962,000
Banten	11,969,781,553	9,263,048,681	26,401,000	19,503,000
Sunda Kelapa	161,824,581	204,847,629	3,237,000	3,351,000

Rupiah

Branch	2000				
	Net Profit before Tax	Account Receivable	Doubtful Account	Personnel Expenses	Other Charge
Tanjung Priok	176,165,515,292	18,429,042,730	4,538,632,473	393,666,158	798,810,591
Panjang	27,396,214,174	1,312,238,231	14,222,284	17,192,112	2,193,780,871
Palembang	12,403,118,602	3,101,526,566	73,965,415	4,375,404	6,548,266
Teluk Bayur	7,508,898,201	3,848,774,397	333,181,365	4,302,855	141,124,554
Pontianak	6,190,833,574	2,570,864,805	149,395,448	5,312,605	271,900
Cirebon	-829,863,362	551,905,067	61,310,131	0	96,631,641
Banten	35,168,385,239	11,969,781,553	1,906,869,695	359,125	4,072,679
Sunda Kelapa	-547,345,962	161,824,581	35,615,367	5,700,000	0
Jambi	1,327,832,119	1,989,527,834	42,762,487	1,524,300	68,320,350
Bengkulu	-2,948,708,560	1,243,713,287	74,300,365	2,133,000	54,889,579
Pangkal Balam	-166,679,547	143,699,724	11,631,420	843,372	100,000
Tanjung Pandan	-334,730,455	642,126,582	266,180,222	8,263,275	0
EDI Indonesia	7,150,368,145	16,316,021,472	216,895,500		107,973,002
Hospital	1,944,572,427	8,905,880,776	382,861,770	793,695	188,310,200
Training Center	-1,484,196,754	334,238,500	0	23,292,830	0
Head Office	-251,650,023,287				32,101,748,032
KOJA	94,771,251,372				
Total	112,065,441,218	71,521,166,105	8,107,823,942	467,758,731	35,762,581,665

Rupiah

Ranch	2001				
	Net Profit before Tax	Account Receivable	Doubtful Account	Personnel Expenses	Other Charge
Tnajung Priok	282,441,949,770	29,784,985,681	8,082,307,539	370,284,423	3,423,262,212
Panjang	50,246,674,932	3,838,708,475	176,116,575	15,767,121	0
Palembang	18,218,917,559	5,810,418,711	168,137,656	5,209,751	71,200,114
Teluk Bayur	12,286,285,363	1,500,391,300	241,278,316	4,707,526	147,494,786
Pontianak	1,111,177,473	4,850,107,557	613,364,421	6,173,711	98,046,855
Cirebon	-1,678,448,492	744,701,456	63,307,411	2,517,841	94,080,000
Banten	23,778,707,107	9,263,048,681	2,541,884,348	0	700,000
Sunda Kelapa	43,498,808	204,847,629	33,570,237	6,068,100	0
Jambi	2,758,865,125	2,783,396,198	98,596,121	0	226,056,200
Bengkulu	-19,946,174,627	1,494,835,761	272,863,014	4,970,500	50,710,579
Pangkal Balam	-303,117,721	158,229,859	32,779,942	793,372	0
Tanjung Pandan	-645,045,986	311,195,829	177,529,747	17,360,450	0
EDI Indonesia	7,674,538,748	20,988,078,042	0		261,252,352
Hospital	2,492,044,326	8,361,515,951	382,105,299	793,695	400,226,435
Training Center	-2,339,872,026	516,723,000	0	82,330,756	0
Head Office	-79,674,754,264				37,316,205,551
KOJA	132,253,632,363				
Total	428,718,878,458	90,611,184,130	12,883,840,626	516,977,246	42,089,235,084

6-C PORT ACTIVITIES IN THE PAST

6-C-1 Calling Vessels

453. In the study are, there are four public commercial ports; Tanjung Priok, Banten, Sunda Kelapa, and Cirebon. If these four ports are combined, total 28,130 vessels call at the ports in 2001, and total tonnage of the vessels reach 109,885,000 GRT. Resulting average tonnage per vessel is 3,906 GRT.

454. During 10 years from 1991 until 2001, number of ship call increases 10.6 per cent only while total tonnage of calling vessels increase 92.7 percent. Average vessel size changes from 2,242 GRT in 19991 to 3,906 GRT in 2001.

455. Tanjung Priok Port is by far largest in the study area in terms of both number of ship call and total tonnage. Number of ship call at Port of Tanjung Priok is 17,068 in 2001; average 46 vessel calls per day. Average vessel size has been increased during the past ten years. In 2001, average vessel size of ship calls at this port is 5,231 GRT, which is 2.12 times larger than that ten years ago.

456. Number of ship call at Port of Sunda Kelapa has been decreased although total tonnage of ship calls is relatively stable for the past decade. Port of Sunda Kelapa is rather unique port. Distinguished from other ports, many wooden vessels loaded with timber or bagged cargo call this port regularly from isolated island port.

Table 6-C-1 Ship Calls at Ports in the Study Area

	Tg. Priok		Banten		Sunda Kelapa		Cirebon		Total	
	Unit	GRT('000)	Unit	GRT('000)	Unit	GRT('000)	Unit	GRT('000)	Unit	GRT('000)
1991	12,106	42,212	2,571	11,016	8,955	2,437	1,802	1,364	25,434	57,029
1992	12,359	49,670	2,618	11,911	8,200	1,558	1,831	2,103	25,008	65,242
1993	12,245	51,214	2,679	12,415	8,435	3,089	2,363	2,256	25,722	68,974
1994	14,002	59,367	3,005	13,608	8,873	2,801	2,567	2,918	28,447	78,694
1995	13,114	63,880	3,932	17,471	7,676	1,563	2,111	1,937	26,833	84,851
1996	14,288	69,736	3,709	18,712	5,758	1,429	2,108	1,670	25,863	91,547
1997	15,137	74,508	3,266	20,180	5,983	1,758	1,825	1,509	26,211	97,955
1998	14,113	74,066	3,054	16,990	4,413	1,089	1,710	1,409	23,290	93,554
1999	14,807	79,522	3,635	20,836	4,747	1,300	1,860	1,467	25,049	103,125
2000	16,381	86,419	3,930	21,852	5,730	2,069	1,760	1,462	27,801	111,802
2001	17,068	89,284	3,332	16,524	6,061	2,499	1,669	1,578	28,130	109,885

Source: IPC2

6-C-2 Cargo Throughput

1) Total Throughput

457. Cargo Throughput of the four ports are summarized and shown in Table 6-C-2. Total 75.7 million tons of cargo were loaded and unloaded at the four ports in 2001, which is 6.8 per cent below the previous year's throughput. The cargo volume had been increasing year by year before the crisis, then suddenly dropped by 8.2 per cent in 1998. Fortunately the cargo throughput began to increase in 1999 and 2000, but again decreased in 2001.

Table 6-C-2 Cargo Throughput by Port in the Study Area

(Unit: Thousand Ton)

Year	Tg. Priok	Banten	Sunda Kelapa	Cirebon	Total
1991	24,903	10,447	3,541	1,024	39,915
1992	29,001	11,261	3,429	1,246	44,937
1993	31,481	11,857	4,000	1,281	48,619
1994	33,791	12,812	4,182	1,413	52,198
1995	37,988	15,321	3,987	1,538	58,834
1996	40,212	17,297	3,631	1,677	62,817
1997	42,431	20,467	4,272	1,863	69,033
1998	38,344	20,583	2,637	1,813	63,377
1999	43,437	23,456	2,845	1,833	71,571
2000	49,816	26,401	3,237	1,752	81,206
2001	50,913	19,503	3,351	1,962	75,729

Source: PT. (Persero) Pelabuhan Indonesia II

2) Throughput by Packing Type

458. Throughputs by packing type at the four ports are shown in Table 6-C-3. Packing types are categorized into the six groups; General cargo, Bag cargo, Liquid Bulk cargo, Dry Bulk cargo, Container, and Others. Container as one of the packing types has the largest share of 27.3 % in the combined throughputs at the four metropolitan ports in 2001. Dry bulk cargo follows with 25.4 % of the total, while liquid bulk cargo has a 23.8 % share.

459. The share of container has been increasing since 1991 when it was 16.4 %. On the other hand, shares of bulk cargoes have been relatively stable, 23.1% for liquid bulk cargo and 17.9 % for dry bulk cargo in 1991.

Table 6-C-3 Cargo Throughput by Packing Type in the Study Area

3) Container Throughput

460. Containers are handled at Tanjung Priok Port and Banten Port. To the lesser magnitude, very small number of containers are handled at Cirebon Port. No containers are handled at Sunda Kelapa Port. Combined total container throughput was 20.377 million ton (2.219 million TEU) in 2001.

461. Tanjung Priok Port covers 99% of the total container throughput at the metropolitan ports in 2001. Merakmas Port, which is a part of Banten Port, started container handling operation in 1999, and show steady growth recently.

6-C-3 Passenger Movement

462. In the study area, passenger ships call at three ports regularly; Tanjung Priok, Sunda Kelapa, and Cirebon. No passenger vessels come to the Port of Banten. Total of 1,950,939 passengers embarked and disembarked at the three ports in 2001.

463. Tg Priok accounts for 88 per cent of the total passengers. Since 1995 the number of passengers showed the declining tendency until 1997 when the economic crisis attacked Asian countries including Indonesia, and 785, 441 passengers passed through the terminal at Tanjung Priok in 1997. Since then number of sea passengers increased year by year, and reached 1,709,368 in 2001. The reason of this rapid increase of sea passengers is believed that people prefer cheaper fare comparing air counterpart in this economically troubled era.

Table Cargo Throughput by Packing Type at Study Ports (1991 - 2001)

(Unit:Thousand Ton)

DESCRIPTION	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Throughput at Port of Banten	10,448	11,262	11,857	12,812	15,321	17,297	20,467	20,583	23,456	26,401	19,503
General Cargo Ton	1,485	1,157	1,434	1,297	849	1,053	1,382	1,068	1,607	1,412	660
Bag Cargo Ton	2	1	6	57	70	633	53	137	192	145	69
Liquid Cargo Ton	1,420	1,685	1,940	3,643	5,448	5,848	7,140	7,388	7,810	8,928	7,589
Dry Bulk Cargo Ton	7,423	8,296	8,334	7,696	8,835	9,658	11,774	11,896	13,639	15,676	10,804
Containerized Cargo Ton	2.9	0.7	1.0	0.4	0.5	0.7	0.5	7.0	105.0	181.0	297
(1,000 Teu)	0.4	0.1	0.1	0.3	0.1	0.1	0.1	1.0	10.0	16.0	24
Others Ton	115	122	142	119	118	104	117	87	103	59	84
Throughput at Port of Sunda Kelapa	3,541	3,429	4,000	4,182	3,987	3,631	4,272	2,637	2,845	3,237	3,351
General Cargo Ton	1,360	1,364	1,564	1,555	1,075	996	829	629	699	740	751
Bag Cargo Ton	598	577	591	497	667	754	754	688	616	594	982
*Liquid Cargo Ton									43	28	164
Dry Bulk Cargo Ton						231	695	2			180
Containerized Cargo Ton											
(1,000 Teu)											
Others Ton	1,583	1,488	1,845	2,130	2,245	1,650	1,994	1,318	1,487	1,875	1,274
Throughput at Port of Cirebon	1,024	1,246	1,281	1,413	1,538	1,678	1,863	1,813	1,833	1,752	1,962
General Cargo Ton	240	345	304	310	244	260	205	229	204	275	228
Bag Cargo Ton	481	483	467	398	427	490	508	558	458	355	576
*Liquid Cargo Ton	7	0	71	142	221	242	228	185	207	148	156
Dry Bulk Cargo Ton	296	418	399	563	625	670	915	840	964	973	1,002
Containerized Cargo Ton	0	0	0	0.1	0.3	1.7	0	1.0	0	0.5	0
(1,000 Teu)	0	0	0	0.1	0.2	0.4	0	0.1	0	0.1	0
Others Ton	0	0	40	0	21	14	7	0	0	1	0
Throughput at Port of Tg. Priok	24,903	29,002	31,481	33,791	37,988	40,212	42,431	38,344	43,437	49,816	50,913
General Cargo Ton	4,077	4,705	5,203	5,048	6,998	8,355	8,078	6,212	6,255	8,692	9,421
Bag Cargo Ton	3,044	2,845	2,884	3,301	3,317	3,390	2,715	3,111	3,263	1,665	3,769
Liquid Bulk Cargo Ton	7,782	8,567	9,103	8,359	8,591	8,259	8,813	8,934	9,258	9,726	10,094
Dry Bulk Cargo Ton	3,410	4,565	4,719	5,661	5,459	4,949	6,292	5,118	5,242	6,929	7,268
Container (Conventional Wharf.) Ton	781	458	612	993	1,438	1,845	2,141	1,646	2,657	4,620	2,447
(1,000 Teu)	115	51	100	106	201	183	238	188	257	403	769
Others	0	0	0	0	0	0	0	0	0	0	0
(Container Terminal) Ton	5,809	7,862	8,960	10,429	12,185	13,414	14,392	13,323	16,762	18,184	17,914
(1,000 Teu)	621	815	978	1,164	1,300	1,421	1,631	1,712	1,855	2,019	1,989
Total Throughput at Major Metropolitan Ports	39,916	44,939	48,619	52,198	58,834	62,817	69,033	63,377	71,571	81,206	75,729
General Cargo Ton	7,162	7,571	8,505	8,210	9,166	10,664	10,494	8,138	8,765	11,119	11,060
Bag Cargo Ton	4,125	3,906	3,948	4,253	4,481	5,267	4,030	4,494	4,529	2,759	5,396
Liquid Bulk Cargo Ton	9,209	10,252	11,114	12,144	14,260	14,349	16,181	16,507	17,318	18,830	18,003
Dry Bulk Cargo Ton	11,129	13,279	13,452	13,920	14,919	15,508	19,676	17,856	19,845	23,578	19,254
Container (Conventional Wharf.) Ton	784	459	613	993	1,439	1,847	2,142	1,654	2,762	4,801	2,744
(1,000 Teu)	115	51	100	106	201	183	238	189	267	419	793
Others	1,698	1,610	2,027	2,249	2,384	1,768	2,118	1,405	1,590	1,935	1,358
(Container Terminal) Ton	5,809	7,862	8,960	10,429	12,185	13,414	14,392	13,323	16,762	18,184	17,914
(1,000 Teu)	621	815	978	1,164	1,300	1,421	1,631	1,712	1,855	2,019	1,989

Source: Pt. (Persero) PELABUHAN INDONESIA II