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I. NATIONAL SHIPPING POLICIES

A. PUBLIC SECTOR REFORM

As a result of the public sector reform in 2002, there have been several changes to Thailand's former Ministry of Transport and Communications. All work and activities relating to the communications sector have been transferred to the Ministry of Communications and Information Technology (ICT), while those relating to transport sector still remain under the new Ministry of Transport. The Harbour Department and part of the Office of Maritime Promotion Commission (OMPC) have been merged to form a new Marine Department. Another part of OMPC has been merged with the Transport Policy and Planning Bureau and the Road Traffic Management Office to form the Office of Transport Policy and Planning (OTP). Hence, there are three agencies responsible for the maritime transport sector under the Ministry of Transport, i.e. OTP (responsible for overall maritime policy), Marine Department (responsible for infrastructure, operational and promotional aspects) and the Port Authority of Thailand (PAT) (responsible for Bangkok and Laem Chabang Ports as well as selected ports).

Under the lead of the re-elected Prime Minister Thaksin Shinawatra, a new public sector reform is being planned and is expected to be effective later this year with possible structural changes to the Ministry of Transport and its functional agencies including OTP and Marine Department.

B. MARITIME ADMINISTRATION

Bureaux Maritime Promotion
Bureau Marine Safety & Channel Development
Engineering Merchant Marine
Training Centre

Divisions

Technical & Planning Ship Registry Ship Survey Finance Administration Regional Offices

Figure 1: Thailand: Organisation of Marine Department

Bureaus generally are bigger than Divisions, both in staff number but more particularly in status. However, the Maritime Promotion Bureau is much smaller than the other bureaus and thus tends to get sidelined by the others, who have operational imperatives. Their agendas get a higher priority.

The Public Service Reform has split the MPB from the other divisions and appears to have caused a hiatus in many activities. For instance, several requests for statistics were met with the response either that they were no longer collected (e.g., port performance), or that they were desirable but no-one is collecting them yet.

C. MODAL SHARE AND DEPARTMENTAL PRIORITIES

The apparent low priority being placed on maritime matters is put into context when the modal share of overall transport activity is considered.

Table 1 Thailand: Inland Transport Mode Share, 2002

Mode	Ranking	Share %
Land - road	1	85.99%
Water (inland)		4.83%
Water (coastal)		4.74%
Water - total	2	10.17%
Pipeline	3	2.17%
Rail	4	1.66%
Air	5	0.01%

Source: Marine Department, personal communication

However, Table 2 the modal share of international cargo movement paints a different picture.

Table 2: Thailand: Overseas Trade Mode Share, 2002

Mode	Ranking	Share %
Sea	1	90.61%
Land – road	2	4.52%
Pipeline	3	3.87%
Rail	4	0.81%
Air	5	0.18%

Source: Marine Department, personal communication

D. PARTICIPATION IN INTERNATIONAL TRADES

Government contacts indicated that only 10.86% of Thailand's international trade was carried in Thai vessels in 2002.

E. SHIP REGISTRATION

To be eligible for registration as a Thai vessel trading with foreign countries, a ship must be either:

- Owned by natural persons¹; or
- Owned by a Thai company with a majority of Thai directors and at least 51% of shares held by Thai nationals. No restrictions are applied on the age, size or country of build of the vessel.

Thailand recognizes two classes of vessel: First, vessels employed in foreign trading (which cannot be employed on coastal trades). Such vessels must have at least 51% of shares owned by Thai nationals. Second: vessels employed in the coastal trades. A vessel

¹ A natural person is defined as a person of Thai nationality.

employed in the coastal trades must either be controlled by Thai nationals or by a Thai company with a majority of Thai directors and at least 70% of shares held by Thai nationals.

F. REGULATION OF COMPETITION IN SHIPPING

Maritime transport of goods and passengers to/from Thailand is open to all service providers regardless of their country of origin. Ships of all nationalities may call at Thai ports without discrimination. Nor are foreign vessels discriminated against when using the country's ports.

The Thai Government has not pursued an active anti-trust policy in the maritime sector. We note that significant changes have recently been made to competition legislation in Thailand. In 1999, Thailand enacted the Prices of Goods and Services Act B.E. 2542 (1999) and the Trade Competition Act B.E. 2542 (1999) with a view to ensuring free and fair competition in trade in goods and services2. Section 27 of the Business Competition Act defines the types of anti-competitive conduct that are prohibited. The section states that a business operator is prohibited from entering into an agreement with another business operator with a view to conducting an act which creates monopoly, reduces competition or restricts competition in the market for any goods or services in any of 10 defined ways.

The activities of conferences, consortia and stabilisation agreements, especially with respect to joint pricing and monopolisation, would appear to come under the aegis of the Act. However, under s. 35(2) of the Act, enterprises must be declared 'controlled businesses' before action can be taken. The Maritime Sector has not been declared a controlled business.

G. CABOTAGE

Vessels Act 1938 reserves coastal trade for Thai flagged vessels. In October 1985, the Vessels Act was amended to allow foreigners to own up to 49% of Thai vessels employed in international trades (note that foreigners are only allowed to own 30% of Thai vessels employed in coastal trades).

If no suitable Thai vessel is available, owners may seek permission to employ a foreign flag vessel. The Ministry will advertise for suitable ships with the proviso that, if no suitable ship found, a foreign vessel may be employed. There has been no other relaxation of restrictions on employment of foreign vessels.

Provided a vessel complies with the requirement for domestic services, it can extend its voyage to international destinations without any change in status other than advice to the Customs. Hence a vessel proceeding form Bangkok to Phuket can accept a change of destination to Vietnam or Cambodia without problems. Thus there is no real differentiation between a domestic and international vessel provided minimum manning levels are complied with.

H. CARGO RESERVATION: PREFERENCE FOR GOVERNMENT CARGOES

Thailand has historically practiced cargo reservation. The Mercantile Marine Promotion Act (1978), requiring government-generated cargo to be carried by national flag vessels, provided for waivers to be granted when Thai vessels were unavailable. Similarly, Ministerial Regulation No. 2527 (July 1984) required private firms undertaking business on behalf of government agencies or state enterprises to carry imports in Thai vessels where possible. Thailand concluded bilateral shipping agreements, including provisions for cargo sharing, with China and Vietnam in 1993.

² Office of the Maritime Promotion Commission, personal communication, Nov 2000.

³ OECD, Maritime Transport, 1994.

The US Maritime Administration noted (1993) that 'to date only government cargoes imported by government agencies and government contractors on specific routes must be carried by Thai vessels⁴. Thailand removed the cargo sharing provisions from its bilateral agreements with China (in 1995) and Vietnam (in 1999), with the result that Thailand no longer has any bilateral agreements restricting access to cargo⁵. In this context, we note that the Final Report of the ASEAN Maritime Transport Development Study argues that 'there are no restrictions on access to cargoes to and from Thailand, except only the transport of goods from certain countries to Thailand which is required to be serviced by Thai flag vessels if such goods are purchased by government agencies or public enterprises.'

Government cargoes continued to be reserved for Thai ships operating on 7 routes: Thailand-Japan, Thailand-South Korea; Thailand-Taiwan, Thailand-Hong Kong, Thailand-Singapore, Thailand-Eastern Europe, Thailand-United States. These regulations are apparently still in force, but are said to apply to less than 100,000 tonnes of cargo per year.

I. SUBSIDIES, GRANTS AND TAX INCENTIVES

Thailand has a clearly articulated policy of fostering the development of its national fleet. The Maritime Law 1992 gave Thai nationals a tax exemption on the purchase of vessels and reduced import taxes on the purchase of vessels from 30% to 1%6. In 1996, a package of promotional measures to promote the growth of the Thai Maritime Industry was introduced. This included a Maritime Development Fund, with initial funding of 4000 million Baht (approximately US\$160 million at the prevailing exchange rate), and 'Packing Credits' providing exporters using Thai vessels with funds for the purchase of promissory notes.

The policies currently in place aimed at promoting the use of Thai registered vessels include:

1. Financial Support

'Packing credits' are available to exporters using Thai vessels, the effect of which is to increase the volume of credit available to exporters to purchase promissory notes. 'Packing credits' still exist, but were considered by interviewees to be relatively unimportant ways of promoting the Thai fleet. In practice, exporters can obtain credit to finance exports relatively easily. True, if they use Thai ships they can get 10% additional credit, but this is viewed as relatively insignificant.

2. Shipowners Fund

The Bank of Thailand (BOT) provides financial assistance through the Industrial Finance Corporation of Thailand (IFCT) and the Export-Import Bank of Thailand (EXIM) by way of promissory notes issued by IFCT or EXIM which are guaranteed by the Ministry of Finance. Of the total credit line of 8,000 million Baht, 4,000 million Baht is provided by BOT and 4,000 million Baht jointly by IFCT and EXIM.

The credit is provided over a five year term, recently extended to 8 years. No further funds have been provided, although there is talk of a 'revolving fund'. Final decisions over the creation of a revolving fund have yet to be taken.

Interviewees were critical of this funding. Observing that the government made TB4 billion available for short term finance to purchase new or larger replacement ships, they noted that this sum is sufficient to finance only two to three ships. The funding has largely been spent on bulk carriers, with most smaller operators forced to list to raise finance for ships.

⁴ US Maritime Administration, Maritime Subsidies, September 1993, p.154.

⁵ Meyrick & Co., APEC Stage 2 Report.

⁶ OECD, Maritime Transport, 1992.

Exacerbating this situation, they feel that commercial banks do not know the shipping business and long term finance is difficult to find in the commercial sector. Even if funds are obtained when interest rates are low as they are now, any increase in rate can cause the ship owner problems.

3. Tax Incentives

Under the Board of Investment Act, shipowners are granted exemption from import duties and corporate income tax. This assistance is provided on a case-by-case basis. To obtain assistance, shipowners have to set up a new 'one ship company' but interviewees reported that few companies qualify for the aid. The privilege is extended for a maximum of 8 years. Measures include:

- Exemption of import duty for vessels over 1,000grt. Still in force.
- Reduction of withholding tax on charter hire payments made by owners of Thai ships used for international trade. Witholding tax reduced from 15% to 1%.
- Exemption from corporate income tax on income derived from the sale of ships used for international freight transport, providing income is used within one year to purchase replacement tonnage that is larger than the vessel sold.
- Exemption from income tax on income paid to Thai or foreign seamen working aboard Thai flagged ships. Still applies.

J. LEGAL LIABILITIES

It was noted that many ship owners float small companies to own individual vessels. This is for liability reasons. In 1991 the maximum liability per package regulation for Thai flagged vessels was dropped. As a result ship owners can be liable for full value. The Thai regulations are somewhere between Hague and Hamburg rules, with complexities familiar only to Thai lawyers. This has been a big driver in companies such as Jutha and Precious placing their vessels on time charters to reduce their liability under Thai law.

K. MANNING OF THAI VESSELS

The minimum proportion of Thai national crews on Thai registered vessels engaged in international shipping was reduced in 1997 from 70% to 50% of total. Dispensation is available to owners unable to recruit sufficient Thai crew. Owners can request Ministry permission to reduce Thai nationals to 10% of total crew, although it was reported that this dispensation is not very commonly applied. Shipowners complained that Thai seamen can lack English language skills.

Domestic vessels employ 100% Thai crews.

1. Regulatory Issues

Thai customs require containers to have in-bound and out-bound clearance. Industry contacts saw this requirement as over-kill, contrasting with the simple procedures in Singapore. Customs regulations in Thailand date back to the break-bulk/conventional vessel era, and the law relating to customs is old and difficult to change. The reform process is bringing only slow change

L. MULTI-MODAL POLICY

Interviewees noted the current Thai Government focus on logistics/multimodal movements. Government has reacted to a study suggesting that logistics costs in Thailand are very high – estimates suggest that logistics costs amount to 25-30% of GDP, compared to the 8-10% common in developed countries⁷.

⁷ Those present at our meeting were very skeptical of the high figure for Thailand.

At present, Thailand relies heavily on road transport. We note that road transport is responsible for ~90% of domestic freight movements, rail for ~5%, coast and inland waterways for ~5%. Government would like to see shift from road to rail transport. Government is implementing a rail improvement program, including double-tracking of Laem Chabang-Bangkok line. Most of the existing Thai rail network is single track.

There has been development of Inland Container Depots (ICD), e.g. Lad Krabang on the outskirts of Bangkok. There are rail service from Laem Chabang to this ICD and it is estimated that c.25% of containers handled at Laem Chabang are railed to the ICD. Container trains carry c60 containers.

The Lad Krabang ICD has six modules leased (for 12 year terms) from Thai Railways by Maersk, Hanjin, freight forwarders etc. The operation of Lad Krabang is under the general supervision of Thai Railways, although the lessees of the individual modules are free to operate them as they see fit.

Cost of moving containers to/from Laem Chabang-Lad Krabang: is approximately:

- road: c2,500 Baht (say US\$65)/TEU
- rail: c2,500 Baht/TEU

From the carrier's perspective, the main problem with rail is its unreliability and lack of punctuality. Frequent train delays lead to missed sailings. There is also a relatively high level of accidents, including frequent derailing.

Since the attempts to move forward the implementation of the ASEAN Framework Agreement on Multimodal Transport have not been successful for years due to the nonreadiness of certain ASEAN Members, Members who are ready to implement the Framework Agreement, particularly those from Indo-China, have found another alternative for earlier implementation through the GMS Cross-Border Transport Agreement sponsored by the Asian Development Bank (ADB). The GMS Agreement has incorporated two Annexes relating to multimodal transport, one of which follows the MTO liability regime of the ASEAN Framework Agreement. The initial implementation of the GMS Agreement at selected Thailand-Lao PDR and Thailand-Cambodia borders is expected to commence in 2006.

A Multimodal Transport Bill, prepared in line with the ASEAN Framework Agreement on Multimodal Transport, has not been drafted but has not yet been approved by the parliament.

The private sector also, represented by the TNSC (National Shippers' Council) has been active in seeking improvements in Thai logistics chain. TNSC are concerned, inter alia, with improvement of infrastructure in key corridors (e.g. Laem Chabang-Bangkok, Thai/Malaysian Border-Bangkok), simplification of customs procedures, grey areas in liability regime for multimodal shipments, capacity building and skill enhancement in transport and freight forwarding industries, development of freight forwarding industry.

M. COASTAL/DOMESTIC SHIPPING

It is government policy to develop more coastal shipping movement. In part, the policy stems from concern for fuel efficient transport: fuel use has been estimated at 20 litres per 100 tonne-kms carried by truck, compared to 15 litres by rail and only 6 litres by barge. However, many factors impeding the modal shift to coastal ship. Lack of berths is critical. Regional ports need a wharf of at least 100m but few have the facility. Depth of water is also a problem. There is some lightering of cargoes,, mostly by shippers carrying their own cargo. There also seems to be a reluctance to shift from traditional modes. Comment was made that even hazardous chemicals, most suited to coastal shipping, is being moved in tankers from Map Ta Put Industrial Port to the industrial areas to the west of Bangkok, transiting urban areas.

II. KEY TRADING RELATIONSHIPS

A. SHIPPING SERVICES OVERVIEW: ASEAN IN A GLOBAL CONTEXT

Shipowner bodies report that the shipping market is performing well. They contend that that all the main shipping markets are currently expanding – especially China – leading to pressure on shipping space, container availability and handling equipment etc. Container availability is a problem in Thailand as a result of chronic imbalance of container flows: containerized imports running at c. 1.3 million TEU annually, whereas containerized exports running at c. 2.3 million TEU annually. Approx 1 million empties annually have to be brought in by lines⁸.

Thai shippers are experiencing some delays/shut outs at the moment. Some of the delays are due to container availability, others due to insufficient space on feeder and mainline services.

Carriers are responding by providing more sailings/space. However, high demand for long haul services ex China etc are creating space shortages in short haul trades. In times of lower demand, carriers frequently carry intra-Asian cargo on vessels engaged in Europe-Far East or trans-Pacific trades. For example, P&O's trans-Pacific Laem Chabang-US service accepts way-port cargo for Taiwan/China when liftings are at normal levels. Given current level of demand for space on the sailings, much less way-port cargo is being lifted. At times of high demand space for intra-Asian (and intra-ASEAN) cargoes tends to be at a premium. This in a situation in which the volume of Thai containerized cargo is said to be 14-15% up this year compared to last year. P&O liftings ex Thailand said to be up 20% up this year. Container trade problems are exacerbated by shortage of conventional vessels. Shippers of rice and sugar are turning to containers because they cannot obtain conventional tonnage.

Not surprisingly, freight rates have risen significantly. The following rates were quoted:

- Asia Europe: two years ago cUS\$700-800/TEU, today's rate US\$1,200/TEU
- Thailand-Indonesia: US\$350/TEU, US\$600/feu, reefer US\$1,800-2,000/feu
- Thailand-Philippines: US\$400/TEU, US\$700/feu, reefer US\$1,800/feu
- Thailand-Malaysia: US\$400/TEU, US\$700/feu
- Thailand-Vietnam: US\$350/TEU, US\$700/feu.

Rates in intra-ASEAN trades said to have risen by 30-50% over past eighteen months.

The Thai National Shippers' Council Annual Report 2003-04 quotes the following freight rates from Thailand to ASEAN destinations:

- Thailand-Singapore: US\$250/TEU, US\$450/feu
- Thailand-Indonesia: US\$350/TEU, US\$650/feu
- Thailand-Malaysia (PK): US\$500/TEU, US\$750/feu (excludes BAF, US\$30/TEU, US\$60/feu)
- Thailand-Malaysia (PTP): US\$400/TEU, US\$700/feu (excludes BAF, US\$30/TEU, US\$60/feu).9
- Thailand-Philippines (Manila): US\$450/TEU, US\$750/feu
- Thailand-Vietnam (HCM): US\$380,TEU, US\$660/feu

⁸ Note the converse of this in the Philippines and , hence, major disparity in freight rates.

⁹ Thai National Shippers' Council, Annual Report 2003-04, p.43.

A contributing problem is the many dense cargoes in intra-ASEAN trades, weighing up to 22 tonnes/TEU. Container vessels are usually designed around average weight of c.12 tonnes/TEU. Carriers therefore may have to restrict volumes of heavy cargo carried for both capacity and stability/stowage reasons.

B. GROWTH IN ASEAN TRADES

Industry representatives felt that AFTA had resulted in a substantial increase in ASEAN cargo flows. Several direct services have begun in past couple of years, e.g. Laem Chabang-Manila, Laem Chabang-PTP-Port Klang, Laem Chabang-Jakarta, Laem Chabang-HCM City. They estimate that intra-ASEAN traffic has more than doubled over past 3-4 years.

C. MAIN COMMODITIES SHIPPED IN INTRA-ASEAN TRADES

1. Chemicals/liquid bulk:

Most domestic movement is in liquid bulk – toluene, hexane etc. This is mostly from Map Ta Phut (MAP) to Bangkok in 500 to 1,500 dwt parcel tankers, discharged predominately at private jetties along the Chao Praya. There is some export from MAP to Malaysia and Singapore. Similarly to oil, the same ships are used for the international voyages. Thai Oil is the biggest shipper, selling LPG widely. Another big movement is asphalt, exported to Singapore, Vietnam and Malaysia.

2. Rice:

Main exports are to China, Hong Kong, Singapore, Japan, USA and Europe. However, ASEAN countries import significant volumes of rice from Thailand, and also from Vietnam. The two major ASEAN buyers are the Philippines and Indonesia. In both countries, government agencies are big purchasers, e.g. National Food Agency in the Philippines. Rice sold to these agencies is usually shipped in bulk. Subsequent information suggested that this is mainly in 50 kg bags, hand stowed and discharged using tween-deckers. Indonesia buys 600,000-1,000,000 tonnes a year, most from Thailand and Vietnam. The volume of Indonesia and Philippines imports, and thus Thai intra-ASEAN exports, varies with climatic conditions and hence size of harvest¹⁰.

Virtually all premium quality (jasmine) rice is being packed in retail packs or 50kg woven poly bags and containerised. The only markets taking bulk rice shipments in any quantity are South Africa, which takes parboiled rice, and the Middle East where conventional liner services still operate. Even in the African trades this may change, pilferage at the wharf having been dramatically reduced from as much as 15% to almost nothing by the use of containers. Privately importers in Indonesia, as elsewhere, tend to import rice in containers.

Rice exporters are experiencing problems of container availability. Rice was formerly shipped in bulk. Rice mills were located alongside rivers such as the Chao Praya and the rice was shipped in barges to Klong Toey for trans-shipment in midstream. The Thai National Shippers' Council noted that rice mills are no longer located beside the river as the interlinking canals have become overloaded. Many have relocated to be close to highways. Thus, movement of rice in containers has grown rapidly over past five years¹¹.

High quality rice (e.g. jasmine rice) is now packed in 5-10 kg consumer packs and shipped in containers. Lower grade rice – 5%-20% broken rice etc – is shipped in 50 kg bags (size of bag varies with market) in break-bulk vessels.

The Private Terminals Club estimate that 17% of the 7.5M tonnes of rice exported in 2000 was containerised. Containerisation now accounts for 45 to 50% of rice exports and is

¹⁰ It was also suggested by a contact in the Philippines, somewhat cynically perhaps, that it varies also with the electoral cycle. All governments want well fed electorates running into an election!

¹¹ It was not clear if the relocation was the cause or an effect of the modal shift.

continuing to increase rapidly. They attribute this trend in part to a shortage of conventional tonnage. Older vessels are being scrapped and there is no replacement program. For example, there are virtually no Friendship class left (small, Handysize that were the workhorse of the world fleet). While this sort of tonnage was previously available at USD 12 to 18/tonne, last month they were quoted USD55/t for a shipment to Iraq. While this is extreme given the risk, rates in the whole region have risen hugely.

The other factor behind the the shift to boxes is cargo damage and loss. Previously premium rice was moving to Malaysia, HK, Brunei, Singapore etc in 5,000 tonne parcels; now it is all in 5 to 10kg packs. While this is partly market/consumer driven, losses are far lower. As an illustration, shipments to Africa used to suffer 15% 'shrinkage', mainly from wharf labour filling their T-shirts etc. Containerised losses are virtually nil. Thus even lower grades are moving to containers.

Container share of rice exports is estimated at 100% to HK, Malaysia, Singapore, Brunei, somewhat less to S and S E Asia. Container share is still low to Africa and Middle East, with estimated 50% to 60% still in conventional shipments. The only exception is where government agencies buy, and this is still usually shipped break-bulk, even to ASEAN nations. However, this is usually as a result of crop failure so shipments are irregular.

3. Sugar:

Sugar is mainly carried in containers, although some raw sugar still moves in bulk. Main markets are Malaysia, Singapore, Philippines, Japan, China. Sales are usually FOB.

4. Automotive:

Cars are mostly carried in dedicated car carriers ex three berths at LCB. However, some (mainly high value or unusual models) are carried in containers. Two Japanese carriers have begun service from Laem Chabang-Jakarta during past six months. Thai automotive plants are using Indonesian components.

The table below illustrates the growth of car throughout at Laem Chabang over the period 1998-2003.

Year	Inbo	ound	Outb	ound	Total		
	Units	Growth (%)	Units Growth (%)		Units	Growth (%)	
1998	282	-	45,324	-	45,606	-	
1999	673	138%	110,023	143%	110,696	143%	
2000	4,296	538%	136,719	24%	141,015	27%	
2001	3,701	-14%	168,553	23%	172,254	22%	
2002	4,662	26%	177,950	6%	182,612	6%	
2003	23,244	399%	229,838	29%	253,082	39%	

Table 3 Thailand: Automobiles Handled, Laem Chabang, 1998-2003¹²

It was noted elsewhere that there is two way trade with ASEAN, with CBU and CKD going out of Thailand in break-bulk (car carriers) and containers, auto parts coming back as back-load under an ASEAN automotive exchange agreement.

5. Fertiliser:

Moves in substantial quantities: 3 to 4M tonnes per annum, mostly imports. The big importers are Thai Fertilisers and Nissho Iwai. Although traditionally raw materials were

¹² Port Authority of Thailand, PAT Magazine, March 2004, p.5.

imported in bulk for local manufacture, many non-performing loans in the manufacturing sector have shifted the industry towards blending only, with raw materials such as urea now coming in bagged form in containers, or in break-bulk or bulk discharged from conventional vessels in mid-stream and barged up river. Whilst this used to a big break-bulk movement, at least 25% of urea imports and most finished products are currently shipped in containers. The blending plants are happier now to receive in smaller lots – e.g., 500 tonnes per week more in line with J.I.T. requirements – than in larger amounts requiring storage. Also less double handling means less damage/loss.

6. Tapioca:

A large scale export crop: 3 to 4M tpa in bulk but most going to Europe and now China, little to ASEAN.

7. Coal:

Big movement in excess of 5M tpa. Previous supplies of lignite to power generation and cement plants from the north are now not environmentally acceptable. This is being replaced by other sources, particularly Kalimantan. Previously it was coming in bulk vessels but the rates are driving a shift to tug/barge. An average rate for delivery by panamax was USD6 per tonne, compared to USD9-10 for barge delivery. Now a panamax vessel is costing more like USD15 per tonne. There has therefore been a shift away from the larger vessels, the cement works taking most of their coal by barge and power plants either by barge or Handysize bulkers.

8. Furniture:

Thai furniture exports rely heavily on wood from rubber trees. The TNSC noted the conflict between latex production (latex producers having a vested interest in keeping trees standing) and the furniture industry. It is reported that Thailand is no longer a timber exporter and now imports a variety of timbers for building and furniture manufacture¹³.

Main destinations for furniture exports are Japan and the US. ASEAN countries account for only a small proportion of furniture exports. Malaysia is Thailand's major competitor in the ASEAN furniture market.

9. Timber:

Thailand is an importer of timber, mostly in sawn timber form from Malaysia and Indonesia, and clear wood (pine) from New Zealand. Most is for furniture manufacture.

REPSF Project 04/001: Country Report - Thailand

10

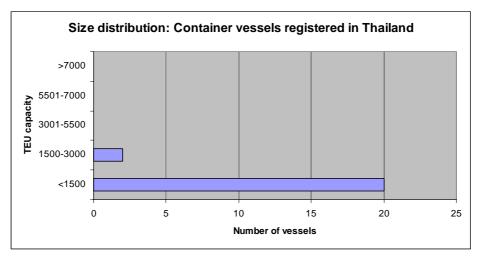
¹³ Logs were a major component of barge traffic on the Chao Praya River, including some being towed in large masses, floating and chained together. We speculate that these may be from E Malaysia, discharged in midstream or at anchorages from log carriers or ocean-going barges.

III. NATIONAL FLEET

A. SIZE/AGE/TYPE DISTRIBUTION OF FLEET UNDER NATIONAL FLAG

1. Container Ships

Table 4: Thai Registered Container Vessels – Size Distribution



Source: Study estimates. derived from analysis of Fairplay/Lloyd's Register of Ships Database

Age distribution: Container vessels registered in Thailand

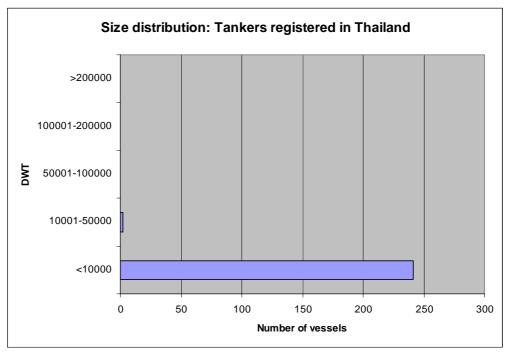
Over 25
20-25
15-20
10-15
5-10
0 2 4 6 8 10 12

Number of vessels

Table 5: Registered Container Vessels – Age Distribution

2. Liquid Bulk

Table 6: Thai Registered Tankers - Size Distribution



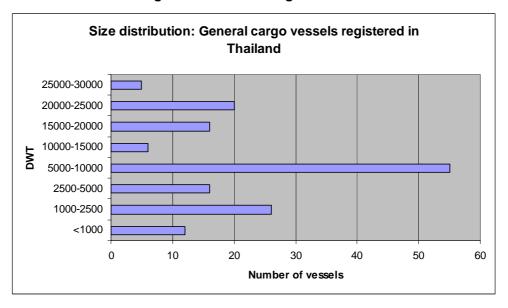
Source: Study estimates. derived from analysis of Fairplay/Lloyd's Register of Ships Database

Age distribution: Tankers registered in Thailand Over 25 20-25 Age in years 15-20 10-15 5-10 0-5 0 80 20 40 60 100 120 Number of vessels

Table 7: Thai Registered Tankers - Age Distribution

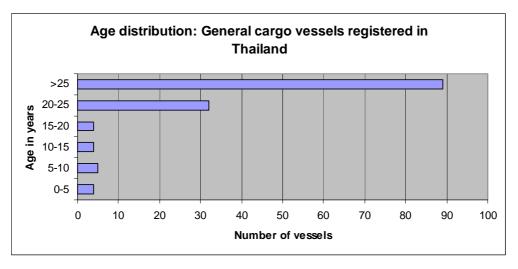
B. GENERAL CARGO

Table 8: Thai Registered General Cargo Vessels – Size Distribution



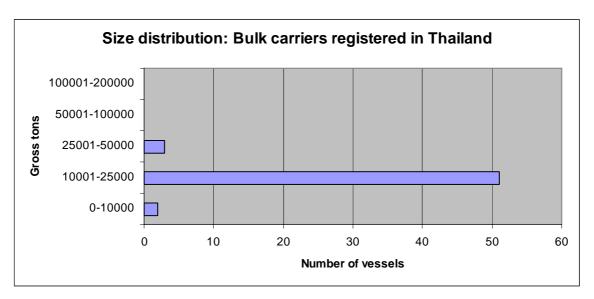
Source: Study estimates. derived from analysis of Fairplay/Lloyd's Register of Ships Database

Table 9: Thai Registered General Cargo Vessels - Age Distribution



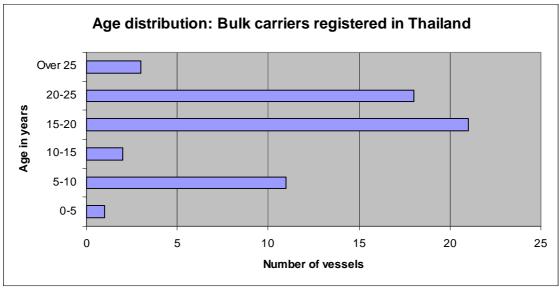
C. DRY BULK

Table 10: Thai Registered Bulk Vessels – Size Distribution



Source: Study estimates. derived from analysis of Fairplay/Lloyd's Register of Ships Database

Table 11: Thai Registered Bulk Vessels – Age Distribution



D. SHIP OPERATING COSTS

Thai flagged vessels are finding it hard to be competitive, particularly vis-a-vis Malaysia. Crewing is a problem. It is easy enough to find crew for regional/domestic trade vessels, but more difficult for international trade vessels.

The problems caused by a shortage of skills and a deficit in training establishments, both in numbers and in quality of training, were recognised by the Thai government some years ago. To address these issues, Thailand's Marine Department has undertaken a series of development programs to improve the quality of both seafarers and training institutions in order to meet the requirements of STCW95. Government sources report that that the situation has been gradually improved as a result of these initiatives, and that further improvement can be expected, since these processes inevitably take some time to deliver their full potential.

IV. PORTS

A. OVERVIEW OF PORT ADMINISTRATION AND DETAILS OF INTRA-ASEAN PORTS

The Port Authority of Thailand (PAT) is a public utility state enterprise under the general supervision of the Ministry of Transport and Communications. It was established by the Port Authority of Thailand Act B.E. 2494 (A.D. 1951) with the objective of conducting port business for the interest of the state and public. At present PAT is directly responsible for two main ports i.e. Bangkok Port and Laem Chabang Port.

1. Organisational Structure of Port Administration

PAT manages Bangkok Port and Laem Chabang Port, having the power to formulate general policies and supervise operations and development plans. PAT has adopted different managerial models in Bangkok and Laem Chabang. At Bangkok (Klongtoey) it is owner and operator, offering all services except stevedoring. At Laem Chabang (LCB) it fulfils a landlord role, supervising the operations of the port. At other ports along the Chao Praya there is full private ownership, including a plethora of private jetties and mini ports on the river¹⁴. PAT has tended to float subsidiaries to manage the large areas of land held around Bangkok, spinning it off for various functions such as logistics.

Regional ports differ in ownership and managerial control. For instance, Songkhla comes under the Marine Department but is leased to a private operator although there are plans for PAT to take over ownership. Map Ta Phut, the industrial port south of LCB, comes under the Ministry of Industries and State Development. At Sriracha, the oil and bulk wharves are in private ownership.

PAT has responsibility for the channels in the Chao Praya, including maintenance dredging – which is not much since the river is mostly 7 to 8 m deep and self scouring. It owns a dredger that is hired out to private wharf operators to form berth boxes etc. The channel from LCB to the pilot station is 18km long, 30km from the inner river berths to the pilot station.

An unusual aspect of PAT's objectives is the long term government-mandated goal of reducing business at the one at which it is fully involved – Bangkok – in favour of growth at LCB, where they have essentially a landlord role. The government has limited the container throughput at Bangkok to 1M TEU per annum, and has instructed PAT to institute measures to reduce volume of all cargoes. Clearly the shift to boxes is assisting this.

PAT considers the South China region as LCB hinterland, although it concedes that most major ports in the region think the same. Overall, the government strategy is to develop rail and road links to support cargo flow to LCB. Already the State Rail Authority is developing an ICD the north, close to but not on the Mekong River. They confirmed that there is now strong cooperation from China to make the river navigable. Rail has now reached the centre of the Friendship Bridge, and Laos remains the only missing link. Thailand is negotiating with Laos to assist. However, despite comments elsewhere about the level of cooperation, there is apparently some competition, with Vietnam for instance offering dedicated berths for Lao cargo at Saigon.

There are plans to build a port in the far south of the country to provide a gateway to Sumatra.

¹⁴ PAT estimates the total number of private jetties on the Chao Praya at 60, but the Private Terminals Club says the total is 128.

2. Private Participation in Port Ownership and Operation

The Port of Laem Chabang is privatised. All other formal ports remain state owned. However there are many private facilities, for instance on the Chao Praya river. These are required to be registered as a port if they can accommodate vessels over 500 gt. On application for registration, provided the operator can satisfy certain criteria relating to throughput, pricing and capability of the operator, a fifteen year license may be issued. Prices are monitored but not capped. If a price is to be increased, approval must be sought. The proposed pricing is compared to the market and investment involved. Moral pressure can be applied, and theoretically the license can be withdrawn or not issued. For smaller private jetties, approval must still be sought as an encroachment and a license issued. Access issues are not part of the registration/licensing process. Some vessels calling at these jetties are involved in international trade.

3. Private Jetties on the Chao Praya River

The private jetties are a development unique to Thailand. Representatives of this sector, the Thai Private Terminals Club, explained their background.

Private jetty/terminal development was driven by government berth priority given to vessels discharging imports. These were then able to load export cargo, shutting out other operators with ships available. This forced the shippers to build their own facilities to export high volume cargoes such as sorghum, sugar, rice etc, plus chemicals and steel. There are now 128 private terminals handling exports of sugar, imports and export of fertilisers, liquid chemicals and petro-chemical products. They estimate that over 90% are dedicated to the owners' cargo.

The entire Chao Praya River is controlled by PAT. They maintain the channels, and charge dues to any vessel over 500gt. Land for private jetty access is privately owned to the high water mark, and in most case the owner will need to build a 40 to 50 m jetty to get sufficient depth alongside. The right to use the riverside land to access the river incurs a TB5 to 10 per m2 to the local authority. The biggest cost to the operator is often to get access to the main road, which may be 1km back from the river.

Dredging is minimal. The river is from 8 to 14m deep and self scouring, the bar being the only part needing ongoing maintenance dredging.

To build a private jetty, plans have to be passed by the Harbours Department for facilities serving vessels over 500 gt, or by the LGA for smaller vessels. A proposal including an EIR must be lodged before a construction license is issued. An operating license is finally issued, with a ten year life but roll-over option provided safety is maintained.

Import break-bulk cargo pays dues of approximately TB5/tonne, compared to TB17.50/tonne for cargo in container. Thus 'overside' cargo is theoretically advantaged.

Towage is by private supplier, pilots provided by the Harbours Department and compulsory for vessels over 50m.

Perhaps the extreme example of a private jetty development is at Sriracha Port (see below).

4. Tariffs and their Application

The government sets a nominal minimum and maximum for terminal charges. However, the private terminal operators are very competitive. For instance, at Laem Chabang, after low utilisation when the port opened ten years ago, there was heavy discounting/rebating. This is now reducing somewhat as utilisation on existing berths climbs towards 70%.

B. HANDLING PERFORMANCE

The tables below show the volume of cargo handled by Bangkok and Laem Chabang ports over the period 1999-2003.

Table 12: Cargo Handled at Bangkok and Laem Chabang, 1999-2003 (million tonnes)¹⁵

Year		Import			Export						
	Container	General	Total	Container	General	Total					
Bangkok Port											
1999	3.731	1.890	5.621	7.064	0.160	7.224	12.845				
2000	4.104	2.007	6.111	7.029	0.107	7.137	13.248				
2001	4.108	1.812	5.919	7.312	0.128	7.440	13.359				
2002	4.396	1.790	6.185	7.665	0.114	7.779	13.965				
2003	4.886	1.849	6.735	7.779	0.113	7.891	14.626				
Laem Chal	oang Port										
1999	5.013	0.109	5.123	10.635	0.710	11.345	16.468				
2000	5.979	0.063	6.042	11.784	1.135	12.918	18.960				
2001	6.767	0.059	6.825	13.162	1.310	14.472	21.297				
2002	8.464	0.093	8.558	15.672	1.259	16.930	25.488				
2003	9.559	0.106	9.666	17.767	1.307	19.074	28.740				

Table 13: Containers Handled at Bangkok and Laem Chabang, 1999-2003 (TEU)

Year		Bangkok Port		Laem Chabang Port				
	Inward	ward Outward Total		Inward	Outward	Total		
1999	498,867	553,699	1,052,566	850,661	905,206	1,755,867		
2000	512,414	561,103	1,073,517	1,033,287	1,071,975	2,105,262		
2001	508,030	561,530	1,069,560	1,148,724	1,163,715	2,312,439		
2002	516,690	593,871	1,110,561	1,317,910	1,338,741	2,656,651		
2003	537,338	636,648	1,173,986	1,541,997	1,505,372	3,047,369		

C. ASEAN NETWORK PORTS

ASEAN network ports in Thailand are identified as 16:

Bangkok, Laem Chabang and Songhkla. Base cargo handling characteristics for these ports are shown in the table below, and the following table summarises marine characteristics such as channel details, depths alongside and other principal physical features.

.

¹⁵ Source: Port Authority of Thailand.

¹⁶ Almec report November 2002

Table 14: Thai Ports of the ASEAN Network - Physical Features

Port	Owner	Ca	rgo 1	func	tions	s ⁽¹⁾	Trade		Remarks	
		С	D B	L B	G C	Р	Total vol t	Total TEU(yr)		
Bangkok	PAT but berths leased to private sector	*	*	*	*	*	12.5m t (2003 est)	1.2m TEU ⁽²⁾ (2003 est)	Three container terminals (Siam Bangkok, United Thai and Bangkok Modern Terminals)	
Laem Chabang	Gov but container berths leased to private sector	*	*	*	*	*	20m t (2001)	2.3m TEU (2001)	Major container and multi purpose facility with 5 container berths (more being developed, dry and liquid bulk and passenger terminals	
Songhkla	PAT	*				*	1.2 m t (2001)		Animal feed, canned/frozen foodstuffs, seafood, furniture, rubber/latex, timber.	

Notes: 1. Cargo types – C=container; DB = dry bulk; LB=liquid bulk; GC = general or break-bulk cargo; P=passengers

Source: Lloyd's ports of the world

Table 15: Thai Ports of the ASEAN Network - Cargo Capabilities

Port	Access	Channel			Berths		Tugs	
		Depth m	Width m	Length nm	Total length m	Depth m	Number & hp	
Bangkok	Road, rail, IWT	8.5	100- 250	~10	10km +	8.5	13 from 1000 to 1800hp	
Laem Chabang	Road, rail	14	-	<1	3,270	14	2 x 800hp, 6 x 3000hp	
Songhkla	Road	9	120	2.2	510	9	2 x 1600hp	

Source: Lloyd's ports of the world

D. PORT DEVELOPMENT PLANS

Discussions with government contacts indicated that plans for port development prioritise container facilities, and particularly Laem Chabang.

PAT advised that Phase 2 of LCB is now progressing, with basic infrastructure in place, berths dredged etc. ready for private operators to construct wharf/shore infrastructure. Asked if they saw calls by main line operators as possible, they said that there are many issues, with location and resulting diversion being a major one. They see development of a major port on the Andaman Sea as a possible long term solution, with land-bridging of Gulf of Thailand and Mekong/S China cargoes. This would give them a port on the east-west mainline route.

The long planned development of road/rail links from southern China, through Laos into Thailand Highway and rail links with China via Laos are clearly a high priority. In China, there is now a highway connection right to the Lao border. Within Thailand, the road system is well developed but there is the need for some bridge upgrading and replacement of some ferry crossings. It is clear that as this link is completed, there will be significant impact on the region. There is some thinking under way as to how the ports infrastructure will develop to service this potential new trade.

In the private sector, however, there has been development elsewhere. Sriracha has a new deepwater port north of LCB, 25-30km from Bangkok. Previously the port specialised in tapioca exports but now has four major oil jetties operated by the Petroleum Authority of Thailand (PTT) and dedicated to PTT, Esso and Thai Oil, and a large, new, privately owned bulk jetty capable of handling several panamax to capsize bulk carriers to 300K dwt. (Photographs sighted showed 3 panamax/capesize bulkers and one handymax working concurrently at a T jetty.)

V. MAIN INTRA-ASEAN SHIPPING ROUTES AND THEIR CHARACTERISTICS

A. CONTAINER SHIPPING PATTERNS

Historically, most containerised cargoes have been transhipped over Singapore, partly because of the draft limitations that exist in the river port of Bangkok. However, since the commissioning of Laem Chabang Thailand has begun to receive direct calls in the major East-West trades.

Direct links between Thailand and other Asian countries, especially to China, have also developed greatly recently (there have been direct links to Japan for may years). The number of services connecting Thailand to other ASEAN ports has also increased.

B. MODAL SHIFT: BULK AND BREAK-BULK TO CONTAINER

There has been a strong shift away from break-bulk in favour of container, although there is still some conventional traffic calling at Bangkok Port. Cargoes still moving in breakbulk form are concentrated at private jetties along the Chao Praya, bulk cargoes tend to be concentrated at private wharves near LCB, bulk liquids at Sriracha and Map Ta Phut.

Despite the trend to containers and big terminals, the Ports Authority said that they feel that the government wants to encourage regional, short-sea trades, particularly intra ASEAN. There is much movement of small vessels from Belawan, for instance, to the southern part of Thailand, and some movement south to Malaysia with rubber, calling at Penang and Pt Klang. Further port development in the south as mentioned above may assist the flow of cargo such as logs, now a major import for Thailand.

C. LIQUID BULK

There are three refineries, with majority state ownership but with private sector involvement (e.g., Shell, Caltex in jvs with local companies). Crude is imported in VLCCs mainly from the Middle East, with distribution of refined product predominantly in small tankers, 1,000 to 5,000 dwt. Most is for domestic consumption although there is some excess capacity driven exports – to Vietnam and, improbably, Singapore.

Liquid bulk in tankers has major advantages that dry or break bulk vessels do not normally enjoy. Refineries by their very nature are located on shorelines with adequate water for large vessels. Road transport is hampered by weight restrictions and rail requires double handling of cargo. Road haulage is further limited by the oil company's tendency to strict compliance with safety. Thus oil tankers have remained viable where dry cargo vessels have declined.

D. MANNING ISSUES

Thai flagged vessels are finding it hard to be cost competitive, particularly vis-a-vis Malaysia. Crewing is a problem. Owners report that it is easy enough to find crew for regional/domestic trade vessels, but more difficult for international trade vessels. Interviewees took the view that there is not so much a shortage of seafarers, but a shortage of skills and a deficit in training establishments, both in numbers and in quality of training. Many seafarers are considered incapable of being trained to the requisite level and there are too few training schools17. Singapore manages because the volume of students means that they can put on courses for a relatively few students. However, the costs of providing both study leave and providing for accommodations etc. is a major burden for smaller companies,

¹⁷ Some companies with larger fleets are able to address this. Precious Shipping for instance has not only developed a financial relationship with a training establishment, but takes virtually 100% of the graduates.

although larger companies (e.g., Precious Shipping) are coping by forming alliances with training institutions.

There appears to be some opportunity here to capitalise on overall skills and labour available in ASEAN. The Philippines manning industry is currently moving to protect its business from external competition (e.g., China) and, in doing so, is driving better standards in training establishments (See Philippines Country Report). There may be some possibility for joint initiatives to pick up the manning surplus (Philippines and Myanmar) and training skills (Singapore and the Philippines) and provide mechanisms to allow free movement (actual as well as notional) of seafarers across national borders and cultures, thus benefiting the ASEAN fleet as a whole.

E. MULTI MODAL DEVELOPMENT IN ASEAN

Shipper bodies raised concern about the progress of multi-modal transport planning in ASEAN. While in Thailand, the Multimodal Transport Bill, the 'blueprint' for ASEAN multimodal legislation, has been passed by Parliament, contacts suggested that this may have been premature, since some member countries of ASEAN are not yet ready to commit to a regime.

Government has placed a high priority on multi-modal development, but the private sector, represented by the TNSC, has also been active in seeking improvements in Thai logistical chain. They are concerned, inter alia, with both physical improvement, such as infrastructure in key corridors (e.g. Laem Chabang to Bangkok, Thailand/Malaysian Border to Bangkok), and with regulatory and educational aspects such as simplification of customs procedures, grey areas in liability regime for multimodal shipments, capacity building and skill enhancement in transport and freight forwarding industries.

1. Non-Tariff Barriers

Although they understood that the project is specifically about impediments to efficient shipping services, Thai shipper representatives also mentioned some NTBs that they felt were impeding trade and were an issue for ASEAN. As examples the following were quoted:

- Malaysian quota of 30,000 tonnes of perishable goods from Thailand (frozen vegetables, meat etc):
- Thai trucks unable to go into Malaysia;
- Thai glass products exported to Malaysia apparently have to be cut in a special way, which in Thai eyes constitutes a NTB;and
- Food (rice) sold to Philippines has to be handled through the National Food Bureau. The Thai exporters would prefer to deal with private sector firms.

F. AUTOMOTIVE INDUSTRY

There is an increasing intra Asian and intra-ASEAN trade in motor vehicles and components. Manufacturing plants in Thailand and Indonesia, and to a lesser extent, the Philippines, are planning production to complement each other. Thus GM and Toyota are building say models in both Thailand and Indonesia and exchanging both the vehicles and components. Ford is building one model in the Philippines for distribution throughout the region and Honda is understood to be moving similarly. Built up cars are mostly carried in dedicated car carriers, although some (mainly high value or unusual models) are carried in containers.

This trade is understood to be under a specific ASEAN exchange agreement as part of the ASEAN Investment Cooperation Program, under which a number of industries, including the automotive industry, have been selected for rapid growth.

This coordinated approach to manufacturing a range of models may have some further possibilities for ASEAN. For instance, the same approach may be possible with electronic and electrical goods, white-ware etc. Even the furniture and garment industries, where ASEAN countries are competing for similar niche markets could benefit for the potential economies of scale. Some harmonisation of tariffs etc. may encourage consolidation or cross trading in components in other manufacturing industry as it appears to be for the car industry.