

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

REVIEW OF MARITIME TRANSPORT, 2004

CHAPTER 7.

Review of Regional Developments: Asia

UNITED NATIONS

New York and Geneva, 2004

Chapter 7

REVIEW OF REGIONAL DEVELOPMENTS: ASIA

This chapter focuses on developments in Asia.¹⁶ It consists of four sections: (1) economic background; (2) maritime trade and the demand for liner shipping services; (3) the supply of maritime businesses; and (4) the situation in selected cases, covering China, South-East Asian LDCs and Central Asian landlocked countries

A. ECONOMIC BACKGROUND

Economic growth

Most Asian countries continued reporting high positive growth rates in 2003. The average of 20 developing countries (table 45) increased from 4.6 per cent in 2002 to 5.2 per cent in 2003. Twelve of the 20 countries recorded higher growth in 2003 than in 2002. The highest growth rates were reported by Kazakhstan (9.5 per cent), followed by China (9.1), India (7.4), the United Arab Emirates (7.0), Thailand (6.7) and Saudi Arabia (6.4). The highest positive change between 2002 and 2003 was achieved by Saudi Arabia (an increase of 5.4 percentage points), followed by the United Arab Emirates (+5.2), India (+2.8), Pakistan (+2.6) and Lebanon (+2.0).

Trade growth

Trade growth in 2003 has been positive for the large majority of the 40 Asian economies covered by table 46. Only four countries (Iraq, Myanmar, Syrian Arab Republic and Bhutan) recorded negative export growth, and only one country (Iraq) negative import growth. By contrast, in 2001, the majority of Asian countries reported negative trade growth rates. The average export growth rate of the 40 countries increased from 5.2 per cent in 2002 to 14.8 per cent in 2003, and the average import growth rate from 5.6 per cent to 14.8 per cent. Of the 40 economies in the table, 32 had higher export growth in 2003 than in 2002.

In 2003, the highest export growth rates were recorded for Kuwait (+40 per cent), Lebanon (+39 per cent), China

(+35 per cent), Kazakhstan (+33 per cent) and Yemen (+26 per cent). The highest import growth rates were recorded for Azerbaijan (+58 per cent), China (+40 per cent), Qatar (+30 per cent), Kazakhstan (+27 per cent) and Viet Nam (+26 per cent).

Direction of trade

On average, just over half of the exports of the 42 Asian countries covered by table 47 go to other Asian countries, that is they represent intraregional trade. For 29 countries, Asia is the most important region of destination, followed by Europe, which is the most important for nine countries, and America, which is the main destination region for four countries. Oman (88.5 per cent), Qatar (88) and Yemen (93.3) are the Asian countries that most depend on exports to Asia. Azerbaijan (79.7 per cent), Turkmenistan (70.6) and Turkey (70.7) are the countries that most depend on exports to Europe, and Cambodia (61.6 per cent), Iraq (58.8) and Maldives (45.4) have the highest share of exports to America.

Between 1990 and 2003, on average, the share of intraregional exports and of exports to America increased slightly, the share of exports to Africa and Europe decreased, and the share of exports to Oceania remained practically unchanged. Some individual countries, however, have experienced far greater changes in their export patterns. Jordan, for example, in 1990 exported 83.4 per cent of its trade to Asia and only 0.7 per cent to America; in 2003, exports to Asia decreased to 63 per cent and the share of exports to America increased almost 30-fold to reach 22.7 per cent. During the same period, the share of Chinese exports to America more

Table 45

Growth of output of Asian countries
(percentage change)

	1998	1999	2000	2001	2002	2003
China	7.8	7.1	8.0	7.5	8.0	9.1
Hong Kong (China)	-5.0	3.4	10.2	0.5	2.3	3.3
India	6.0	7.1	4.0	5.5	4.6	7.4
Indonesia	-13.1	0.8	4.9	3.4	3.7	4.1
Iran, Islamic Republic of	2.0	2.5	5.9	4.8	6.7	5.9
Jordan	3.0	3.0	4.2	4.3	4.9	3.2
Kazakhstan	-1.9	2.7	9.8	13.5	9.8	9.5
Korea, Republic of	-6.7	10.9	9.3	3.1	6.4	3.1
Lebanon	3.0	1.0	0.0	1.3	1.0	3.0
Malaysia	-7.4	6.1	8.5	0.3	4.1	5.2
Pakistan	2.5	3.7	4.3	2.5	2.9	5.5
Philippines	-0.6	3.4	4.0	3.4	4.4	4.5
Saudi Arabia	2.8	-0.7	4.9	1.3	1.0	6.4
Singapore	-0.9	6.4	9.4	-2.4	2.3	1.1
Taiwan Province of China	4.6	5.4	5.9	-2.2	3.6	3.2
Thailand	-10.5	4.4	4.6	1.8	5.4	6.7
Turkey	3.1	-4.7	7.4	-7.5	7.9	5.8
United Arab Emirates	1.4	4.4	12.3	3.5	1.8	7.0
Viet Nam	5.8	4.8	6.8	6.9	7.0	6.0
Yemen	6.5	2.7	6.5	4.7	3.6	3.8
Arithmetic average	0.1	3.7	6.5	2.8	4.6	5.2

Source: UNCTAD.

Note: Arithmetic averages are unweighted.

than doubled to reach 25.1 per cent, while its share of exports to Asia decreased to 50.8 per cent. Likewise, the share of Cambodian exports to America multiplied by 80, whereas its share of exports to Asia decreased by 90 per cent. India, on the other hand, increased its share of intra-Asian exports by 40 per cent, while its share of exports to Europe decreased by almost half from 49.5 per cent to 26.6 per cent.

Regarding imports (table 48), the trade patterns are similar to those of Asian exports. For the majority of countries, the share of intraregional imports has increased since 1990, reaching an average of 57.1 per cent in 2003. Cambodia (92.8 per cent), the Lao People's Democratic Republic (92.2) and Myanmar (95.1) are the countries that most depend on other Asian countries for their

imports. The Republic of Korea (17.5 per cent), Kuwait (16.8) and the Philippines (20.1) have the highest shares of imports from America, and Kazakhstan (66.6 per cent), Lebanon (61.9) and Turkey (69.3) are the countries with the highest shares of imports from Europe. Indonesia, Iraq and Kuwait have the highest shares of imports from Oceania; and Sri Lanka, Turkey and Yemen have the highest shares of imports from Africa.

Between 1990 and 2003, China increased its share of intraregional imports from 54.2 to 63.9 per cent, while its share of imports from America decreased from 18 per cent to 13.7 per cent. Similarly, India too increased its share of imports from Asia, reaching 43.8 per cent in 2003, while reducing its share of imports from America to 13 per cent and from Europe to 32.9 per cent.

Table 46

Asian countries' growth rates for merchandise trade
(in US dollars and percentages)

Merchandise trade annual growth	Exports			Arithmetic average 1995–2003	Imports			Arithmetic average 1995–2003
	2001	2002	2003		2001	2002	2003	
Afghanistan	-48.6	-5.3	16.7	-2.5	0.0	72.7	4.7	14.2
Azerbaijan	32.6	-6.3	19.6	20.5	22.1	16.4	57.6	16.2
Bahrain	-10.0	-3.7	17.7	8.4	-7.1	15.8	2.3	4.1
Bangladesh	-4.9	-0.1	12.2	10.2	-0.1	-5.2	22.1	9.3
Bhutan	2.9	13.2	-3.3	8.0	-5.9	0.0	7.3	10.0
Cambodia	15.4	11.3	12.5	17.2	2.2	5.8	11.9	11.1
China	6.8	22.4	34.6	16.0	8.2	21.2	39.9	16.0
Hong Kong (China)	-5.7	5.7	11.0	4.7	-5.6	3.0	11.8	4.3
India	2.3	13.8	11.0	9.4	-2.2	12.2	23.4	11.5
Indonesia	-9.1	1.3	6.1	5.3	-7.5	0.9	3.5	2.2
Iran, Islamic Republic of	-16.3	18.8	18.4	9.5	25.5	23.7	24.3	9.0
Iraq	-22.8	-16.1	-15.0	n.a.	-1.4	-27.2	-17.7	n.a.
Jordan	20.7	20.8	8.3	9.0	5.4	3.6	11.1	6.1
Kazakhstan	-5.4	12.3	32.9	19.5	27.9	2.1	26.5	11.0
Korea, Republic of	-12.7	8.0	19.6	8.8	-12.1	7.8	17.5	8.8
Kuwait	-16.6	-5.1	40.2	10.9	9.9	14.4	24.0	6.4
Kyrgyzstan	-5.6	2.1	19.8	7.1	-15.7	25.7	22.1	13.9
Lao People's Dem. Rep.	0.3	-10.0	24.5	2.9	-1.3	-18.4	17.9	-0.3
Lebanon	21.7	20.2	39.4	17.1	17.1	-11.6	9.1	2.5
Malaysia	-10.4	6.0	8.0	6.7	-9.9	8.1	1.5	4.8
Maldives	0.0	18.4	25.6	11.2	1.0	-0.3	17.3	8.8
Mongolia	-3.9	0.4	14.7	5.6	2.4	9.7	13.9	14.3
Myanmar	44.7	27.9	-8.0	16.7	19.8	-18.4	7.1	14.7
Nepal	-8.3	-22.9	14.4	8.1	-6.4	-3.7	21.9	5.7
Oman	1.7	1.8	6.6	10.9	15.0	3.6	1.7	5.5
Pakistan	2.3	7.3	20.1	5.7	-6.2	10.2	16.0	5.2
Philippines	-17.9	11.7	1.5	13.0	-5.7	6.5	5.7	7.1
Qatar	-6.2	1.0	12.8	18.1	15.6	7.8	29.9	15.1
Saudi Arabia	-5.4	-2.0	23.0	11.3	3.3	3.5	5.5	4.5
Singapore	-11.6	2.8	15.1	5.2	-13.8	0.4	9.8	3.5
Sri Lanka	-11.3	-2.4	7.7	5.6	-16.8	2.2	5.7	3.9
Syrian Arab Republic	13.2	18.7	-4.0	9.2	6.2	5.6	13.0	-0.6
Taiwan Province of China	-16.9	7.3	11.5	6.1	-23.3	4.9	13.1	5.5
Tajikistan	-17.2	13.5	8.1	7.4	1.9	4.8	22.2	6.9
Thailand	-5.7	5.6	16.7	7.0	0.2	4.2	17.0	5.4
Turkmenistan	7.7	5.6	19.4	15.6	26.0	-5.8	18.7	8.1
United Arab Emirates	-2.1	1.7	17.1	9.6	12.6	4.1	9.9	6.3
Uzbekistan	-3.7	-14.8	10.8	2.7	6.0	-18.9	5.1	2.5
Viet Nam	4.5	9.5	18.9	19.7	2.3	18.8	26.4	18.1
Yemen	-21.2	7.5	26.0	26.9	-0.6	12.8	11.0	4.7
Arithmetic average of 40 economies	-3.1	5.2	14.8	10.4	2.2	5.6	14.8	7.9

Source: UNCTAD, based on data provided by WTO database.

Note: Arithmetic averages are unweighted.

Table 47

Direction of trade, merchandise exports
(percentage share of exports)

Region of destination: Country of origin:	Africa			America			Asia			Europe			Oceania		
	1990	2002	2003	1990	2002	2003	1990	2002	2003	1990	2002	2003	1990	2002	2003
Afghanistan	0.3	4.6	2.8	4.5	8.5	28.7	21.1	62.1	37.5	73.9	24.6	30.9	0.3	0.3	0.1
Armenia	..	0.0	0.0	..	9.3	7.4	..	38.2	29.2	..	52.3	63.4	..	0.1	0.0
Azerbaijan	..	0.2	0.3	..	2.9	0.9	..	19.4	19.1	..	77.5	79.7	..	0.0	0.0
Bahrain	0.9	8.1	8.6	18.0	14.8	12.2	70.4	62.3	63.6	10.4	13.4	13.4	0.3	1.4	2.2
Bangladesh	4.2	1.2	0.9	32.8	35.7	32.7	19.0	10.4	9.3	42.1	52.4	56.7	2.0	0.4	0.4
Cambodia	0.2	0.3	0.3	0.8	60.6	61.6	90.9	14.0	12.7	7.8	25.0	25.2	0.2	0.1	0.1
China	2.1	2.1	2.3	10.5	25.7	25.1	71.7	52.6	50.8	14.9	17.9	20.1	0.9	1.6	1.6
Georgia	..	1.7	1.5	..	4.0	7.9	..	37.8	39.7	..	56.4	50.9	..	0.0	0.1
Hong Kong (China)	1.7	0.6	0.7	28.0	25.0	21.4	48.2	58.4	62.0	20.4	14.6	14.6	1.8	1.4	1.4
India	2.7	5.0	5.0	17.2	28.0	25.9	29.5	39.2	41.1	49.5	26.5	26.6	1.2	1.3	1.3
Indonesia	0.7	2.1	2.0	14.0	15.6	15.4	70.5	63.6	63.6	12.9	14.9	15.0	1.9	3.8	4.0
Iran, Islamic Republic of	0.0	1.7	1.5	6.5	1.1	0.9	37.4	68.1	68.0	56.1	28.8	29.3	0.0	0.3	0.2
Iraq	2.3	4.6	5.2	39.7	50.0	58.8	28.4	19.2	19.3	29.5	26.0	16.2	0.0	0.2	0.5
Jordan	8.1	7.0	6.5	0.7	17.4	22.7	83.4	67.2	63.2	7.7	8.3	7.5	0.0	0.1	0.1
Kazakhstan	..	0.5	0.4	..	23.0	20.9	..	26.7	24.3	..	49.8	54.4	..	0.0	0.0
Korea, Republic of	2.0	2.4	2.4	37.3	27.2	25.1	41.7	52.4	55.4	17.1	16.2	15.2	1.9	1.7	1.9
Kuwait	2.1	2.1	2.2	9.7	12.1	12.3	60.3	75.1	74.3	26.8	10.0	10.3	1.1	0.7	0.9
Kyrgyzstan	..	0.0	0.0	..	8.4	4.2	..	47.0	52.4	..	44.6	43.4	..	0.0	0.0
Lao People's Dem. Rep.	1.0	0.1	0.1	2.3	1.7	2.5	85.5	57.8	59.5	11.1	40.2	37.6	0.1	0.1	0.1
Lebanon	9.4	11.3	11.4	5.6	7.5	9.1	44.2	50.8	49.8	40.4	29.9	29.2	0.5	0.5	0.5
Malaysia	0.8	1.1	1.1	18.4	21.9	22.1	62.2	61.1	60.5	16.6	13.3	13.6	2.0	2.7	2.7
Maldives	0.0	2.9	3.3	26.3	53.2	45.4	47.0	34.6	42.1	26.5	9.3	9.1	0.2	0.0	0.0
Mongolia	20.7	0.0	0.0	2.4	32.0	34.1	31.7	48.3	53.8	45.2	16.3	11.4	0.0	3.4	0.7
Myanmar	1.2	0.4	0.4	2.9	15.7	12.0	82.8	67.4	70.4	12.3	16.1	16.7	0.8	0.4	0.4
Nepal	0.1	0.0	0.0	24.2	29.4	27.6	15.6	53.7	56.2	60.0	16.6	16.0	0.1	0.3	0.3
Oman	4.4	1.3	1.3	3.7	4.5	6.5	78.9	88.2	88.5	13.0	4.6	2.4	0.0	1.4	1.3
Pakistan	2.3	4.7	5.3	15.1	28.4	25.7	38.3	36.6	38.3	42.8	28.8	29.4	1.4	1.5	1.4
Philippines	0.3	0.2	0.2	40.6	27.0	23.1	38.6	53.1	60.0	19.0	18.6	15.3	1.6	1.1	1.4
Qatar	0.7	1.1	1.1	10.8	4.8	2.8	85.6	88.6	88.0	2.4	4.0	6.8	0.5	1.5	1.3
Saudi Arabia	4.0	5.2	5.0	28.3	21.0	23.0	47.6	56.6	55.0	19.2	16.0	16.1	1.0	1.2	0.9
Singapore	1.6	1.1	1.2	23.9	17.6	16.4	52.9	63.7	63.3	17.7	14.0	14.9	4.0	3.5	4.2
Sri Lanka	5.7	1.0	1.0	30.6	43.5	39.5	29.8	24.1	25.5	32.2	30.1	32.5	1.7	1.3	1.5
Syrian Arab Republic	2.8	3.7	4.3	1.0	3.0	5.3	19.3	28.9	34.1	76.9	64.4	56.3	0.0	0.0	0.0
Taiwan Province of China	1.1	0.9	0.9	37.3	24.0	21.7	40.8	59.3	61.6	18.6	14.4	14.2	2.3	1.4	1.5
Tajikistan	..	0.0	0.0	..	0.1	1.0	..	34.8	47.6	..	65.1	51.3	..	0.0	0.0
Thailand	2.5	2.1	2.0	25.6	22.7	19.7	44.6	55.7	58.3	25.5	16.7	16.8	1.9	2.8	3.1
Turkey	5.7	5.1	4.6	8.3	11.5	10.1	19.1	14.6	14.3	66.7	68.4	70.6	0.2	0.4	0.4
Turkmenistan	..	0.0	0.0	..	2.6	3.5	..	24.0	25.8	..	73.4	70.7	..	0.0	0.0
United Arab Emirates	3.1	3.1	3.0	5.8	3.2	3.1	77.9	84.4	83.1	10.9	8.3	8.8	2.3	0.9	2.0
Uzbekistan	..	0.3	0.3	..	5.1	4.4	..	43.5	51.0	..	51.1	44.3	..	0.0	0.0
Viet Nam	0.2	1.1	1.0	0.7	17.2	23.4	45.6	45.9	42.6	53.2	27.9	25.2	0.3	7.9	7.8
Yemen	1.4	3.1	2.6	24.2	5.4	1.3	15.5	89.7	93.3	57.3	1.8	2.4	1.5	0.0	0.4
AVERAGE (unweighted)	2.8	2.2	2.2	16.4	18.4	18.3	49.3	49.5	50.2	30.5	28.8	28.2	1.0	1.1	1.1

Source: UNCTAD, on the basis of IMF Direction of Trade Statistics, CD-ROM, June 2004.

Note: The three highest percentages per import region are marked in bold.

Table 48

Direction of trade, merchandise imports
(percentage share of imports)

Region of origin: Destination country:	Africa			America			Asia			Europe			Oceania		
	1990	2002	2003	1990	2002	2003	1990	2002	2003	1990	2002	2003	1990	2002	2003
Afghanistan	0.0	5.6	5.3	1.6	8.9	5.7	81.1	66.4	66.5	17.1	18.8	22.2	0.1	0.2	0.2
Armenia	..	0.1	0.1	..	15.6	11.7	..	32.7	32.9	..	51.6	55.2	..	0.0	0.1
Azerbaijan	..	0.3	0.2	..	6.7	6.4	..	42.7	38.7	..	49.6	54.3	..	0.7	0.3
Bahrain	0.1	0.7	1.4	8.8	14.1	13.8	67.4	55.3	55.7	18.0	28.3	27.3	5.7	1.7	1.7
Bangladesh	0.3	0.7	0.7	11.4	5.2	5.0	60.8	77.5	79.3	25.4	14.0	12.8	2.1	2.7	2.2
Cambodia	0.1	0.0	0.0	0.6	1.4	2.3	68.3	92.9	92.8	28.5	5.3	4.5	2.5	0.4	0.4
China	0.7	1.9	2.2	18.0	14.0	13.7	54.2	63.1	63.9	24.3	18.6	18.0	2.8	2.4	2.2
Georgia	..	0.2	0.1	..	13.7	13.8	..	28.6	27.8	..	57.1	57.8	..	0.5	0.5
Hong Kong (China)	0.6	0.3	0.4	9.2	6.9	6.7	76.6	81.3	81.9	12.4	10.6	10.1	1.1	0.9	0.8
India	3.1	6.7	6.7	14.6	13.1	13.0	37.3	43.7	43.8	41.5	33.4	32.9	3.4	3.2	3.6
Indonesia	0.7	5.4	4.6	15.7	11.6	9.1	54.9	62.8	66.5	22.5	14.3	14.2	6.0	5.9	5.6
Iran, Islamic Republic of	0.0	0.6	0.5	6.9	6.6	5.5	30.9	34.9	36.3	62.2	56.2	56.8	0.0	1.7	1.0
Iraq	2.1	5.1	6.5	15.9	3.1	10.1	26.2	41.2	41.6	52.7	43.7	37.9	3.1	6.8	3.9
Jordan	3.0	2.6	2.6	18.6	11.2	10.7	39.2	48.9	48.5	37.8	35.6	36.3	1.4	1.6	1.9
Kazakhstan	..	0.3	0.3	..	9.8	4.0	..	17.8	29.1	..	71.9	66.6	..	0.2	0.0
Korea, Republic of	0.9	1.4	1.4	30.9	18.8	17.5	48.2	61.0	64.5	15.0	14.2	13.1	4.9	4.5	3.5
Kuwait	0.1	0.9	0.8	15.4	14.5	16.8	33.7	42.2	41.7	49.6	38.6	36.9	1.3	3.8	3.9
Kyrgyzstan	..	0.0	0.0	..	10.6	5.4	..	51.2	60.9	..	38.2	33.6	..	0.1	0.0
Lao People's Dem. Rep.	0.1	0.0	0.0	1.0	0.6	0.6	88.3	91.2	92.2	9.7	6.3	6.0	0.9	1.8	1.2
Lebanon	1.4	2.2	2.0	6.1	7.7	6.5	33.9	30.3	29.4	58.7	59.5	61.9	0.1	0.3	0.3
Malaysia	0.5	0.4	0.4	19.7	18.2	13.3	57.5	66.0	72.2	18.0	13.2	12.3	4.3	2.2	1.8
Maldives	0.0	0.5	0.4	0.6	2.2	2.2	85.8	81.0	79.8	13.3	11.7	14.3	0.3	4.7	3.2
Mongolia	0.7	0.0	0.0	0.1	3.9	3.0	33.1	48.1	45.2	66.0	46.2	49.7	0.1	1.8	2.2
Myanmar	0.5	0.1	0.1	3.2	0.4	0.3	69.3	90.9	95.1	23.4	8.0	4.2	3.7	0.6	0.3
Nepal	0.2	0.1	0.1	3.2	2.9	2.2	70.6	82.5	82.7	20.1	12.2	12.7	5.8	2.3	2.3
Oman	0.5	0.5	0.5	10.0	8.7	7.5	54.4	62.0	62.9	32.4	26.6	26.5	2.7	2.2	2.6
Pakistan	2.4	3.3	2.8	15.3	8.1	8.0	50.1	65.5	67.8	29.8	20.5	19.6	2.4	2.6	1.8
Philippines	0.7	0.2	0.2	23.6	22.6	20.1	58.2	66.1	68.1	13.2	8.8	9.4	4.3	2.3	2.2
Qatar	0.4	0.2	0.2	12.1	10.3	10.2	38.7	36.1	33.0	46.3	52.1	54.9	2.7	1.3	1.7
Saudi Arabia	2.0	1.3	2.1	19.1	16.7	15.2	33.1	34.2	35.4	44.2	43.8	43.7	1.6	4.0	3.6
Singapore	0.6	0.6	0.6	18.0	15.7	15.4	63.2	66.9	66.5	16.0	14.7	15.5	2.2	2.1	1.9
Sri Lanka	4.4	0.6	0.6	9.8	4.6	3.4	65.0	76.4	76.1	18.0	14.4	17.0	2.8	4.0	2.9
Syrian Arab Republic	2.9	2.6	2.5	15.2	9.5	7.7	21.2	36.9	38.0	60.7	50.7	51.5	0.0	0.3	0.3
Taiwan Province of China	0.5	1.9	1.9	27.7	19.0	16.5	50.3	62.8	67.2	18.0	13.3	12.1	3.5	3.0	2.4
Tajikistan	..	0.9	0.9	..	0.1	6.4	..	53.2	56.5	..	45.6	36.1	..	0.1	0.1
Thailand	1.0	1.4	1.3	14.0	12.1	12.2	63.2	69.5	71.1	19.9	14.2	12.7	2.0	2.8	2.6
Turkey	5.9	5.3	5.0	13.3	8.1	6.2	23.7	19.5	19.1	56.4	66.4	69.3	0.6	0.6	0.3
Turkmenistan	..	0.0	0.0	..	8.0	2.1	..	43.5	44.1	..	48.5	53.9	..	0.0	0.0
United Arab Emirates	0.6	1.3	1.2	10.8	9.4	9.2	49.5	47.4	45.4	37.0	39.4	41.4	2.2	2.3	2.8
Uzbekistan	..	0.0	0.0	..	7.5	11.3	..	36.5	37.5	..	55.9	51.0	..	0.0	0.1
Viet Nam	0.1	0.3	0.2	0.7	4.7	6.8	61.6	79.6	78.0	36.9	13.6	13.3	0.7	1.9	1.6
Yemen	5.4	4.7	3.8	6.6	11.2	10.8	40.6	64.0	60.9	41.4	18.6	22.5	6.0	1.5	2.0
AVERAGE (unweighted)	1.2	1.5	1.4	11.7	9.5	8.8	52.7	56.1	57.1	32.0	31.1	31.0	2.5	2.0	1.7

Source: UNCTAD, on the basis of IMF Direction of Trade Statistics, CD-ROM, June 2004.

Note: The three highest percentages per export region are marked in bold.

Regional integration in Asia

As shown above, a majority of Asian countries is increasingly importing and exporting with other Asian countries. This growth of trade is at the same time the cause and effect of the general progress of regional integration in Asia. The region covers very diverse economies, including LDCs, landlocked countries and the most populous developing countries, as well as highly advanced countries such as Japan. In such a context, where regional integration may seem difficult, it has nevertheless made important progress.

As regards South-East Asia, in January 2003, countries belonging to the ASEAN free trade area renewed their commitment to promote regional trade by signing the Protocol to Amend the Agreement on the Common Effective Preferential Tariff (CEPT) Scheme, whereby import duties would be eliminated. Under this amendment, the pioneering signatories of ASEAN (Brunei Darussalam, Indonesia, Malaysia, the Philippines, Singapore and Thailand, also called ASEAN-6) will eliminate all import duties on the products in their Inclusion Lists no later than 1 January 2010. The remaining member States — Cambodia, the Lao People's Democratic Republic, Myanmar and Viet Nam — will follow suit no later than 1 January 2015. The ASEAN secretariat reports that since 1 January 2003, tariffs on 99.55 per cent of products in the 2003 Inclusion List of the ASEAN-6 have been reduced to the 0–5 per cent tariff range. The average tariff for ASEAN-6 under the CEPT Scheme is now down to 2.39 per cent from 12.76 per cent when the tariff reduction started in 1993. The newer members of ASEAN still have to reach the 0–5 per cent tariffs for intra-ASEAN trade – Viet Nam in 2006, the Lao People's Democratic Republic and Myanmar in 2008, and Cambodia in 2010. Overall, in 2003, 87.85 per cent of all products in the Inclusion List of the 10 member countries tentatively have tariffs of between 0 and 5 per cent, and about 11 per cent of these products have tariffs of above 5 per cent. Ultimately, tariffs will be completely abolished by 2010 for ASEAN-6 and by 2015 for the newer members, with flexibility on some sensitive products until 2018.¹⁷

With regard to neighbouring countries, on 8 October 2003, both India and China signed a Treaty of Amity and Cooperation, ensuring their participation in mutual cooperation towards developing and sustaining the prosperity and security of the region. On the same day, the commitment for economic cooperation between

ASEAN States and China, Japan, and India was also affirmed in the form of framework agreements and partnerships.¹⁸ The agreements cover various aspects of trade, including matters classified under trade facilitation such as customs cooperation, non-tariff measures, mutual recognition arrangements, conformity assessment, accreditation procedures, and standards and technical regulations.

In Central and West Asia, the Economic Cooperation Organization (ECO) comprises the signatory States of the Islamic Republic of Iran, Pakistan and Turkey, as well as Afghanistan, Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, which joined ECO in 1992. Regarding multimodal transport and trade facilitation in the ECO region, a three-day workshop was held in May 2004. During the workshop, ECO's Secretary-General stated that ECO gave high priority to the development of transport and communications in the region. During the workshop, partnerships between the public and private sectors were recommended, as well as the establishment of border links and the institution of business linkages between associations dealing with trade and transport, raising standards of service and simplification of customs procedures. The workshop concluded with a set of recommendations which include harmonization of trade and tariff policies, customs procedures, training of customs officials, establishing linkages between trade associations in the trade transport and transit areas, and preparation of a trade guide and website giving information on trade, transport, transit and customs facilitation institutions and activities.

In South Asia, member States of the South Asian Association for Regional Cooperation (SAARC), Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka, signed an agreement in January 2004 to establish the South Asian Free Trade Area (SAFTA). The Agreement sets out a Trade Liberation Programme that contains general schedules and categories for reducing a variety of barriers to trade for the next two decades. As a first step, the nominal tariff of all intra-regionally traded goods must progressively be reduced to a range of 0–5 per cent by 2016. This reduction process is scheduled to start soon after the agreement comes into effect in January 2006. The Non-LDC member countries must reduce all tariffs to 20 per cent or below over the next two years after the agreement enters into force. During the subsequent 5 years, their tariffs must be reduced further to the range of 0–5 per cent. The

LDC member countries must lower their tariffs down to 30 per cent or less over the next two years after January 2006 and to 0–5 per cent during the subsequent eight years.

Already in 1993, the SAARC Preferential Trading Arrangement (SAPTA) agreement was signed and entered into force two years later. The Agreement was designed to help improve intra-regional trade by granting certain preferential status to countries according to their development needs. Unlike the SAPTA agreement, the new agreement to establish SAFTA also envisages trade facilitation measures needed to support and complement the Trade Liberation Programme and other initiatives toward realizing SAFTA. One aim of these measures is to ensure smooth and rapid cross border procedures that would allow for lowest delay possible on any traded goods and operators crossing the borders of SAARC member States. Included in the list of measures is a transit facilitation agreement that aims at ensuring the full benefits of intra-regional trade also for the landlocked member countries of Bhutan and Nepal.

B. MARITIME TRADE AND THE DEMAND FOR MARITIME TRANSPORT SERVICES IN ASIA

Containerized trade

Twelve major South and East Asian exporters (tables 49 to 51) together accounted for 49.3 per cent of the world's containerized exports in 2003. This share is forecast to increase to 52.1 per cent in 2005, assuming an average annual growth rate of 11.2 per cent in 2004 and 2005.

China is by far the world's largest exporter of containerized cargo, with 14.4 million TEUs in 2003. This is expected to grow further to 18.6 million TEUs in 2005, assuming an annual growth rate of almost 18 per cent, which is also the region's highest. China will then account for 24 per cent of the world's containerized exports. In fact, globally, the largest bilateral containerized trade flow is that of Chinese exports to the United States. In 2003, these increased by 13 per cent to 4.6 million TEUs.¹⁹

Table 49

Containerized trade among South and East Asian countries, 2003 (TEU)

Import country	China	Indonesia	India	Hong Kong, (China)	Japan	Malaysia	Philippines	Singapore	Republic of Korea	Taiwan Province of China	Thailand	Viet Nam	Totals
Export country	China	Indonesia	India	Hong Kong, (China)	Japan	Malaysia	Philippines	Singapore	Republic of Korea	Taiwan Province of China	Thailand	Viet Nam	Totals
China		57 872	71 869	720 734	1 041 961	144 926	91485	156 711	354 039	205 680	59 389	53 105	2 957 771
Indonesia	154 312		29 728	60 745	184 992	62 571	39 468	161 317	68 969	65 357	28 341	23 542	879 342
India	29 962	8 102		17 053	18 811	56 716	12 608	14 244	27 880	7 912	7 234	3 638	204 160
Hong Kong (China)	80 669	2 788	1 222		6 761	3 114	9 171	3 503	2 207	5 510	4 245	1 543	120 733
Japan	502 895	72 111	32 850	349 081		105 933	76 813	113 090	224 358	223 735	121 695	36 007	1 858 568
Malaysia	126 816	21 914	93 846	100 454	117 646		69 223	0	35 711	65 577	36 060	34 508	701 755
Philippines	43 791	3 093	1 561	23 241	121 514	8 605		15 133	33 078	24 667	8 378	1 899	284 960
Singapore	116 799	54 474	54 272	78 472	41 710	80 762	42 972		13 653	59 354	76 003	24 501	642 972
Republic of Korea	504 081	43 675	34 878	139 308	174 896	43 073	55 745	50 468		60 366	35 067	72 484	1 214 041
Taiwan Province of China	688 334	33 295	8 846	228 297	157 070	80 214	56 006	43 734	32 808		39 165	0	1 367 769
Thailand	114 917	32 054	24 663	119 830	155 149	47 375	29 838	57 284	30 949	46 823		14 046	672 928
Viet Nam	17 744	1 577	1 065	5 495	32 754	8 189	21 965	9 351	30 442	0	892		129 474
Totals	2 380 320	330 955	354 800	1 842 710	2 053 264	641 478	505 294	624 835	854 094	764 981	416 469	265 273	11 034 473

Source: Global Insight, April 2004, Robert.West@GlobalInsight.com.

Table 50

Forecast containerized trade among South and East Asian countries, 2005
(TEU)

Export country	China	Indonesia	India	Hong Kong, (China)	Japan	Malaysia	Philippines	Singapore	Republic of Korea	Taiwan Province of China	Thailand	Viet Nam	Totals
China		79 843	112 682	867 439	1 572 209	202 627	130 472	218 453	535 560	305 410	84 355	75 420	4 184 470
Indonesia	201 304		34 762	66 042	197 285	68 666	43 095	174 253	78 599	72 960	31 336	26 087	994 389
India	36 142	8 969		18 513	19 715	60 932	13 795	15 605	31 462	8 444	8 066	4 006	225 649
Hong Kong (China)	91 617	2 942	1 318		7 123	3 338	9 515	3 828	2 424	5 938	4 580	1 665	134 288
Japan	687 059	77 546	36 995	363 853		112 353	79 911	119 746	251 228	240 263	131 537	37 846	2 138 337
Malaysia	162 597	23 923	108 632	109 549	126 409		72 095	0	41 317	71 668	41 841	37 239	795 270
Philippines	57 597	3 288	1 794	25 514	124 738	9 582		17 002	36 309	27 356	9 350	2 027	314 557
Singapore	151 345	56 340	63 355	87 120	44 420	89 778	46 529		15 641	67 883	85 837	26 814	735 062
Republic of Korea	615 627	48 020	38 253	154 794	185 722	48 959	60 302	55 306		68 703	39 853	80 359	1 395 898
Taiwan Province of China	805 815	34 594	8 955	240 460	162 214	86 758	58 622	47 519	35 974		42 258	0	1 523 169
Thailand	152 273	34 852	28 401	131 078	165 595	51 686	32 641	63 873	35 039	52 321		15 403	763 162
Viet Nam	24 223	1 693	1 231	5 866	36 302	8 912	25 073	10 211	34 799	0	1 023		149 333
Totals	2 985 599	372 010	436 378	2 070 228	2 641 732	743 591	572 050	725 796	1 098 352	920 946	480 036	306 866	13 353 584

Source: Global Insight, April 2004, *Robert.West@GlobalInsight.com*.

The second largest Asian exporter is Japan, whose containerized exports are expected to grow annually by 6.2 per cent between 2003 and 2005, to reach 4.5 million TEUs in the latter year. The second highest growth rate in the region, with almost 9 per cent, is that of Viet Nam, whose containerized exports are expected to reach 442,000 TEUs in 2005. India's containerized exports are expected to grow annually by a relatively low 3.8 per cent, which will leave the country in eighth position among the leading South and East Asian exporters.

Trade among the 12 main South and East Asian exporters accounts for more than half of containerized exports for Singapore (66.7 per cent), the Philippines (54.4 per cent) and Taiwan Province of China (50.9 per cent). It is least important for India (14 per cent of Indian exports), Hong Kong (China) (20.3 per cent) and also for China (22.1 per cent). The latter's trade is dominated by its exports to North America.

The most important intra-Asian containerized trade flows in 2003 are Chinese exports to Japan (1,041,961 TEUs), followed by Chinese exports to Hong Kong, China

(720,734 TEUs), Taiwan Province of China exports to China (688,334 TEUs), Republic of Korea exports to China (504,081 TEUs) and Japanese exports to China (502,895 TEUs). Chinese imports and exports from other Asian countries are also those with the highest growth rates. In 2004 and 2005, Chinese exports to India are forecast to grow at 25.2 per cent annually, exports to Republic of Korea by 23 per cent and exports to Japan by 22.8 per cent. Viet Nam's exports to the 11 main other South and East Asian countries are forecast to grow by 7.4 per cent, Japan's exports by 7.3 per cent and the Republic of Korea's exports by 7.2 per cent. With an annual rate of 13.4 per cent, Japan and the Republic of Korea are the two countries with the highest forecast growth of imports from the other 11 main South and East Asian exporters (see table 52).

Ports and liner shipping services

Sixty-two per cent of global container port throughput takes place in Asia (estimation based on data for 2002). In 2003, 20 of the world's top 30 container ports were located in Asia (table 53).

Table 51

Containerized exports of South and East Asian countries, 2003 and 2005 forecast
(TEU and percentages)

	Total exports 2003	Total exports 2005	Annual growth, 2003–2005	Exports to 11 Asian countries, percentage of total, 2003	Exports to 11 Asian countries, percentage of total, 2005
China	13 398 646	18 621 399	17.89	22.08	22.47
Indonesia	2 209 628	2 514 987	6.69	39.80	39.54
India	1 452 672	1 564 897	3.79	14.05	14.42
Hong Kong (China)	594 667	681 825	7.08	20.30	19.70
Japan	3 954 325	4 456 581	6.16	47.00	47.98
Malaysia	1 679 098	1 931 752	7.26	41.79	41.17
Philippines	524 438	587 277	5.82	54.34	53.56
Singapore	964 371	1 101 162	6.86	66.67	66.75
Republic of Korea	2 764 818	3 133 394	6.46	43.91	44.55
Taiwan Province of China	2 689 246	2 982 094	5.30	50.86	51.08
Thailand	1 790 701	2 023 801	6.31	37.58	37.71
Viet Nam	372 531	442 387	8.97	34.76	33.76
Total 12 countries	32 395 141	40 041 556	11.18	34.06	33.35
12 countries, percentage of world	49.33%	52.10%			
World	65 666 521	76 859 314	8.19		

Source: UNCTAD secretariat, based on data provided by Global Insight, April 2004.

Shenzhen is the port that in 2003 registered the highest absolute growth of all ports in the world, with an annual increase of 3 million TEUs. Salalah (Oman), ranked 34th in the world, registered the highest annual growth rate among the world's top 70 ports, with an increase of over 65 per cent between 2002 and 2003.

Hong Kong (China) and Singapore continue to be by far the largest container ports in the world. Most intercontinental liner shipping routes that link Asia with Europe or North America will call at both of them. Nevertheless, there are also an increasing number of additional hub ports and secondary direct calling ports, and most liner shipping alliances tend to offer alternative routes, as illustrated in figure 14. Port Klang and Tanjung Pelepas in the first box, for example, have become hub ports with dense feeder networks. Laem Chabang mostly attracts direct calls on interregional trunk routes and also intraregional coastal services.

Compared with the competition in neighbouring economies, the ports of Singapore and Hong Kong (China) have the advantage of already attracting the highest

number of liner shipping services. This in itself helps to generate economies of scale and achieve the highest levels of connectivity, which in turn increases these locations' attractiveness as ports of call.

Nevertheless, new entrants have been able to take business from the traditional main hub ports. Port Klang in Malaysia, for example, has managed to attract transshipment traffic that used to go through Singapore, and Shenzhen has been able to cater for Chinese international trade that would in previous years have gone through Hong Kong (China).

In order to be competitive in the transshipment business, Malaysia has effectively lifted cabotage restrictions for the main liner shipping routes. International liner shipping companies are allowed to pick up cargo in Malaysian secondary ports and trans-ship, for example, in Port Klang or Tanjung-Pelepas. Further to the north, GwangYang (Republic of Korea) expects to benefit from cabotage restrictions in neighbouring countries. In particular, it has ambitions to serve as a major transshipment centre for the trade of Japanese and

Table 52

**Forecast containerized trade growth among South and East Asian countries, 2003-2005,
annual growth rate
(percentages)**

Export country	China	Indonesia	India	Hong Kong, (China)	Japan	Malaysia	Philippines	Singapore	Republic of Korea	Taiwan Province of China	Thailand	Viet Nam	Totals
China		17.5	25.2	9.7	22.8	18.2	19.4	18.1	23.0	21.9	19.2	19.2	18.9
Indonesia	14.2		8.1	4.3	3.3	4.8	4.5	3.9	6.8	5.7	5.2	5.3	6.3
India	9.8	5.2		4.2	2.4	3.7	4.6	4.7	6.2	3.3	5.6	4.9	5.1
Hong Kong (China)	6.6	2.7	3.9		2.6	3.5	1.9	4.5	4.8	3.8	3.9	3.9	5.5
Japan	16.9	3.7	6.1	2.1		3.0	2.0	2.9	5.8	3.6	4.0	2.5	7.3
Malaysia	13.2	4.5	7.6	4.4	3.7		2.1	n.a.	7.6	4.5	7.7	3.9	6.5
Philippines	14.7	3.1	7.2	4.8	1.3	5.5		6.0	4.8	5.3	5.6	3.3	5.1
Singapore	13.8	1.7	8.0	5.4	3.2	5.4	4.1		7.0	6.9	6.3	4.6	6.9
Republic of Korea	10.5	4.9	4.7	5.4	3.0	6.6	4.0	4.7		6.7	6.6	5.3	7.2
Taiwan Province of China	8.2	1.9	0.6	2.6	1.6	4.0	2.3	4.2	4.7		3.9	n.a.	5.5
Thailand	15.1	4.3	7.3	4.6	3.3	4.5	4.6	5.6	6.4	5.7		4.7	6.5
Viet Nam	16.8	3.6	7.5	3.3	5.3	4.3	6.8	4.5	6.9	n.a.	7.1		7.4
Totals	12.0	6.0	10.9	6.0	13.4	7.7	6.4	7.8	13.4	9.7	7.4	7.6	10.0

Source: UNCTAD, based on data provided by Global Insight, April 2004.

Northern Chinese ports. In the first four months of 2004, GwangYang grew by 24 per cent as compared with the same period in 2003.

The position of Asian countries and their ports in global liner shipping networks is further illustrated in table 54, which depicts TEU capacity assignment by liner shipping companies and their vessel deployment. China (3.7 million TEUs), Hong Kong, China (3.5 million TEUs) and Singapore (2.4 million TEUs) are the three economies with the highest total fleet assignment. Ports in these economies as well as in Malaysia and Taiwan Province of China are the only ones that are currently being used as ports of call by the world's largest container vessels in service, which have a reported capacity of 8,063 TEUs. Although Singapore attracts the world's largest container ships, the average vessel size in Singapore is actually relatively low (2,606 TEUs). This reflects the fact that Singapore is mostly a transshipment port that depends heavily on the connection of main-haul services with regional feeding services, and

the latter tend to use relatively smaller vessels. Hong Kong (China), on the other hand, has the highest average vessel size because this port moves a far lower proportion of transshipment cargo and instead caters for imports and exports from mainland China, as well as re-exports from its Free Zone.

If we look at the fleet deployment on the major intra-Asian routes (table 55), we find that the largest capacity (741,879 TEUs) has been assigned between East Asia and North East Asia, followed by the Far East–Mid-East route. The latter is part of the main East–West trunk route and thus registers very high average vessel sizes. The smallest vessel sizes are registered on the routes that mainly cater for feeding services such as South-East Asian coastal shipping and services connecting North-East and South-East Asia.

As already discussed in chapter 4, freight rates for Asian trade with Europe and North America are strongly

Table 53

Twenty largest Asian container ports in 2001, 2002 and 2003

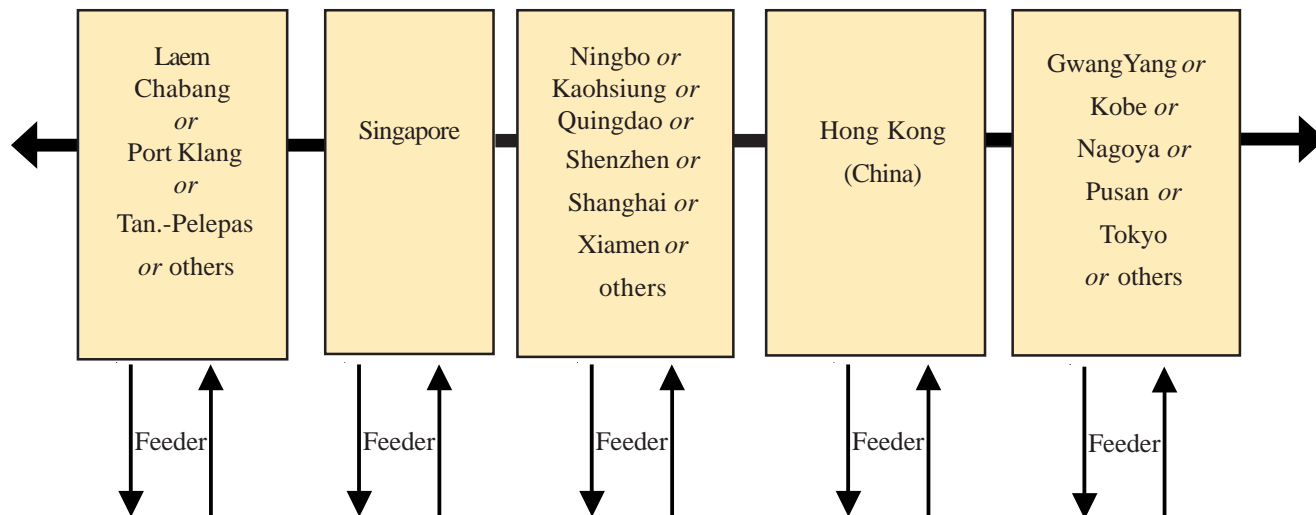
Rank		Port	Country	2001 TEU	2002 TEU	2003 TEU	Percentage growth 2002–2003
World	Asia						
1	1	Hong Kong	China	17 900	19 144	20 450	6.82
2	2	Singapore	Singapore	15 520	16 941	18 100	6.84
3	3	Shanghai	China	6 330	8 612	11 370	32.03
4	4	Shenzhen	China	5 079	7 614	10 650	39.87
5	5	Busan	Republic of Korea	8 073	9 453	10 368	9.68
6	6	Kaoshiung	Taiwan Province of China	7 540	8 493	8 844	4.13
11	7	Dubai	United Arab Emirates	3 502	4 194	5 152	22.84
12	8	Port Kelang	Malaysia	3 760	4 533	4 840	6.77
14	9	Qingdao	China	2 639	3 410	4 230	24.05
16	10	T. Pelepas	Malaysia	2 049	2 669	3 487	30.65
17	11	Tokyo	Japan	2 750	3 028	3 314	9.45
19	12	Laem Chab.	Thailand	2 367	2 749	3 180	15.68
21	13	Tianjin	China	2 011	2 408	3 020	25.42
22	15	Ningbo	China	1 213	1 859	2 772	49.11
23	14	Guangzhou	China	1 628	2 173	2 760	27.01
24	16	Jakarta	Indonesia	2 222	2 398	2 758	15.01
26	17	Manila	Philippines	2 296	2 462	2 561	4.02
28	18	Yokohama	Japan	2 304	2 365	2 503	5.84
29	19	Xiamen	China	1 295	1 754	2 330	32.84
30	20	J. Nehru Port	India	1 462	1 946	2 269	16.60

Source: Cargo Systems, August 2004; Dyna Liner, May 2004; Ministry of Communication of the People's Republic of China; company websites.

Note: Singapore includes PSA Corp and Jurong port. Shenzhen includes Chiwan, Shekou and Yantian.

Figure 14

Structure of port calls in South-East and East Asia



Source: UNCTAD, based on a concept presented by Shigeru Yoshida in “Structural changes of container route network in East Asia”, at the III International Port Forum, GwangYang, Republic of Korea, April 2004.

influenced by global demand and supply as well as by trade imbalances. The trade surplus of Asia with North America and with Europe is reflected in freight rates that are twice as high for Asian exports as for Asian imports.

C. THE SUPPLY OF MARITIME BUSINESSES IN ASIA

Asian countries have a significant presence in most maritime sectors (figure 15). However, not all countries participate equally in all sectors; rather, different countries specialize in different maritime sectors. The situation in various maritime sectors and the participation of Asian countries and companies will be reviewed below, with a special focus on container shipping.

Liner shipping companies

Sixteen of the world’s top 25 liner shipping companies, and 28 of the top 50, are based in Asia. Table 56 provides a list of the 16 Asian liner shipping companies with the largest operated TEU capacity.

The largest Asian companies in terms of operated container carrying capacity are Evergreen (Taiwan Province of China), APL (Singapore), Hanjin (Republic of Korea), NYK (Japan) and COSCO (China). The largest order books are

those of China Shipping (China), Evergreen, COSCO, K-line (Japan) and MOL (Japan). In terms of fleet on order relative to the existing operated fleet, those with the highest projected growth are China Shipping, COSCO, K-line (Taiwan Province of China) and MOL. China Shipping is the only company among the world’s top 25 whose order book is actually bigger than its existing owned or operated fleet.²⁰

Hyundai (Republic of Korea), Hanjin, OOCL (Hong Kong, China), APL and MOL are the companies with the largest average vessel size of the existing fleet. With regard to vessels on order, the companies with the largest average ship sizes are NYK, Hanjin, OOCL, MOL and Evergreen. IRISL (Islamic Republic of Iran), PIL (Singapore), Wan Hai and China Shipping have the smallest existing vessel sizes, as they specialize in regional and feeder traffic. IRISL and China Shipping are, however, also among the companies with the highest projected growth of average vessel sizes, together with COSCO, NYK and Evergreen.

Together, the top 16 Asian liner shipping companies operate 41 per cent of the existing TEU carrying capacity. The average vessel size of the ships on order is 5,567 TEUs, which is more than twice the existing average vessel size.

Table 54

Containership allocation to Asian countries, May 2004

Country	Fleet assignment		TEU capacity per ship		No. of regular liner services
	TEUs	Vessels	Maximum	Average	
Bahrain	14 088	9	2 672	1 565	9
Bangladesh	22 209	37	1 034	600	20
Brunei Darussalam	7 478	18	802	415	12
Cambodia	8 999	15	1 158	600	16
China	3 678 340	1 188	8 063	3 096	827
Cyprus	64 617	72	3 250	897	44
Georgia	3 000	6	700	500	6
Hong Kong (China)	3 544 505	1 115	8 063	3 179	717
India	435 954	237	6 420	1 839	184
Indonesia	256 692	189	3 842	1 358	175
Iran, Islamic Republic of	84 916	50	3 300	1 698	31
Iraq	886	6	380	148	9
Israel	175 137	99	4 992	1 769	60
Japan	1 860 586	752	6 600	2 474	540
Jordan	46 232	34	3 091	1 360	24
Korea, Republic of	1 967 683	699	6 978	2 815	546
Kuwait	14 878	10	2 672	1 488	13
Lebanon	47 327	62	1 911	763	36
Malaysia	1 773 835	621	8 063	2 856	452
Maldives	6 624	10	1 158	662	7
Myanmar	6 933	15	712	462	10
Oman	213 712	79	6 420	2 705	34
Pakistan	224 614	109	4 038	2 061	82
Philippines	122 806	131	1 923	937	117
Qatar	3 809	11	841	346	4
Saudi Arabia	791 020	280	6 750	2 825	144
Singapore	2 381 624	914	8 063	2 606	656
Sri Lanka	725 181	263	5 774	2 757	167
Syrian Arab Republic	32 589	48	1 911	679	29
Taiwan Province of China	1 959 434	629	8 063	3 115	403
Thailand	362 511	202	6 200	1 795	145
Turkey	221 410	208	4 350	1 064	139
United Arab Emirates	724 792	276	6 750	2 626	177
Viet Nam	85 702	93	1 888	922	95
Yemen	117 821	46	5 762	2 561	35

Source: www.ci-online.co.uk, 30 April 2004.

Note: "Fleet assignment" shows the number of ships and the total TEU capacity of all vessels being deployed on regular liner services that call at the countries' ports.

Table 55

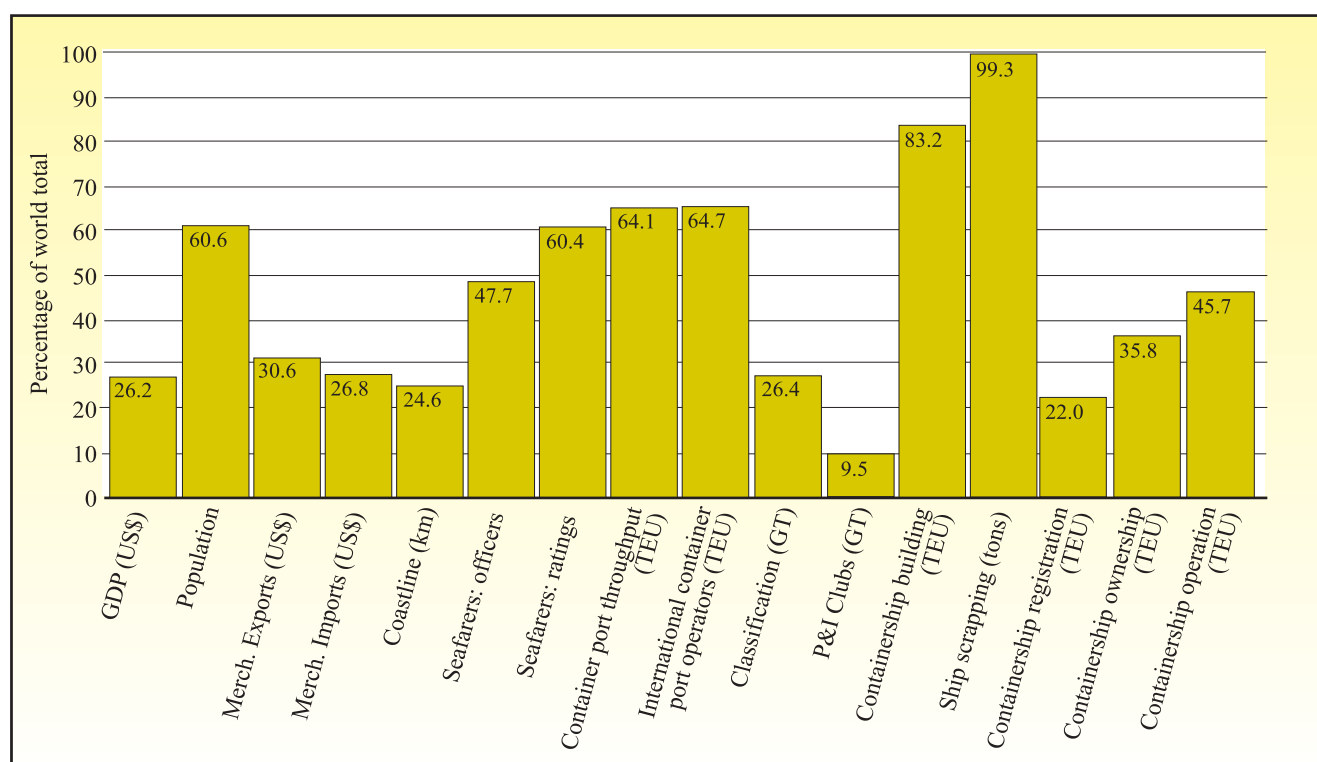
Container vessel fleet deployment on intra-Asian routes, April 2004

Route	Vessels deployed	TEUs deployed	Average vessel size
East Asia – North-East Asia	374	741 879	1 984
Far East – Mid-East	186	632 201	3 399
Far East – Indian subcontinent	233	631 196	2 709
East Asian coastal	274	622 246	2 271
East Asia – South-East Asia	305	616 414	2 021
Indian subcontinent – South-East Asia	145	320 148	2 208
Indian subcontinent – Mid-East	125	291 363	2 331
North East Asia – South-East Asia	177	283 543	1 602
Far East – Red Sea	71	244 854	3 449
South-East Asian coastal	192	236 349	1 231

Source: www.ci-online.co.uk, 30 April 2004.

Figure 15

Maritime profile of Asia
(percentage of world totals)



Source: UNCTAD, based on data provided by a variety of sources. See accompanying text for details. The data are for 2004 or the latest year available. See text for specific sources and years.

Table 56

Asian liner shipping companies

World ranking	Company name	Country/territory	Existing TEU	Existing TEU, % of world total	Existing containerships	Average vessel size of existing ships	TEU on order	TEU on order as % of existing TEU	Containerships on order	Average vessel size of ships on order	Average vessel size on order as % of average vessel size of existing fleet
3	Evergreen	Taiwan Province of China	455 000	5.91	158	2 880	152 000	33	22	6 909	240
6	APL	Singapore	287 000	3.73	87	3 299	29 000	10	6	4 833	147
7	Hanjin	Republic of Korea	287 000	3.73	78	3 679	72 000	25	10	7 200	196
8	NYK	Japan	260 000	3.38	95	2 737	82 000	32	10	8 200	300
9	COSCO	China	232 000	3.01	107	2 168	131 000	56	20	6 550	302
10	China Shipping	China	218 000	2.83	102	2 137	239 000	110	38	6 289	294
11	OOCL	Hong Kong (China)	204 000	2.65	56	3 643	79 000	39	11	7 182	197
12	K-line	Japan	198 000	2.57	66	3 000	107 000	54	19	5 632	188
14	ZIM	Israel	187 000	2.43	85	2 200	28 000	15	6	4 667	212
15	MOL	Japan	181 000	2.35	58	3 121	83 000	46	12	6 917	222
18	Yang Ming	Taiwan Province of China	160 000	2.08	58	2 759	64 000	40	18	3 556	129
20	Hyundai	Republic of Korea	141 000	1.83	37	3 811	34 000	24	5	6 800	178
21	PIL	Singapore	117 000	1.52	91	1 286	26 000	22	12	2 167	169
22	Wan Hai	Taiwan Province of China	97 000	1.26	67	1 448	52 000	54	18	2 889	200
23	UASC	United Arab Emirates	76 000	0.99	34	2 235	-	0	-	n.a.	n.a.
25	IRISL	Iran, Islamic Republic of	53 000	0.69	57	930	19 000	36	8	2 375	255

Source: UNCTAD calculations, based on data provided by Dyna Liners 20/2004, May.

Ownership of containerships

Liner shipping companies tend to charter a large proportion of their vessels from “non-operating” owners, many of which are based in Europe. The proportion of capacity that is owned by the liner shipping company itself tends to be larger in Asia than in Europe. The largest Asian ship owning companies at the beginning of 2004 are Evergreen (Taiwan Province of China), COSCO (China), APL (Singapore), NYK (Japan) and K-Line (Japan).²¹

Nationally flagged vessels

With regard to Asian developing countries (table 57), Indonesia has the largest number of nationally-flagged vessels (1,405 units), followed by Singapore (916), the Philippines (872), the Republic of Korea (810), Hong Kong, China (699) and Cambodia (591). In terms of cargo carrying capacity, the largest nationally-flagged fleets are those of Singapore (34.8 million dwt), followed by Hong Kong, China (34.2), India (10.7), the Republic of Korea (9.6), Iran (8.2) and the Philippines (6.6).

Regarding average vessel sizes in dwt, the largest ships are those of Kuwait (73,516 dwt average vessel size), followed by the Islamic Republic of Iran (53,491), Hong Kong, China (48,946), Jordan (42,122), Singapore (38,033) and Qatar (33,051). Concerning ship age, Qatar has the largest proportion of new vessels, that is vessels between 0 and 4 years of age (26.1 per cent), followed by Hong Kong, China (23.2 per cent), Islamic Republic of Iran (19 per cent), Singapore (13.8 per cent) and Brunei (11.1 per cent). All vessels under the flags of Iraq, Oman and Yemen are 20 years or older.

Containership building

Nine of the top 10 containership builders are from Asia. The five largest companies are in the Republic of Korea (Hyundai H.I., Samsung S.B., Hyundai Samho, Hanjin H.I. and Daewoo S.B.). Other Asian shipbuilders among the top 10 are Ishikawajima-Harima Heavy Industries (Japan), CSBS (Taiwan Province of China), Hyundai Mipo (Republic of Korea) and Mitsubishi H.I. (Japan). Together, all Republic of Korea shipyards today account for 62.3 per cent of TEU on order, and all Asian shipyards together have a market share of 83.2 per cent. Japan is the world’s second largest shipbuilding country, and China the fourth.²²

Classification societies

Ten of the 25 largest classification societies are based in Asia. Together, they are responsible for 26 per cent of the world’s classifications of commercial vessels. The largest Asian society is based in Japan, followed by societies in China, the Republic of Korea, Indonesia, Taiwan Province of China and India.²³

P&I clubs

Most of the major Protection and Indemnity (P&I) clubs are based in the United Kingdom. The largest Asian club is based in Japan.²⁴

Container manufacturing

Approximately 90 per cent of all containers are being built in China. The two leading companies are CIMC and Singamas.²⁵

Ship-to-shore crane manufacturing

At the beginning of 2004, there were around 250 such cranes on order globally. By far the biggest supplier is ZPMC, based in Shanghai, China. The company now has a market share of 55 per cent, up from 32 per cent a year ago. The other three main producers are Europe-based, although production often takes place in China, Malaysia and other Asian countries.²⁶

Container port operators

The market share of global port operators has been growing in recent years mainly owing to concessions of previously State-run facilities, and also through mergers and acquisitions. Half of the top 10 port operating companies are linked to shipping lines. Among these, Evergreen, Cosco and Hanjin are the three largest Asian port-operating companies. Other operators originate from a major container port. Hutchison, the world’s largest port operating company, started in Hong Kong (China), PSA in Singapore and ICTSI in the Philippines.²⁷

Ship scrapping

Almost all global ship scrapping takes place in Asia. India, Bangladesh, China and Pakistan together accounted for 97 per cent of the world’s ship scrapping activity between 1994 and 2002. Other Asian economies with some participation in this sector are Turkey, Viet Nam,

Table 57

Nationally flagged fleet of Asian developing countries, January 2004

Flag State		Ship age					Grand total
		0-4 years	5-9 years	10-14 years	15-19 years	20 years and over	
Bahrain	Number of ships	7%	13%	0%	0%	80%	15
	Dwt	48%	31%	0%	0%	20%	317 248
	Average vessel size, dwt	153 019	49 924			5365	21 150
Brunei	Number of ships	11%	11%	33%	11%	33%	9
	Dwt	8%	16%	47%	4%	26%	3 105
	Average vessel size, dwt	250	500	482	118	264	345
Cambodia	Number of ships	1%	0%	3%	9%	87%	591
	Dwt	0%	0%	2%	3%	95%	2 831 501
	Average vessel size, dwt	2 835	3 000	2 655	1 739	5 191	4 791
Hong Kong, China	Number of ships	23%	28%	17%	10%	22%	699
	Dwt	32%	27%	21%	9%	12%	34 213 042
	Average vessel size, dwt	66 671	46 959	60 825	45 099	25 915	48 946
India	Number of ships	5%	14%	15%	18%	48%	374
	Dwt	9%	11%	19%	27%	35%	10 690 939
	Average vessel size, dwt	50 459	21 154	36 018	44 072	20 557	28 585
Indonesia	Number of ships	1%	3%	6%	5%	85%	1405
	Dwt	2%	2%	4%	10%	82%	4 416 795
	Average vessel size, dwt	7 364	1 948	2 076	5 944	3 052	3 144
Iran, Islamic Republic of	Number of ships	19%	16%	4%	18%	43%	153
	Dwt	49%	26%	0%	10%	15%	8 184 165
	Average vessel size, dwt	139 030	85 885	3 530	28 967	18 210	53 491
Iraq	Number of ships	0%	0%	0%	0%	100%	19
	Dwt	0%	0%	0%	0%	100%	140 727
	Average vessel size, dwt					7 407	7 407
Jordan	Number of ships	0%	0%	0%	33%	67%	9
	Dwt	0%	0%	0%	13%	87%	379 095
	Average vessel size, dwt				16 793	54 786	42 122
Korea, Republic of	Number of ships	2%	8%	14%	24%	52%	810
	Dwt	1%	21%	18%	34%	26%	9 592 313
	Average vessel size, dwt	4 694	29 835	15 492	17 141	5 977	11 842
Kuwait	Number of ships	2%	9%	13%	15%	62%	47
	Dwt	3%	21%	33%	12%	31%	3 455 275
	Average vessel size, dwt	105 857	180 165	189 920	58 554	37 219	73 516
Lebanon	Number of ships	0%	1%	0%	3%	96%	72
	Dwt	0%	0%	0%	13%	87%	238 062
	Average vessel size, dwt		800		15345	2994	3 306
Malaysia	Number of ships	3%	20%	15%	10%	53%	457
	Dwt	9%	42%	19%	9%	21%	6 528 753
	Average vessel size, dwt	41 269	30 798	18 061	12 714	5 745	14 286
Maldives	Number of ships	0%	0%	7%	4%	89%	45
	Dwt	0%	0%	1%	2%	97%	80 455
	Average vessel size, dwt			277	966	1 942	1 788

Table 57 (continued)

Flag State		Ship age					Grand total
		0–4 years	5–9 years	10–14 years	15–19 years	20 years and over	
Myanmar	Number of ships	4%	20%	0%	10%	66%	50
	Dwt	23%	39%	0%	23%	15%	637 002
	Average vessel size, dwt	72 917	24 897		29 497	2 870	12 740
Oman	Number of ships	0%	0%	0%	0%	100%	7
	Dwt	0%	0%	0%	0%	100%	1 017
	Average vessel size, dwt					145	145
Pakistan	Number of ships	0%	0%	12%	18%	71%	17
	Dwt	0%	0%	0%	38%	61%	485 195
	Average vessel size, dwt			542	62 247	24 781	28 541
Philippines	Number of ships	4%	9%	8%	12%	67%	872
	Dwt	30%	28%	10%	9%	23%	6 598 746
	Average vessel size, dwt	51 909	23 702	10 277	5 303	2 578	7 567
Qatar	Number of ships	26%	17%	9%	4%	43%	23
	Dwt	18%	34%	18%	12%	18%	760173
	Average vessel size, dwt	22 255	64 788	69 058	91 717	13 766	33051
Saudi Arabia	Number of ships	0%	6%	0%	9%	85%	65
	Dwt	0%	11%	0%	3%	86%	1 722 728
	Average vessel size, dwt		48 560		8 257	26 890	26504
Singapore	Number of ships	14%	25%	18%	12%	31%	916
	Dwt	21%	27%	27%	9%	16%	34 838 480
	Average vessel size, dwt	5 7191	40 316	58 076	28 369	19 717	38 033
Sri Lanka	Number of ships	0%	0%	0%	17%	83%	23
	Dwt	0%	0%	0%	9%	91%	175 362
	Average vessel size, dwt				3 771	8 436	7 624
Syrian Arab Republic	Number of ships	1%	1%	0%	3%	95%	166
	Dwt	2%	1%	0%	9%	88%	687 546
	Average vessel size, dwt	6 175	8 650		12 616	3 819	4 142
Thailand	Number of ships	6%	5%	3%	13%	74%	421
	Dwt	1%	9%	5%	23%	61%	3 271 847
	Average vessel size, dwt	1 653	14 065	14 018	14 291	6 467	7 772
United Arab Emirates	Number of ships	2%	7%	6%	7%	78%	101
	Dwt	12%	12%	4%	2%	70%	868 837
	Average vessel size, dwt	53 266	14 898	5 170	2 506	7 715	8 602
Yemen	Number of ships	0%	0%	0%	0%	100%	9
	Dwt	0%	0%	0%	0%	100%	114 771
	Average vessel size, dwt					12 752	12 752

Source: Lloyd's Register – Fairplay. Includes all types of commercial vessels of 100 grt and above.

Philippines and Taiwan Province of China. In 2003, ship scrapping in China doubled, partly as a result of a surge in national demand for steel. At the beginning of 2004, prices for vessels for scrap have increased substantially as a consequence of overall soaring vessel prices (see chapter 4), and Bangladesh and China have both purchased more large tankers for their scrap yards than India.²⁸

Crewing

Sixty per cent of the world's ratings are from Asia, the largest providers being the Philippines, followed by Indonesia, Turkey, China and India. Regarding officers, the Philippines and Indonesia are again the most important providers, followed by Japan, Indonesia, Turkey and India. Globally, there are twice as many ratings working at sea than officers. Asian countries on average supply 2.5 times as many ratings as officers; only the Republic of Korea, Japan and Taiwan Province of China supply more officers than ratings.²⁹

Maritime country profiles

As shown above, different maritime businesses are concentrating their activities in selected Asian countries. This development leads to a situation where some Asian countries are specializing in certain sectors, and other countries in other sectors. Table 58 shows Asian countries' participation in different maritime sectors, as a percentage of the world total.

A high percentage of the world's seafarers are nationals of the Philippines, Indonesia and Turkey. For some smaller countries, such as Georgia and Sri Lanka, the supply of seafaring personnel is also relatively important that is, these countries have a greater participation in the supply of seafarers than in any other maritime business. Lebanon and the Syrian Arab Republic have a relatively strong participation in the supply of officers.

China is the country with by far the most container port throughput in Asia. Singapore and Hong Kong (China) have their largest maritime participation through their respective international port operating companies — Port of Singapore Authority and Hutchison Port Holdings — which not only operate in their traditional home port, but have also expanded and invested in concessions and port privatizations abroad.

Japan has its highest market share with its classification society Nippon Kaiji Kyokai. The Republic of Korea has by far its highest market share in containership building.

India, Bangladesh and Pakistan have their highest market shares in ship scrapping.

Except for Singapore, most Asian countries have a large proportion of their fleet registered under foreign flags. A few smaller countries, notably Cambodia, are open registries.

Taiwan Province of China, mostly through the Evergreen group, has its highest market share in containership operation. Just like other major operators from China, the Republic of Korea and Japan, these liner shipping companies tend to operate fleets that are only partly owned by them and a large proportion of the vessels are chartered in. Singapore and Hong Kong (China), on the other hand, have a higher market share in container ship owning than in container ship operation.

D. FOCUS ON SELECTED CASES

Transport developments in China

In several of the previous chapters, developments in China were mentioned as particularly noteworthy with regard to the supply of, and demand for, shipping services. On the supply side, Chinese shipping companies (table 56) are among the fastest growing, and the country is host to the most important container and crane manufacturers. On the demand side, Chinese containerized exports are growing at almost 18 per cent annually and today make up almost one quarter of the world total (table 51). As a result of these developments, Chinese ports too are among the fastest growing in the world, with annual increases of port throughput of between approximately 18 and 153 per cent in major ports (table 59).

In terms of volume, 70.5 per cent of Chinese port throughput is cabotage traffic, and 37.7 per cent takes place in inland ports (figure 16). In 2003, port throughput of foreign trade grew by 23.7 per cent, and cabotage port throughput by 15.5 per cent. Year-on-year growth in Shanghai for the first quarter of 2004 has been reported to be 26.5 per cent.

China is among the few Asian countries that participate in almost all maritime sub-sectors, as depicted in table 58. To put this participation into perspective, figure 17 shows a maritime profile of China, including the country's participation in global production, trade and containerized exports.

Table 58

Participation of Asian economies in different maritime businesses
(percentage of world total)

Country or economy	Seafarers: officers	Seafarers: rating	Container port throughput (TEU)	International container port operators (TEU)	Classification (GT)	Containership building (TEU)	Ship scrapping (tons)	Containership registration (TEU)	Containership ownership (TEU)	Containership operation (TEU)
Azerbaijan								0.01	0.01	0.01
Bahrain			0.06					0.10		
Bangladesh	1.06	0.61	0.20				23.47	0.15	0.17	0.09
Brunei Darussalam			0.03							
Cambodia			0.06					0.20	0.04	0.01
China	8.47	5.81	20.92	2.90	2.30	6.14	13.75	2.85	3.75	5.99
Georgia	0.34	0.50						0.10	0.00	0.00
Hong Kong (China)	0.31	0.08	7.19	24.46				2.79	4.31	3.39
India	2.90	5.22	1.22		0.10		48.91	0.20	0.29	0.22
Indonesia	3.84	8.26	1.71		0.15			0.40	0.39	0.39
Iran, Islamic Republic of	0.66	0.76	0.30			0.37		0.48	0.49	0.59
Israel	0.13	0.15	0.55					0.74	1.24	1.82
Japan	4.66	1.48	5.07	5.18	18.93	10.08	0.10	0.43	5.81	9.47
Jordan	0.09	0.01	0.10					0.03	0.03	0.01
Kazakhstan								0.01	0.01	
Korea, Democratic People's Republic of	0.28	0.31	n.a.					0.09	0.02	0.01
Korea, Republic of	2.36	0.85	4.33	4.13	1.77	62.31		0.73	2.22	6.35
Kuwait	0.02		0.07					0.18	0.74	0.88
Lao People's Democratic Republic	0.00	0.00								
Lebanon	0.28	0.17	0.11						0.03	0.07
Malaysia	1.05	1.03	2.83					0.83	0.66	0.76
Maldives	0.02	0.24	0.01					0.01	0.01	0.00
Mongolia								0.02		
Myanmar	1.49	2.79	0.02					0.04	0.04	0.05
Oman	0.01	0.01	0.53							
Pakistan	0.70	1.13	0.36				10.68	0.07	0.08	0.09
Philippines	12.39	21.86	1.23	1.23			0.14	0.26	0.27	0.30
Qatar			n.a.					0.18	0.02	0.03
Saudi Arabia			0.73					0.27	0.14	0.15
Singapore	0.16	0.07	6.31	18.79		0.44		4.36	5.13	4.61
Sri Lanka	0.15	1.21	0.66					0.04	0.03	0.01

Table 58 (continued)

Country or economy	Seafarers: officers	Seafarers: rating	Container port throughput (TEU)	International container port operators (TEU)	Classification (GT)	Containership building (TEU)	Ship scrapping (tons)	Containership registration (TEU)	Containership ownership (TEU)	Containership operation (TEU)
Syrian Arab Republic	0.29	0.20	0.10					0.10	0.11	0.03
Taiwan Province of China	1.07	0.33	4.36	4.74	0.13	3.90	0.09	0.67	5.35	7.52
Turkey	3.54	5.85	0.67		0.02		1.10	0.67	0.89	0.80
Turkmenistan								0.00	0.00	0.00
United Arab Emirates			2.21	3.27				0.19	0.20	0.10
Viet Nam	0.62	0.50	0.53		0.00		1.08	0.12	0.13	0.10
Yemen	0.01	0.00	0.15					0.00	0.00	0.00

Source: UNCTAD, based on data provided by a variety of sources. See accompanying text for details. The figures provided are estimations based on data for 2004 or the latest year available. Each economy's estimated maximum participation is highlighted in bold.

Table 59

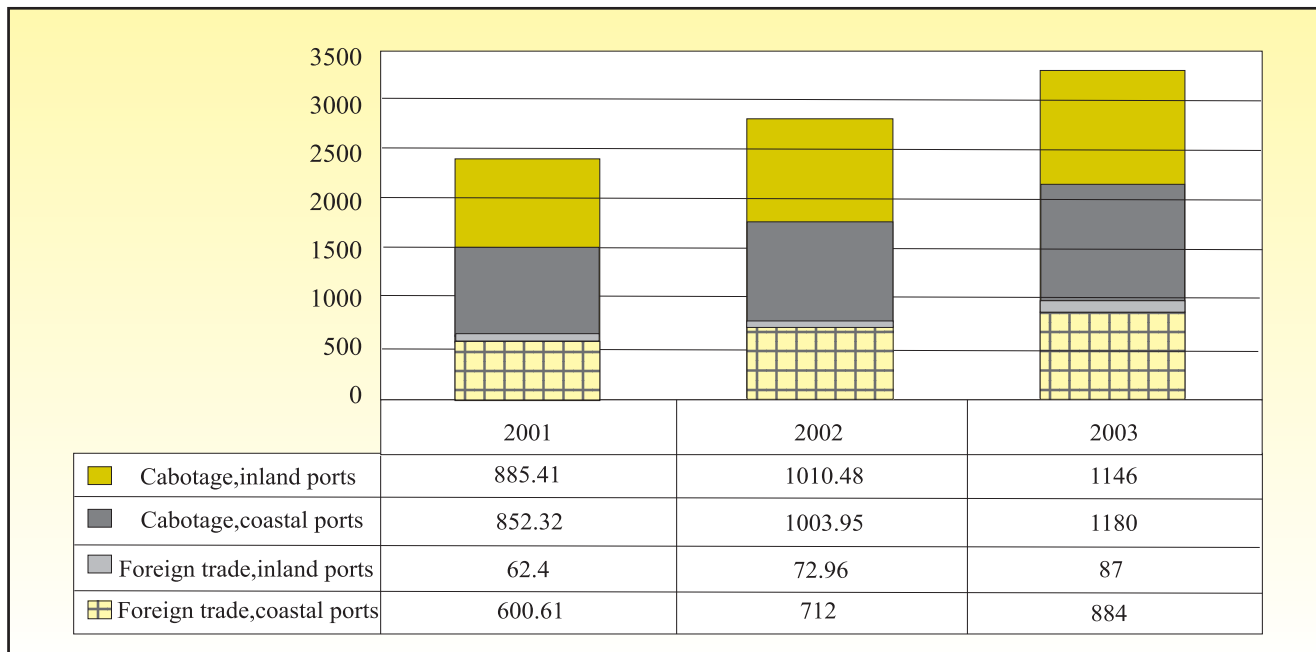
Top 10 container ports of mainland China, 2002 and 2003
(TEU)

Rank	Port	2002	2003	Growth
1	Shanghai	8 611 890	11 370 000	31.00%
2	Shenzhen	7 613 754	10 650 000	39.30%
3	Qingdao	3 410 000	4 230 000	24.30%
4	Tianjin	2 408 100	3 020 000	25.20%
5	Ningbo	1 859 000	2 772 200	48.60%
6	Guangzhou	2 172 800	2 760 000	27.10%
7	Xiamen	1 754 370	2 330 000	32.90%
8	Dalian	1 367 192	1 670 590	23.50%
9	Zhongshan	642 400	756 100	17.70%
10	Jiangmen	468 000	744 200	153.30%

Source: Ministry of Communication of the People's Republic of China, and Cargo Systems, August 2004.

Figure 16

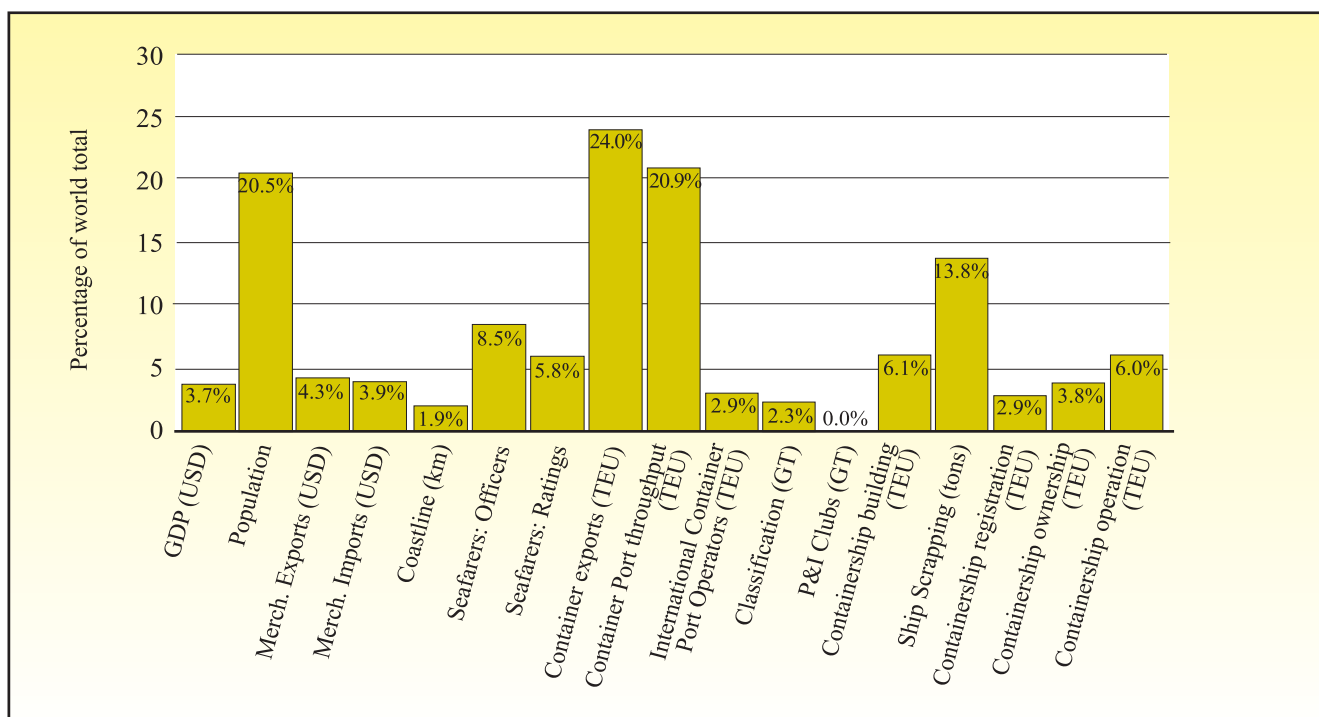
Chinese port throughput, 2001–2003
(millions of tons)



Source: Ministry of Communication of the People’s Republic of China, 2003 and 2004.

Figure 17

Maritime profile of China
(percentages of world totals)



Source: UNCTAD estimations based on data for 2004 or latest available year.

In spite of its important role in absolute terms, when compared with its relative weight in the world population, China is actually maintaining a relatively low market share in many maritime sectors. It is very strong in containerized exports, mostly owing to its trade with North America. It also has strong participation in containerized port throughput, albeit not quite as strong as might be expected given its trade volumes. The reason for this lies in still low transshipment volumes, which is where neighbouring economies such as those of Singapore, Hong Kong (China) and also Sri Lanka have a far higher market share.

China also has a remarkable market share in ship scrapping, which has grown further in recent months due to the country's demand for steel.

Concerning containership registration, ownership and operation, China has a relatively typical industry structure for a country that hosts important liner shipping companies. These companies are likely to own only between half and two thirds of their vessels and the remainder of the operated capacity is chartered in. Owned and chartered tonnage is often registered in foreign open registry countries.

As regards national transport in China, figure 18 depicts its modal split among waterway, road, rail and air transport.

Between 1980 and 2003, waterway transport increased its share from 45.6 per cent to 54.9 per cent of ton-km of national transport in China, reaching 2,972 billion ton-km in 2003. During these 23 years, waterway ton-km have increased by an average annual rate of 7.8 per cent.

Rail was still the most important mode of transport in the 1980s. It has, however, lost market share since then and in 2003 accounted for only 31.5 per cent of ton-km. Rail transport has grown by an average of 4.7 per cent annually since 1980, albeit with stronger growth since 2000, thus recovering some of its lost market share. In fact, with an increase of 9.3 per cent in 2003, rail registered the highest growth rate of all main modes of transport in that year.

In relative terms, airborne cargo has recorded the highest growth, with almost 19 per cent annually since 1980, but still accounts for only 0.1 per cent of overall ton-km in China. In 2003, its output grew by 5.5 per cent.

Road transport has grown by 14.5 per cent annually since 1980, accounting for 13.6 per cent of all ton-km in 2003. In 2003, it grew by 4.7 per cent.

Combining all modes of transport, cargo turnover in China has grown at an average of 7 per cent annually since 1980, reaching 5,234 billion ton-km in 2003.

Transport developments in South East Asia: Cambodia and the Lao People's Democratic Republic

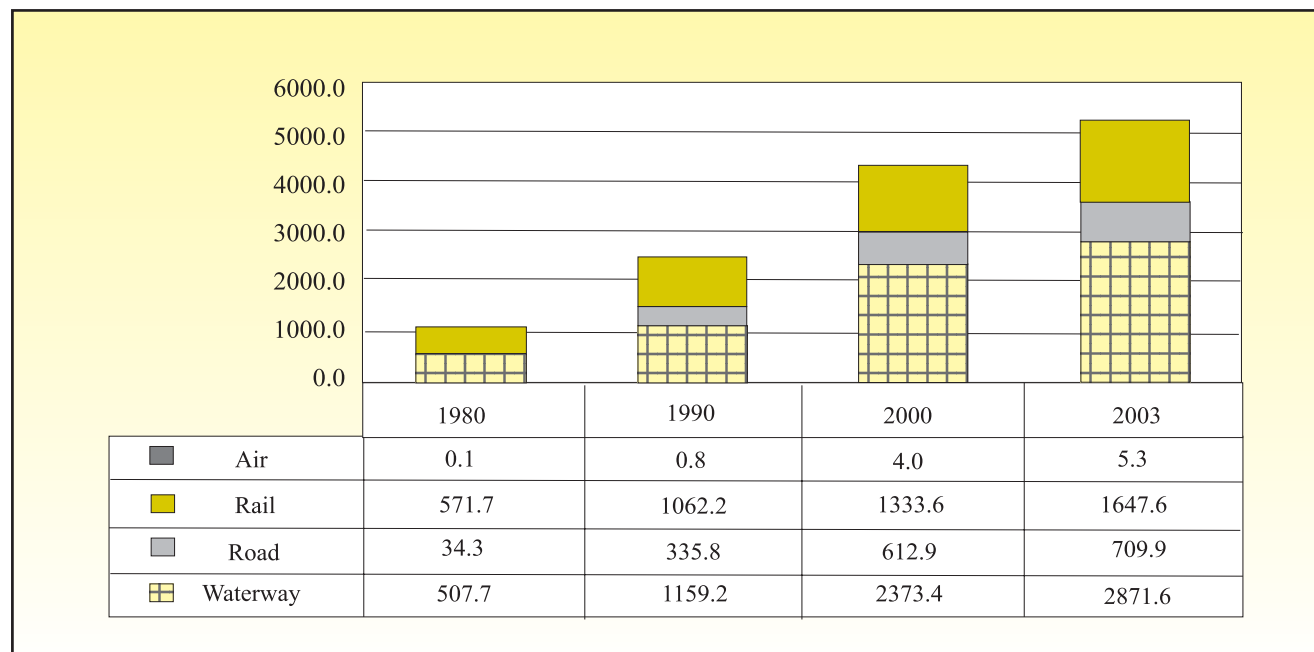
Cambodia and the Lao People's Democratic Republic are among the LDCs in South-East Asia. Whereas Cambodia has been able to benefit from recent improvements in its port infrastructure, the Lao People's Democratic Republic has to overcome additional obstacles owing to its landlocked situation.

Cambodia's trade structure has changed over the last years from that of a country that mainly exported commodities and imported finished goods, to that of a country that also imports unfinished goods so as to participate in global production processes. This participation would not have been possible without improvements in its transport infrastructure and services, which allowed Cambodia to take advantage of the Multifibre Arrangement. Exports of garments from Cambodia, like the required imports of components, are mostly transported as maritime containerized cargo. During the five years to 2003, containerized imports (in tons) passing through Cambodian ports grew by 66 per cent and containerized exports by 81 per cent. At the same time, the export of timber has practically ceased, whereas the import of cement through national ports has increased by 160 per cent. Overall, during the five years to 2002, Cambodia's GDP (in US dollars) grew by 24 per cent, while its foreign trade increased by 108 per cent. In 2003, exports and imports grew by 12.5 per cent and 11.9 per cent respectively.

Foreign and national investors in the Cambodian garments industry had previously exerted strong pressure on ports to improve efficiency and reduce bureaucracy. Consequently, administrative procedures in the two main ports of Phnom Penh and Sihanoukville have now been streamlined. However, obstacles appear to persist in the port administration, as well as in customs and other public authorities, as is claimed by importers and exporters. For transit cargo that enters Cambodia via Vietnamese ports, even if transported via waterway transport on the river Mekong, the border crossing continues to involve lengthy

Figure 18

National transport in China
(billion ton-km)



Source: UNCTAD, based on data from Ministry of Communications of the People's Republic of China: "The 2002 Report on China's shipping development" and 2003 updates.

Note: Includes inland and coastal transport of imports and exports.

controls. These controls effectively reduce the competition between Cambodian and Vietnamese ports, leaving most importers and exporters without real choices between alternative ports. For continued development of the garment industry or other industries in Cambodia, port and customs procedures as well as border controls will need to be further streamlined.

Until the beginning of the 1990s, Cambodia had hardly any containerized trade, mostly because of insecure inland transport. Most imports and exports for the capital city of Phnom Penh reached its river port at the Mekong River on barges, that is via waterway transport. Cargo had to be transhipped in terminals near Ho Chi Minh City, as the Mekong river transits Viet Nam. Improved security and a new 214-km toll road between the country's only deep sea port of Sihanoukville and Phnom Penh have in recent years led to a surge of international cargo at Sihanoukville, originating in or bound for Phnom Penh. Container throughput in Sihanoukville has almost doubled during the last five years to reach 181,286 TEUs

in 2003. At the same time, Phnom Penh port has benefited from improvements concerning transit agreements with Viet Nam as well as investments in container handling equipment in the port itself, leading to an increase in container handling from practically zero to around 1,000 TEUs per month in 2004. This also includes the transshipment of containers that arrive on barges from smaller river ports located further upstream. However, many rural parts of the country are not connected by adequate roads or waterways to any port at all, and containerization has only just started to reach a few economic centres.

The Lao People's Democratic Republic is the only landlocked country in South-East Asia, sharing borders with Thailand, Viet Nam, Cambodia and China. The country has limited basic infrastructure and no railway network. The major modes of transportation are land and inland waterway. The Lao People's Democratic Republic relies mainly on its neighbouring countries for exports and imports. In 2002, almost half of their export

volumes of \$443 million were destined for neighbouring countries, Viet Nam being the main export destination with a share of 26 per cent. Regarding imports, the reliance on neighbouring countries was even greater. Out of a total of \$763 million, more than 80 per cent of imports by the Lao People's Democratic Republic came from neighbouring countries, with Thailand being the major import origin with a share of 58 per cent.³⁰

Ninety-five per cent of the country's transit trade moves through ports in Thailand and the remainder through ports in Viet Nam. Approximately 670 kilometres away from Vientiane (Lao People's Democratic Republic), Bangkok (Thailand) port is considered to be the most convenient transit choice. For exports, the total cost and time to move shipments from Vientiane to Bangkok port by road ranges from 17 to 31 hours with costs of \$700 per TEU. Border-crossing time and costs account for approximately 30 per cent and 20 per cent, respectively, towards the total figures. For imports, the total cost and time were estimated to be much higher. Border crossing for imports from Thailand to the Lao People's Democratic Republic can take more than a month for customs clearance. The cost of land transportation from Bangkok port to Vientiane, at around \$1,200–1,500, is almost double that of exports, as the trucking freight rate usually needs to cover empty backhauling. An alternative route would be via ports in Viet Nam. However, this remains unpopular owing to inadequate infrastructure, administrative barriers and limited port traffic. The average time required from Vientiane to Danang (Viet Nam) port is about 3 days, three times the average of the Bangkok port corridor. The cost is estimated at \$1,650 per TEU, which is more than double the cost to Bangkok port. At the same time, imports through this port have been subject to unpredictable delays in the port itself.³¹

Efforts by the Lao People's Democratic Republic to improve transit transport have been made through cooperation at the bilateral level, such as bilateral transit agreements with Thailand and Viet Nam, as well as at the multilateral level, for example through ASEAN and the Greater Mekong Subregion transit transport agreements. However, there are still important obstacles to overcome.

Landlocked countries in Central Asia

Central Asian landlocked countries are particularly strongly affected by high transport costs and lengthy transit times as well as by low frequencies and reliability of services.

Border crossing costs between Kazakhstan and the Russian Federation are estimated at \$200 and between Uzbekistan and Turkmenistan at \$650 (figure 19). Border crossing between Uzbekistan and Turkmenistan is estimated to last an average of 280 hours.³² Uzbekistan is the only country in the world that is separated from any seaport by at least two international borders.

In many cases, containers that arrive at a transit country's seaport with final destination in a landlocked country are unstuffed and stuffed by the transit country's Customs; this is perceived as a non-tariff trade barrier. Such impediments, together with long and costly Customs procedures and other inspections in the transit country and in the landlocked country itself, amount to between 10 and 15 per cent of the goods' value for road transport and 2 to 10 per cent for rail transport.³³

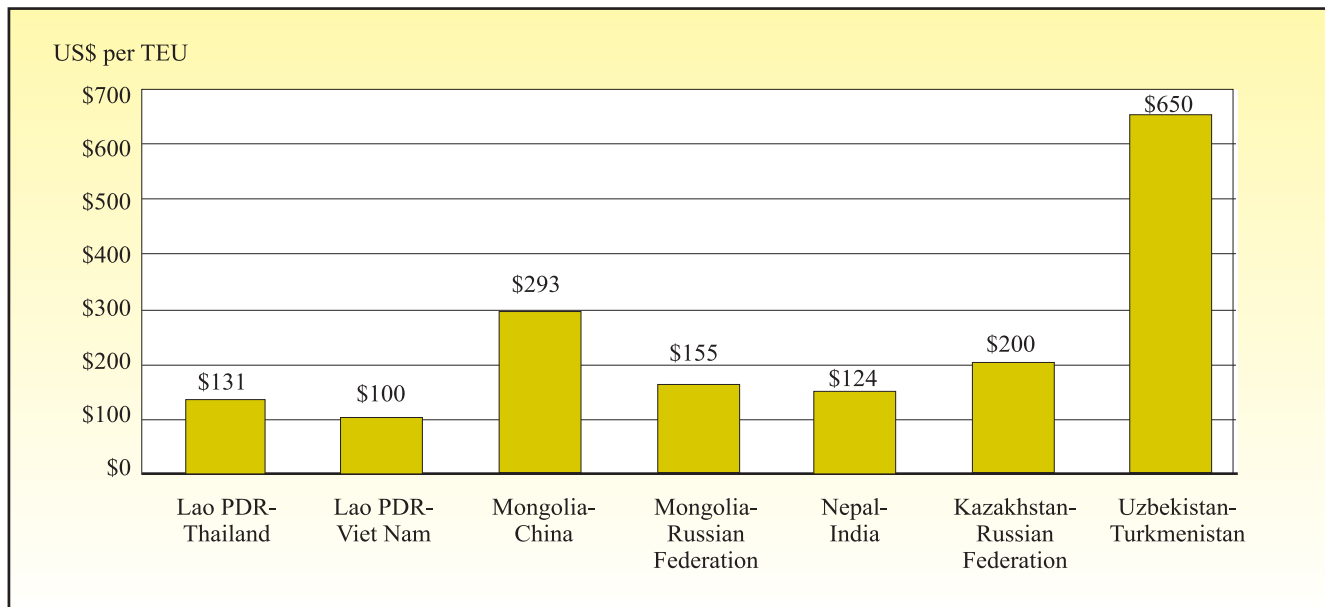
For the case of Almaty in landlocked Kazakhstan, a comparison of four corridors shows that the costs per TEU per km vary between \$0.26 for a rail connection to Moscow and \$1.90 for a connection by truck to Urumqi (China).³⁴ On average, rail costs are one third of those of road transport. In absolute terms, among the four corridors, road transport from Almaty to Baku is the most expensive at \$5,300 and transport by rail on the same corridor the one that takes the longest — 18 days.

There is a lack of coordination between countries in the region, and suggested reforms include a regional approach to trade and transport policies as well as Customs procedures. Countries should work towards common and transparent transit fees and also the implementation of international freight handling standards such as TIR and ASYCUDA.³⁵

With regard to Afghanistan, this country is important as a potential transit country for other members of the Economic Cooperation Organization, and it itself also depends heavily on transit through neighbouring countries for its own trade. Concerning transit, road links are still sporadic, maps are mostly missing, and multiple controls are continuing. Spare parts and repair shops for trucks are practically non-existent. The country will need to create an institutional and regulatory framework, in harmony with international conventions and protocols on transit trade and transport.

Figure 19

Comparison of border crossing costs
(US\$ per TEU)



Source: UNESCAP, "Transit transport issues in landlocked and transit developing countries", New York, 2003.