Chapter 2 Questionnaire

1. Description of Survey

1.1 Questionnaire objectives

Along with the objective of understanding the overall tendency in logistics informatization in the subject countries, the questionnaire had as its purpose to position the information obtained from the hearings within the overall tendency.

1.2 Selection of survey subject companies

Companies with locally incorporated companies in the survey subject countries (Philippines, Thailand, Malaysia, Singapore) were selected from among JILS corporate members. Toyo Keizai Shimpo's "2002 List of Companies Expanding Overseas (by company) (by country)" was used to verify the locally incorporated companies.

Further, in addition to the above, those in charge of logistics in the locally incorporated companies to which the questionnaires were distributed were asked to select and distribute questionnaires to local companies (Japanese and local) with which they do business.

1.3 Selection of survey items

The survey items were selected with the aim of extracting the problems that locally incorporated companies have with respect to logistics. For this purpose, the questions were divided into three main categories: logistics services (transport, storage, cargo handling, information), costs, and infrastructure (level of basic infrastructure, interconnectivity of transport modes, restrictions on use of transport, entry regulations, business regulations). The choices for the responses were the key words for each item and respondents were asked to reply in order of priority.

1.4 Distribution and Recovery of Questionnaire

The questionnaires (988 in total) were sent to those in charge of logistics at the member companies by JILS, and then were forwarded by mail, fax or e-mail to the people in charge of distribution in the locally incorporated companies in the subject countries. Then, the people in charge of logistics in the locally incorporated companies were asked to distribute the questionnaires to companies (Japanese and local) with which they do business (the number distributed in this manner is unknown).

The questionnaires, both their own and those distributed to companies with which they do business, were collected by the people in charge of logistics at the locally incorporated companies and returned to the people in charge of logistics at the member companies in Japan. They were then returned to JILS in the envelopes supplied by JILS for that purpose (164 valid responses).

1.5 Survey period

The questionnaires were answered during the period from Friday, February 14, 2003 through Friday, March 14, 2003.

2. Description of Responding Companies

2.1 Attributes of responding companies

164 companies responded to the survey, among which 145 were Japanese companies, 15 were local, and four were overseas companies other than Japanese companies. By industry, 56 were manufacturers, 27 were distributors, 78 were logistics companies, and three were "other." Below, the 83 manufacturers and distributors are analyzed as goods owning companies. The survey results showed that 54 manufacturers and 64 logistics companies were Japanese companies, which is a high proportion, and the following characteristics also are central to both of these.

By country, 31 companies were in the Philippines, 42 in Thailand, 37 in Malaysia, and 54 in Singapore. Singapore has different content than the other three countries because of the particularities of its size and logistics functions involving specialization as an international port.

Table 2-2-1 Surveyed companies by Japanese/Local and Industry Type

		Total for 4 countries	Philippines	Thailand	Malaysia	Singapore
Total		164	31	42	37	54
Japanese companies (145)	Manufacturing	54	13	18	13	10
	Distribution	25	2	8	4	11
	Logistics	64	12	13	16	23
	Other	2	0	0	0	2
Local companies (15)	Manufacturing	2	0	1	0	1
	Distribution	0	0	0	0	0
	Logistics	13	2	1	3	7
	Other	0	0	0	0	0
Other (Overseas companies other than Japanese) (4)	Manufacturing	0	0	0	0	0
	Distribution	2	1	1	0	0
	Logistics	1	0	0	1	0
	Other	1	1	0	0	0

2.2 Number of Employees in Responding Companies

48 of the responding companies had between 101 and 300 employees, which was the most common size.

Table 2-2-2 Number of Employees

	Total for 4 countries		Philippines		Thailand		Malaysia		Singapore	
	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Total	164	100.0	31	100.0	42	100.0	37	100.0	54	100.0
(1) Under 10	12	7.3	1	3.2	0	0.0	4	10.8	7	13.0
(2) 11-50	24	14.6	3	9.7	3	7.1	4	10.8	14	25.9
(3) 51-100	26	15.9	4	12.9	5	11.9	6	16.2	11	20.4
(4) 101-300	48	29.3	9	29.0	14	33.3	9	24.3	16	29.6
(5) 301-500	14	8.5	4	12.9	6	14.3	1	2.7	3	5.6
(6) 501-1,000	18	11.0	2	6.5	8	19.0	6	16.2	2	3.7
(7) 1,001-10,000	18	11.0	4	12.9	6	14.3	7	18.9	1	1.9
(8) more than 10,001	2	1.2	2	6.5	0	0.0	0	0.0	0	0.0
No response	2	1.2	2	6.5	0	0.0	0	0.0	0	0.0

2.3 Description of Logistics

Goods owners (manufacturers and distributors) are divided broadly into international and importing types. There are 31 “international” companies, which carry out overseas purchase/overseas sale, located in special exporting industrial complexes, and have little involvement with domestic companies. There are 28 importing companies, which carry out overseas purchase/domestic sale. Other companies fall into the domestic purchase/domestic sale category (domestic-domestic type) and domestic purchase/overseas sale category (export type), with 11 companies in each category.

By country, both major categories are common in the Philippines and Malaysia, whereas in Thailand there are more importing companies, and in Singapore there are more in the international category.

Among logistics companies, 56 carry out a great deal of international transport, with 21 more involved in domestic transport. By country, 27 of the 73 are in Singapore, where international logistics is the focus. In the Philippines and Malaysia, international transport is the focus, but for Thai logistics companies, the same as the goods owning companies, international and domestic are divided more equally, with 8 in the international and 7 in the domestic category.

Table 2-2-3 Company Categories

		Total for 4 countries		Philippines		Thailand		Malaysia		Singapore	
		Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage	Number	Percentage
Goods owners	No. of responses	77		13		28		16		20	
	Domestic purchase/ domestic sale	11	14.3	0	0.0	9	32.1	1	6.3	1	5.0
	Overseas purchase/ domestic sale	28	36.4	8	61.5	13	46.4	5	31.3	2	10.0
	Domestic purchase/ overseas sale	11	14.3	1	7.7	4	14.3	4	25.0	2	10.0
	Overseas purchase/ overseas sale	31	40.3	5	38.5	4	14.3	7	43.8	15	75.0
Manufacturers											
	No. of responses	52		11		19		13		9	
	Domestic purchase/ domestic sale	5	9.6	0	0.0	5	26.3	0	0.0	0	0.0
	Overseas purchase/ domestic sale	18	34.6	6	54.5	8	42.1	3	23.1	1	11.1
	Domestic purchase/ overseas sale	11	21.2	1	9.1	4	21.1	4	30.8	2	22.2
	Overseas purchase/ overseas sale	21	40.4	5	45.5	3	15.8	7	53.8	6	66.7
Distributors											
	No. of responses	25		2		9		3		11	
	Domestic purchase/ domestic sale	6	24.0	0	0.0	4	44.4	1	33.3	1	9.1
	Overseas purchase/ domestic sale	10	40.0	2	100.0	5	55.6	2	66.7	1	9.1
	Domestic purchase/ overseas sale	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
	Overseas purchase/ overseas sale	10	40.0	0	0.0	1	11.1	0	0.0	9	81.8
Logistics companies											
	No. of responses	73		13		14		19		27	
	Domestic	21	28.8	3	23.1	7	50.0	6	31.6	5	18.5
	Overseas	56	76.7	11	84.6	8	57.1	14	73.7	23	85.2

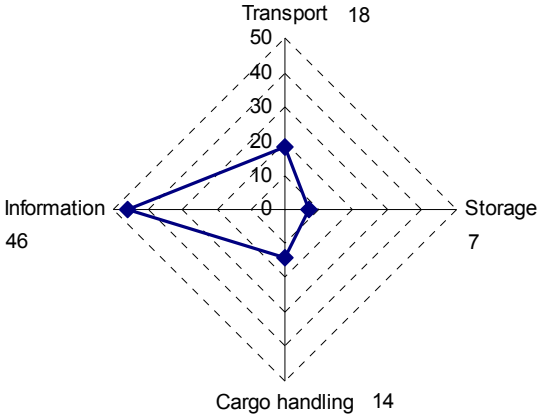
3. Logistics Services

A two-step method was used whereby logistics services were broken down into the four areas of transport, storage, cargo handling and information, and then issues within each area were verified.

The results of this show that the top priority in logistics services in all countries is information, for a total of 46 overall. There is a significant difference between information and the second priority, which is transport, at 18, and the third, cargo handling, at 14.

With regard to types of transactions, there were no major differences among the overseas purchase/domestic sale type (import), domestic purchase/overseas sale type (export) and overseas purchase/overseas sale type (international), with information having top priority (respectively 17, 6 and 16). However, there was a clear difference for the domestic purchase/domestic sale type (domestic), with cargo handling (4) taking top priority over information, and “too many inspection errors” and “not enough forklifts” tied for top priority, at 3 each.

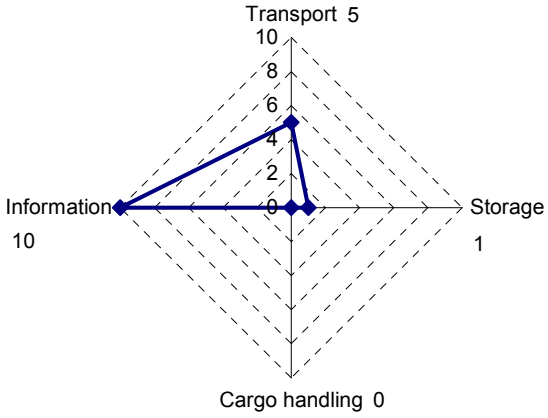
Figure 2-3-1　Logistics Services (top priority for all four countries/no. of companies)



(Number responding: 85, parameter: 91)

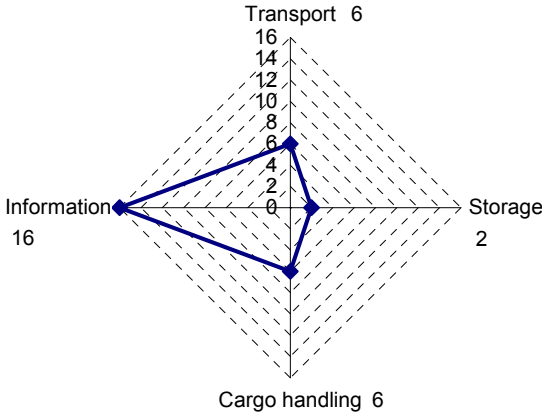
Figure 2-3-2　Logistics Services (top priority for each country/no. of companies)

Philippines



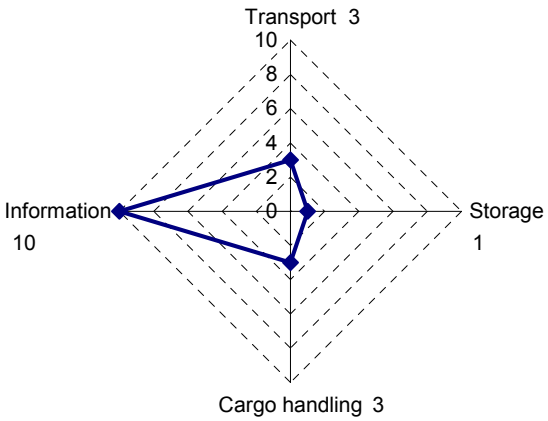
(Number responding: 16, parameter: 18)

Thailand



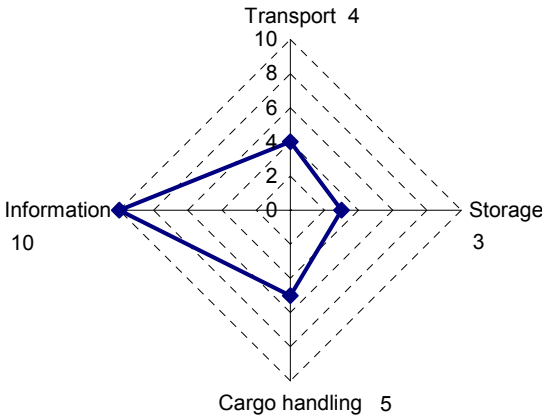
(Number responding: 30, parameter: 30)

Malaysia



(Number responding: 17, parameter: 18)

Singapore



(Number responding: 22, parameter: 25)

3.1 Information Services

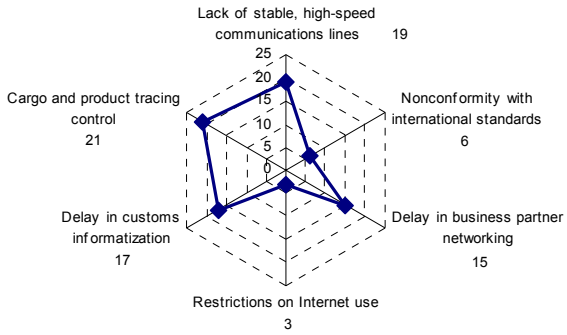
The breakdown of "information" shows that the top priority for improvement in the four countries overall is tracing control for cargo and products, at 21, followed by the lack of stable, high-speed communications lines, at 19, and delays in customs informatization, at 17.

There are two aspects of "tracing control for cargo and products." One is theft prevention and the other is coping with time-specific transport; in technical terms this means vehicle tracing control using GPS and location verification (cargo tracing service like Japan's home delivery services and international courier services) using entering/dispatch control information at sales offices, etc.

These priorities differ according to the country. The first and second priorities for Singapore and Malaysia are cargo and product tracing control (8 and 6, respectively) and delay in business partner networking (5 and 4, respectively; Malaysia had 4 responses indicating ICT delays). In Thailand, the lack of stable, high-speed communications lines is top priority (11), and delay in business partner networking and delay in ICT are tied for second, at 6 each. In the Philippines, delay in ICT is top priority (5), with lack of stable, high-speed communications lines in second place (4).

By transaction type, the top priority for the overseas purchase/domestic sale type (import) and overseas purchase/overseas sale type (international) was delay in ICT (9 and 7, respectively; 7 international also cited lack of stable, high-speed communications lines).

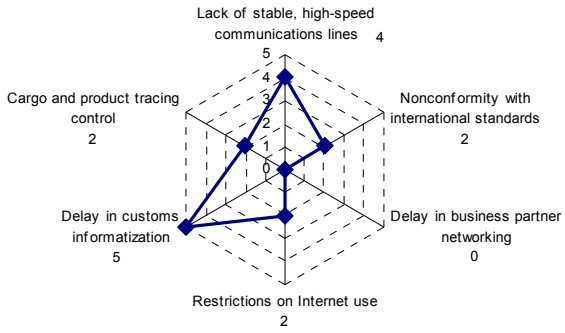
Figure 2-3-3 Information Services
(top priority for all four countries/no. of companies)



(Number responding: 81, parameter: 91)

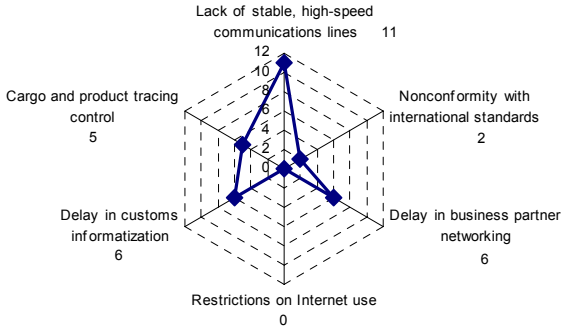
Figure 2-3-4 Information Services (top priority by country/no. of companies)

Philippines



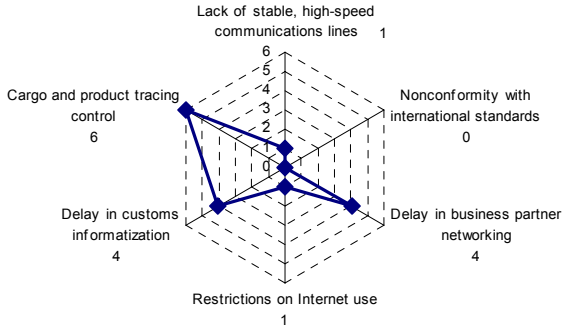
(Number responding: 15, parameter: 18)

Thailand



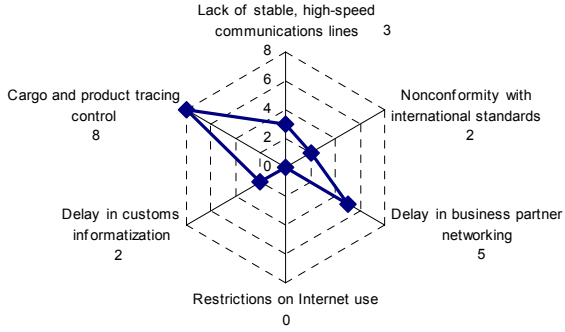
(Number responding: 30, parameter: 30)

Malaysia



(Number responding: 16, parameter: 18)

Singapore



(Number responding: 20, parameter: 25)

3.2 Transport Services

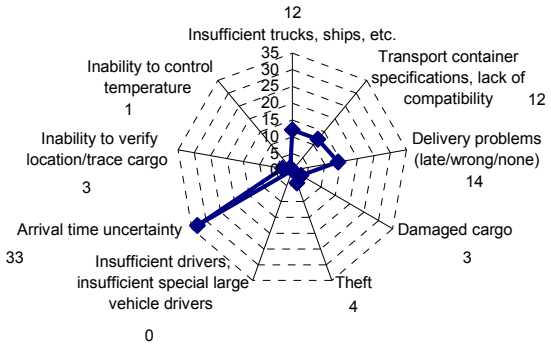
The top priority in the four countries overall with regard to transport services is arrival time uncertainty, with 33 responses.

"Arrival time uncertainty" involves not only traffic jams, but also reflects a variety of factors and transport organization situations such as truck travel restrictions, delays in customs clerical processing, and opening hours, as well as train and plane schedules and maritime speeds.

Also, arrival time uncertainty received the most responses in each country (Philippines 6, Thailand 11, Malaysia 7, Singapore 9). However, as described later in the chapter on hearing results, it should be noted that the main problem in the Philippines, Thailand and Malaysia is traffic jams in the cities, whereas in Singapore it is uncertain arrival times for international shipping.

By type of transaction, for the domestic purchase/domestic sale type (domestic), delivery problems (late/wrong/none) received 4 responses, about the same as arrival time uncertainty (3). For the domestic purchase/overseas sale type (export), insufficient trucks, ships, etc. is tied with arrival time uncertainty at 3 each.

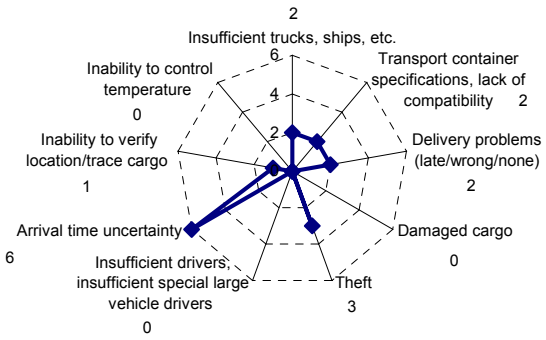
Figure 2-3-5 Transport Services (top priority for all four countries/no. of companies)



(Number responding: 81, parameter: 91)

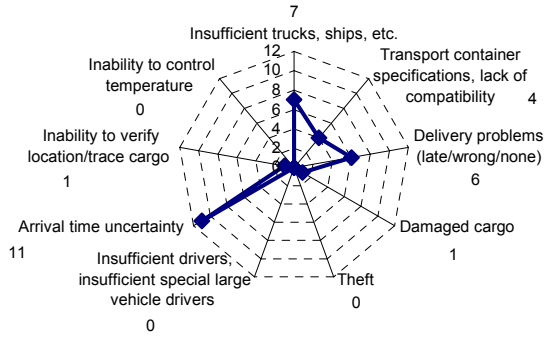
Figure 2-3-6 Transport Services (top priority by country/no. of companies)

Philippines



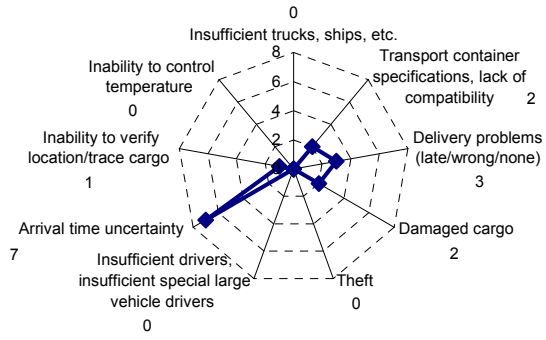
(Number responding: 16, parameter: 18)

Thailand



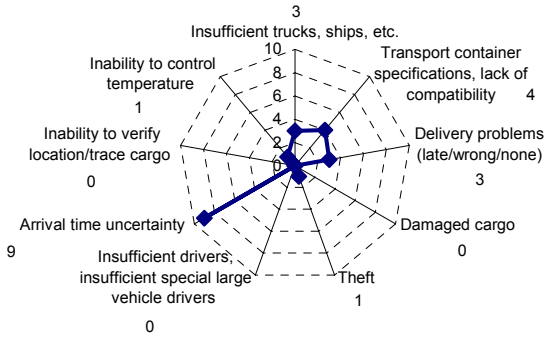
(Number responding: 30, parameter: 30)

Malaysia



(Number responding: 15, parameter: 18)

Singapore



(Number responding: 21, parameter: 25)

3.3 Cargo Handling Services

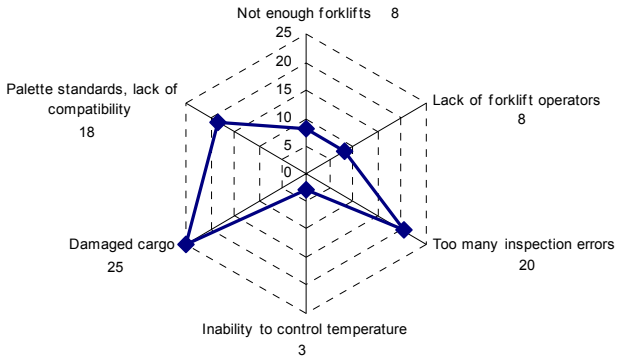
The top priority in cargo handling services for the four countries overall is damaged cargo, with 25 responses.

There are differences among countries in the order of priorities. In the Philippines and Thailand, damaged cargo is first (5 and 11, respectively), but the second priority in the Philippines is not enough forklifts (4) and in Thailand the second priority is too many inspection errors (7). In Malaysia, damaged cargo and inspection mistakes are tied, at 6 each. In Singapore, the first priority is palette standards, lack of compatibility (9), with too many inspection errors and lack of forklift operators tied for second, at 4 each.

However, there are two kinds of problems here. In a case such as "temperature control" needs, there is no awareness of the problem because currently there is no equipment or materials, while for something like "not enough forklifts" and "lack of operators," there is no awareness of the problem unless they are being utilized. In terms of the latter's primary meaning, the question of whether forklifts are used or whether they are needed should have more weight.

By transaction type, the first priority for overseas purchase/domestic sale (import) and overseas purchase/overseas sale (international) is damaged cargo (8 and 11, respectively), while the second priority is too many inspection errors (7 and 6, respectively, although palette standards, lack of compatibility had 6 responses for international). The domestic purchase/overseas sale type (export) has damaged cargo (4) as top priority, with palette standards, lack of compatibility in second place with 3. The responses were scattered for domestic purchase/domestic sale (domestic), but top priorities were not enough forklifts and too many inspection errors, at 3 each.

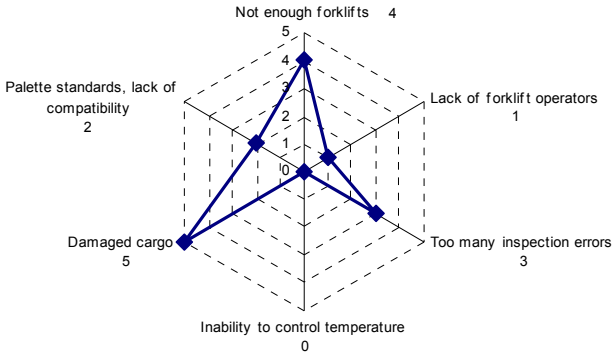
Figure 2-3-7 Cargo Handling Services
(top priority for all four countries/no. of companies)



(Number responding: 82, parameter: 91)

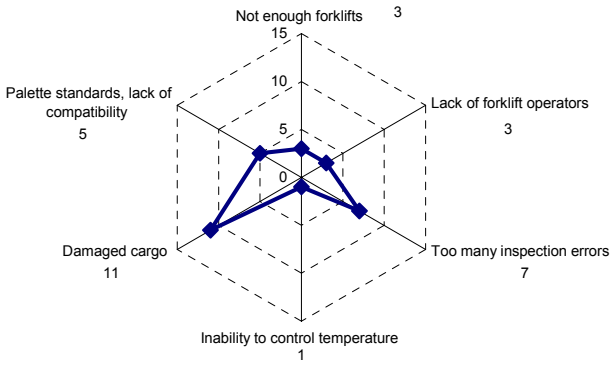
Figure 2-3-8 Cargo Handling Services (top priority by country/no. of companies)

Philippines



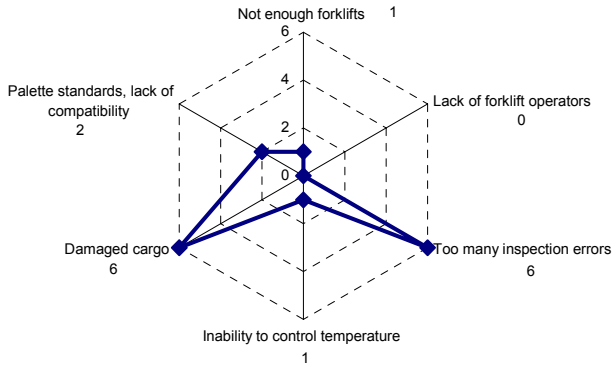
(Number responding: 15, parameter: 18)

Thailand



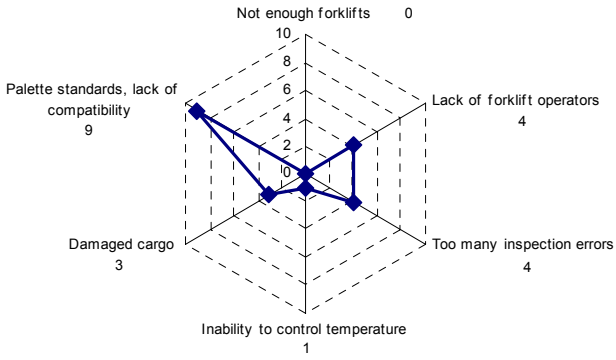
(Number responding: 30, parameter: 30)

Malaysia



(Number responding: 16, parameter: 18)

Singapore



(Number responding: 21, parameter: 25)

3.4 Storage Services

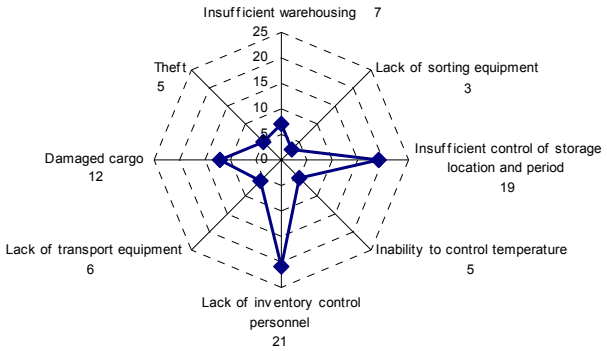
The top priority for the four countries overall with respect to storage services improvements is lack of inventory control personnel, at 21, followed by insufficient control of storage location and period, at 19, and damaged cargo, at 12.

By country, Thailand followed the overall trend, but for the Philippines, theft and damaged cargo, with 2 each, followed insufficient control and lack of transport equipment (3). For Malaysia, after insufficient control (4), damaged cargo is next with 3, then theft, lack of transport equipment, inability to control temperature and lack of inventory control personnel with 2 each. Singapore has the most responses for lack of inventory control personnel, at 9.

By transaction type, the top priority for domestic purchase/domestic sale type (domestic) and domestic purchase/overseas sale type (export) is lack of inventory control personnel (5 and 3, respectively), while the overseas purchase/domestic sale type (import) has insufficient control (7) as top priority and the overseas purchase/overseas sale type (international) has insufficient control and lack of inventory control personnel as top priorities, with 7 each.

It would appear that lack of inventory control personnel means that local employees' education and training does not keep up with the requirements of middle management on the logistics front line, even though it is common in all the countries for Japanese staff to handle the control departments overall.

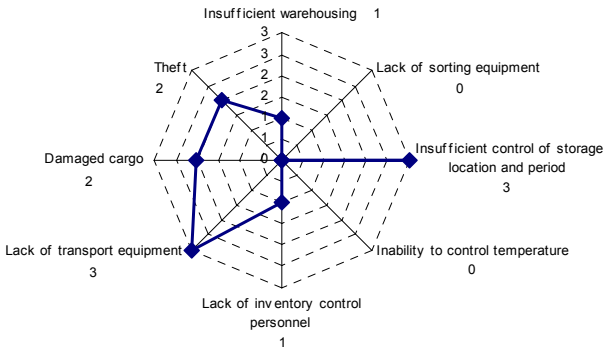
Figure 2-3-9 Storage Services (top priority for all four countries/no. of companies)



(Number responding: 71, parameter: 91)

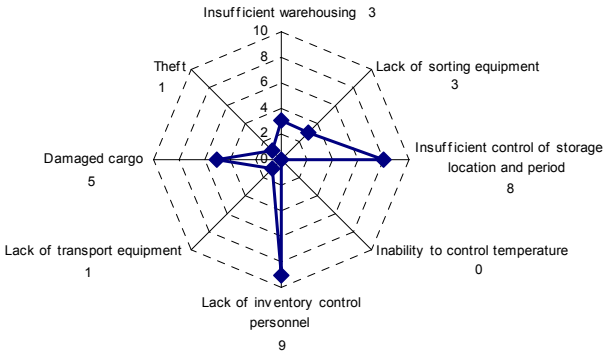
Figure 2-3-10 Storage Services (top priority by country/no. of companies)

Philippines



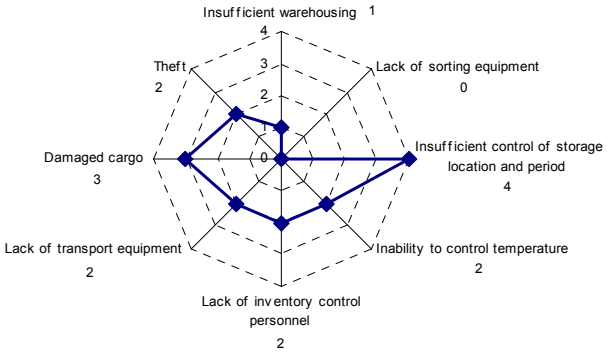
(Number responding: 12, parameter: 18)

Thailand



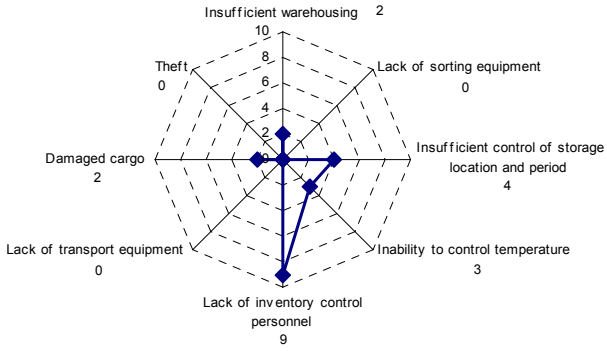
(Number responding: 30, parameter: 30)

Malaysia



(Number responding: 16, parameter: 18)

Singapore



(Number responding: 20, parameter: 25)

4. Logistics Costs

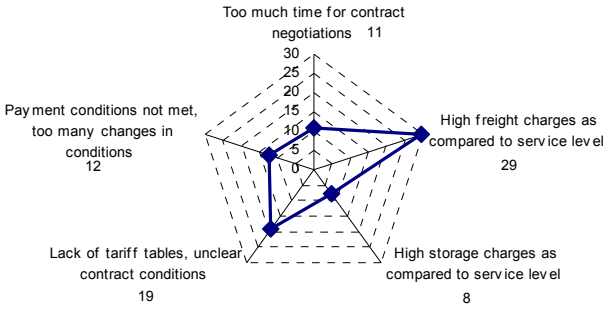
4.1 Logistics Costs

Logistics costs problems were divided into five items. Overall in the four countries the top priority for improvement in relation to logistics costs is “high freight charges as compared to service level,” with 29 responses. Next is “lack of tariff tables, unclear contract conditions” at 19.

By country, there is some deviation as to items with the most responses; for the Philippines and Singapore, “high freight charges as compared to service level” have 6 and 12 responses, respectively, whereas for Thailand “lack of tariff tables, unclear contract conditions” has the most responses, at 12, and Malaysia pointed to the problem of “payment conditions not met, too many changes in conditions,” with 5 responses.

By type of transaction, overseas purchase/overseas sale (international) and overseas purchase/domestic sale (import) types showed the same trend as above, but there were few responses, and these were scattered, for domestic purchase/overseas sale (export) and domestic purchase/domestic sale (domestic). Still, the top priorities for the export type, with 3 responses each, are “lack of tariff tables, unclear contract conditions” and “payment conditions not met, too many changes in conditions,” and for the domestic type, “too much time for contract negotiations” and “high freight charges as compared to service level” are the top priority, with 3 responses each.

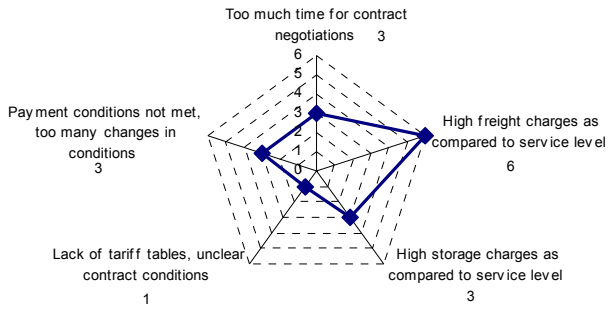
Figure 2-4-1 Logistics Costs (top priority for all four countries/no. of companies)



(Number responding: 79, parameter: 91)

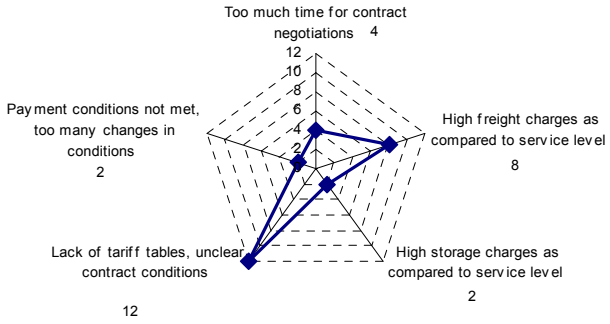
Figure 2-4-2 Logistics Costs (top priority by country/no. of companies)

Philippines



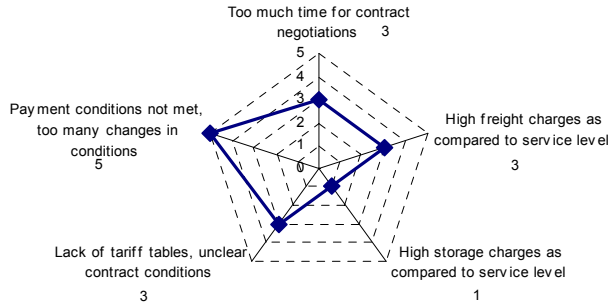
(Number responding: 16, parameter: 18)

Thailand



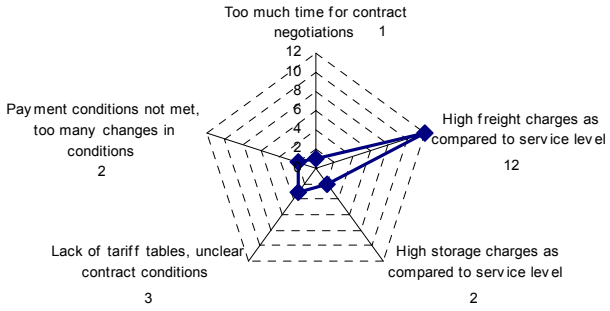
(Number responding: 28, parameter: 30)

Malaysia



(Number responding: 15, parameter: 18)

Singapore



(Number responding: 20, parameter: 25)

4.2 Logistics Cost Comparison

1) Survey subject costs

In looking at logistics costs by payment pattern, self-logistics and paid-for logistics can be observed. Given the limitations on survey implementation, here we look only at paid-for logistics.

Paid-for logistics includes, in addition to transport costs and storage costs, packaging and cargo handling and logistics control costs.

The questionnaire asks only about transport costs and storage costs, but sine the responses are from cargo owners, it must be noted that transport is not only between special facilities, but that there is a mixture, with some including supplemental conditions such as packaging and cargo handling costs and logistics control costs.

2) Cost Comparison

The average costs as seen from the results are as shown below.

Among the four countries, truck costs are relatively high over short distances in the Philippines. An example of a clear trend is that for maritime 20ft-500km, which

shows decreasing costs the larger the scale of the economy and the greater the amount of transport, with costs descending in order from the Philippines to Thailand, Malaysia and Singapore.

Depending on the distance range, domestic and international may be mixed. Most of the 1000km distance range is international transport.

There is no long distance range in Singapore for truck costs; the ranges of 200km and up are cross-border costs to Malaysia, and the same is true for maritime transport.

In comparison, small cargo consolidation costs less in Japan.

Table 2-4-3 Comparison of Costs

Unit: JPY

Transport mode	Conditions	Average	Philippines	Thailand	Malaysia	Singapore
Truck	1) 2 kg - 50 km	3,106	4,097	2,305	3,135	2,885
	2) 100 kg - 50 km	3,864	4,732	3,837	3,432	3,456
	3) 2 tons - 200 km	12,548	10,514	9,898	11,213	18,566
	4) 10 tons - 1000 km	69,582	-	50,045	62,489	96,211
Freight train	1) 10 ton - 600 km	-	-	30,835	-	-
	2) 10 tons - 1000 km	-	-	47,500	21,118	-
	3) 20 tons - 400 km	-	-	55,733	-	-
Maritime	1) 20 ft - 500 km	38,473	48,976	42,621	32,856	29,438
	2) 20 ft - 1000 km	81,105	96,011	70,216	49,273	108,919
Air	1) 2 kg - 600 km	3,512	6,839	2,518	1,757	2,932
	2) 100 kg - 600 km	9,873	13,615	7,343	8,176	10,357
Warehouse	1) 1 ton - 1 month	777	- (see note)	942	654	736

Note 1: Exchange rates (end February 2002, Bank of Japan rates)

- Philippine peso 2.135
- Thai bath 2.691
- Malaysian ringgit 30.168
- Singapore dollar 67.77
- US dollar 117.75

The peso, baht and ringgit were c based on the Bank of Japan's Singapore dollar figures.

Note 2: Some responses that used the wrong unit or appears to be mistaken were eliminated or corrected.

Note 3: The warehouse costs for the Philippines is the average of three responses, and at JPY 5165 is markedly high in comparison to the other countries. It is possible that this refers not to commercial warehouses but to facilities that are rented and used as the companies' own warehouses.

Table 2-4-4 Cost Comparison with Japan

Unit: JPY

Transport mode	Conditions	Philippines	Thailand	Malaysia	Singapore	Japan
Truck	1) 2 kg - 50 km	4,097	2,305	3,135	2,885	800
	2) 100 kg - 50 km	4,732	3,837	3,432	3,456	1,460
	3) 2 tons - 200 km	10,514	9,898	11,213	18,566	22,000
	4) 10 tons - 1000 km	-	50,045	62,489	96,211	210,000
Freight train	1) 10 ton - 600 km	-	30,835	-	-	70,000
	2) 10 tons - 1000 km	-	47,500	21,118	-	104,000
	3) 20 tons - 400 km	-	55,733	-	-	104,000
Maritime	1) 20 ft - 500 km	48,976	42,621	32,856	29,438	33,000
	2) 20 ft - 1000 km	96,011	70,216	49,273	108,919	90,000
Air	1) 2 kg - 600 km	6,839	2,518	1,757	2,932	1,000
	2) 100 kg - 600 km	13,615	7,343	8,176	10,357	9,500
Warehouse	1) 1 ton - 1 month	- (see note)	942	654	736	1,000

Note 1: Exchange rates (end February 2002, Bank of Japan rates)

- Philippine peso 2.135
- Thai bath 2.691
- Malaysian ringgit 30.168
- Singapore dollar 67.77
- US dollar 117.75

The peso, baht and ringgit were corrected relatively based on the Bank of Japan's Singapore dollar figures.

Note 2: Some responses that used the wrong unit or appeared to be in error were eliminated or corrected.

Note 3: The warehouse costs for the Philippines is the average of three responses, and at JPY 5165 is markedly high in comparison to the other countries. It is possible that this refers not to commercial warehouses but to facilities that are rented and used as the companies' own warehouses.

The transport costs and warehouse costs in the different countries as compared to Japan are as shown in Figure 2-4-4. In particular, in all of the surveyed countries, the market is not mature with respect to home delivery-type transport that involves consolidation of small cargos. Transport of small cargos over short distances also is chartered, so there are big differences between the transport costs for 2 kg, 50 km and 100 kg, 50 km. As a result, the transport costs for urban home delivery-type transport of small cargos is higher than Japan in all the countries. For purposes of comparison, according to the results of a domestic/external price difference study, the transport costs for 2 kg, 50 km even in England, Germany and France are from 1.6 to 1.7 times higher than those in Japan, reflecting the differences in population and industrial location density.

Here, the following types of factors that define cost differences have a major effect.

<1> Transport density

If there are large amounts of cargo that can be consolidated for transport over short distances, then transport costs for even small amounts of different cargos are less, while they are higher when transport density is low and transport is by vehicle over long distances. In principle, the surveyed countries do not have consolidated transport.

<2> Bulk transport of large quantities

There are significant scale merits involved in using ocean-going as opposed to domestic vessels, as the transport capacity of ocean-going ships is 15 times larger.

For domestic vessels, the freight charges (40ft container) for a 4,000 D/W vessel with transport capacity of about 200 (20ft containers) are about JPY 1,770,000 (Conference freight) (1,000 km Tokyo - Tomakomai), whereas for an ocean-going vessels, the freight charges (40ft container) for a 40,000 D/W vessel with transport capacity of about 3,000 (20ft containers) is about JPY 300,000 (Conference freight) (9,000 km, Yokoyama - West Coast).

For domestic transport, there is no demand for a maritime transport service using large ships of ocean-going size to transport large amounts at one time.

<3> Exchange rate differences

When the yen is strong, the gap between domestic and overseas prices widens, and shrinks when the yen is weak. Labor costs are a high percentage of transport costs, and the difference in labor costs has a significant effect.

<4> Systematic differences

There is not as much difference between crew ratios as there is between transport capacities between ocean-going and domestic vessels. In addition, normally the crew on domestic vessels are of the same nationality as the country of the vessel, but for international maritime transport, less expensive foreign crew can be used, resulting in lower labor costs.

Also, another factor that contributes significantly to the difference in transport costs between domestic and international transport is differences in taxation, such as domestic consumption tax on fuel and the like.

<5> Peak characteristics

Indirect operating costs and fixed costs are generated on a year-round basis, so costs can be set low per transport unit for customers for which transport demand can be equalized over the year, while they rise when shipments are concentrated only in a certain period.

Table 2-4-5 Number of Cases and Dispersion for Cost Comparison Data

Units: JPY, no. of cases

		Philippines			Thailand		
Transport mode	Conditions	Average value	No. of cases	Max/min value	Average value	No. of cases	Max/min value
Truck	1) 2 kg - 50 km	4,097	7	3.4	2,305	19	27.4
	2) 100 kg - 50 km	4,732	8	1.7	3,837	19	16.3
	3) 2 tons - 200 km	10,514	10	2.9	9,898	19	25.0
	4) 10 tons - 1000 km	-	-	-	50,045	16	18.0
Freight train	1) 10 ton - 600 km	-	-	-	30,835	3	3.4
	2) 10 tons - 1000 km	-	-	-	47,500	5	5.7
	3) 20 tons - 400 km	-	-	-	55,733	3	4.2
Maritime	1) 20 ft - 500 km	48,976	7	9.8	42,621	3	3.0
	2) 20 ft - 1000 km	96,011	4	1.6	70,216	3	6.1
Air	1) 2 kg - 600 km	6,839	6	13.0	2,518	7	22.1
	2) 100 kg - 600 km	13,615	6	25.5	7,343	6	6.4
Warehouse	1) 1 ton - 1 month	- (see note)	3	2.0	942	9	25.0

		Malaysia			Singapore		
Transport mode	Conditions	Average value	No. of cases	Max/min value	Average value	No. of cases	Max/min value
Truck	1) 2 kg - 50 km	3,135	12	14.7	2,885	12	4.7
	2) 100 kg - 50 km	3,432	12	7.1	3,456	12	2.4
	3) 2 tons - 200 km	11,213	10	9.0	18,566	6	14.0
	4) 10 tons - 1000 km	62,489	8	7.5	96,211	4	4.3
Freight train	1) 10 ton - 600 km	-	-	-	-	-	-
	2) 10 tons - 1000 km	21,118	1	-	-	-	-
	3) 20 tons - 400 km	-	-	-	-	-	-
Maritime	1) 20 ft - 500 km	32,856	4	1.8	29,438	2	1.5
	2) 20 ft - 1000 km	49,273	5	4.3	108,919	2	2.1
Air	1) 2 kg - 600 km	1,757	4	3.3	2,932	5	5.6
	2) 100 kg - 600 km	8,176	4	7.2	10,357	5	5.0
Warehouse	1) 1 ton - 1 month	654	6	12.0	736	10	10.0

Note 1: Exchange rates (end February 2002, Bank of Japan rates)

- Philippine peso 2.135
- Thai baht 2.691
- Malaysian ringgit 30.168
- Singapore dollar 67.77
- US dollar 117.75

The peso, baht and ringgit were corrected relatively based on the Bank of Japan's Singapore dollar figures.

Note 2: Some responses that used the wrong unit or appears to be mistaken were eliminated or corrected.

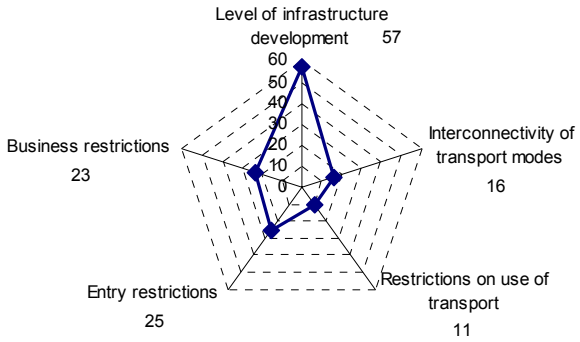
Note 3: The warehouse costs for the Philippines is the average of three responses, and at JPY 5,165 is markedly high in comparison to the other countries. It is possible that this refers not to commercial warehouses but to facilities that are rented and used as the companies' own warehouses.

5. Logistics Infrastructure

With regard to logistics infrastructure, the figures for logistics companies were combined with those for goods owners, and both hardware and software aspects were tallied. The results show that the first priority in the four countries overall is the level of infrastructure development, at 57, followed by entry restrictions at 25, and business restrictions at 23, showing that the strongest need continues to be promotion of physical infrastructure development. There is a difference on this point, not in Singapore, but in Malaysia, where the highest priority is entry restrictions, at 11, followed by level of infrastructure development at 9.

Nonetheless, the differences in evaluation between the responses from Singapore and those from other countries are large, because in Singapore, the evaluation centers on international airports and ports, while the domestic rail network is well developed and the distances are short, so the level of satisfaction with the social infrastructure is high. It must be kept in mind that the evaluations below are for cases in which upgrading is desired.

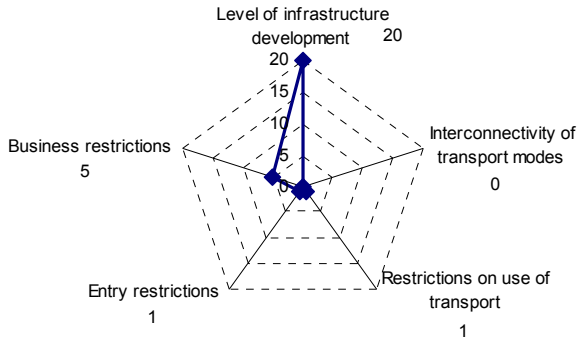
Figure 2-5-1 Logistics Infrastructure
(top priority for all four countries/no. of companies)



(Number responding: 132, parameter: 164)

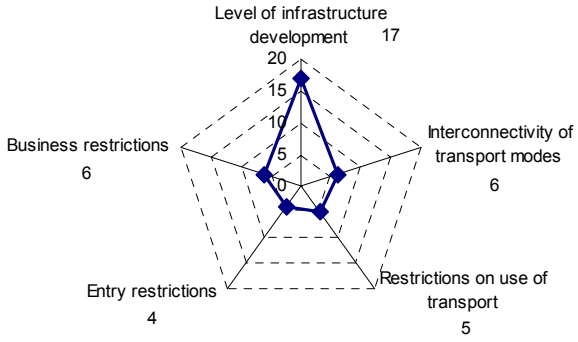
Figure 2-5-2 Logistics Infrastructure (top priority by country/no. of companies)

Philippines



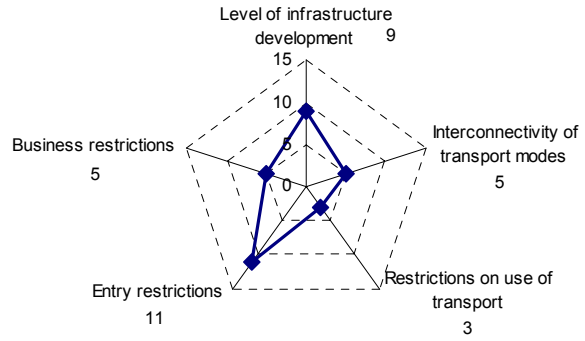
(Number responding: 27, parameter: 31)

Thailand



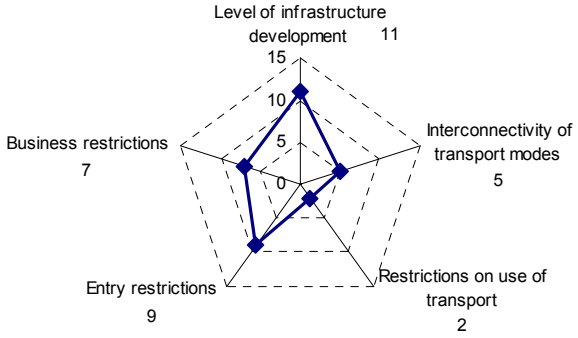
(Number responding: 38, parameter: 42)

Malaysia



(Number responding: 33, parameter: 37)

Singapore



(Number responding: 34, parameter: 54)

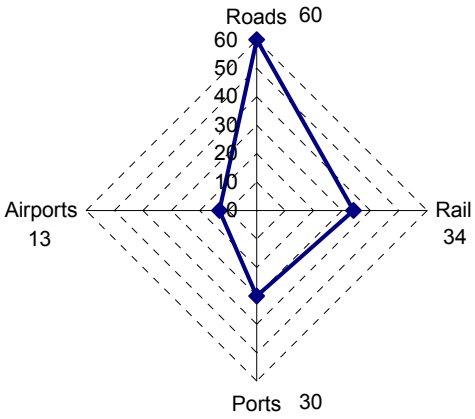
5.1 Level of Infrastructure Development

With regard to level of infrastructure development, looking at the order of priorities for the four countries overall by means of transport shows road transport with 60, reflecting its high share, while rail is second at 34 and ports are third at 30.

By country, road transport is first in the Philippines and Thailand, but in Malaysia ports are first, at 13, with rail second at 11. Because Singapore's infrastructure is already highly developed, it is likely that what is demanded in terms of "development level" differs from other countries, but currently unimproved railways are at the top with 16.

Also, in terms of transaction type, although roads (7) are top priority for the overseas purchase/overseas sale (international) type, ports and rail, in second place at 6 each, are nearly the same.

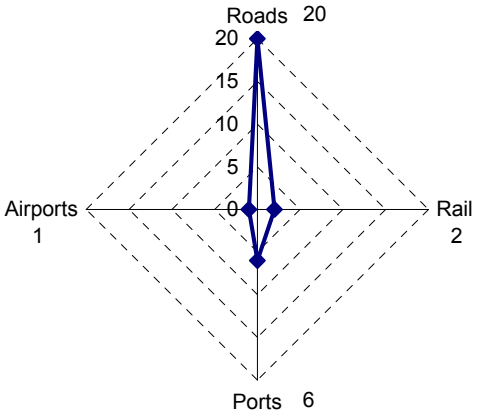
Figure 2-5-3 Level of Infrastructure Development (top priority for all four countries/no. of companies)



(Number responding: 137; parameter: 164)

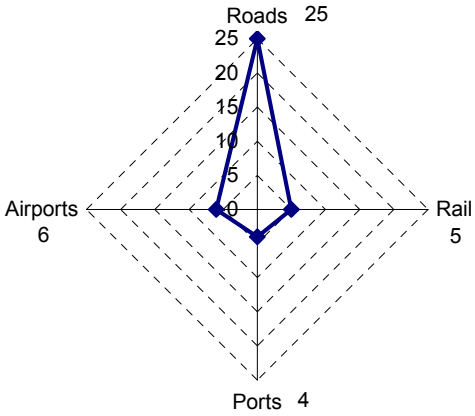
Figure 2-5-4 Level of Infrastructure Development (top priority by country/no. of companies)

Philippines



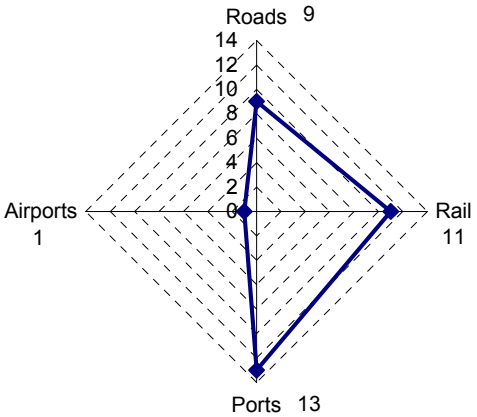
(Number responding: 29; parameter: 31)

Thailand



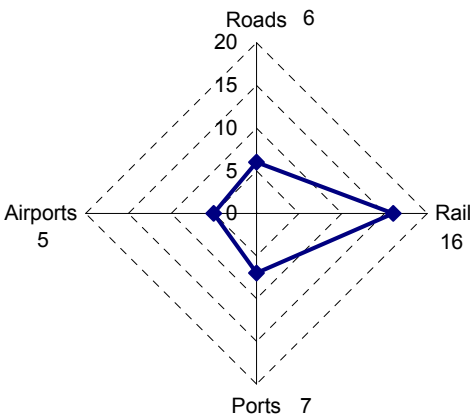
(Number responding: 40; parameter: 42)

Malaysia



(Number responding: 34; parameter: 37)

Singapore



(Number responding: 34; parameter: 54)

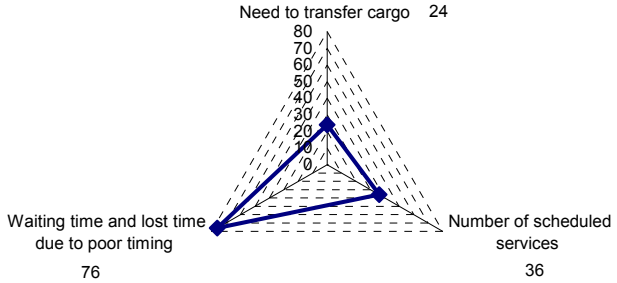
5.2 Interconnectivity of transport modes

The top priority for the four countries overall in terms of interconnectivity of transport modes such as ports and roads, rail and roads, etc. is “waiting time and lost time due to poor timing,” at 76.

By country, the Philippines and Thailand follow the overall trend, but Malaysia has two top priorities, “waiting time and lost time due to poor timing” at 15 and “number of scheduled services” at 14. This is thought to reflect problems with rail freight transport.

By transaction type, for the domestic purchase/domestic sale (domestic) type, “waiting time and lost time due to poor timing” and “number of scheduled services” were tied for top priority, at 4 each.

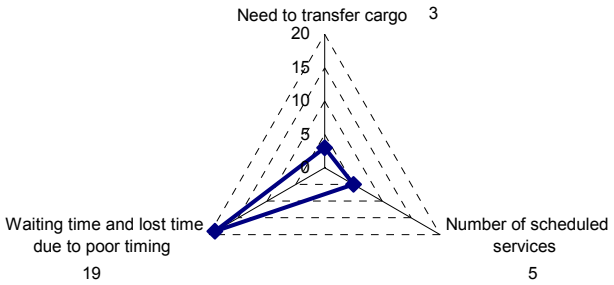
Figure 2-5-5 Interconnectivity of transport modes (top priority for all four countries/no. of companies)



(Number responding: 136; parameter: 164)

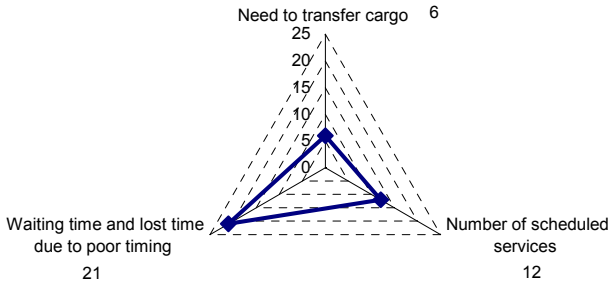
Figure 2-5-6 Interconnectivity of transport modes (top priority by country/no. of companies)

Philippines



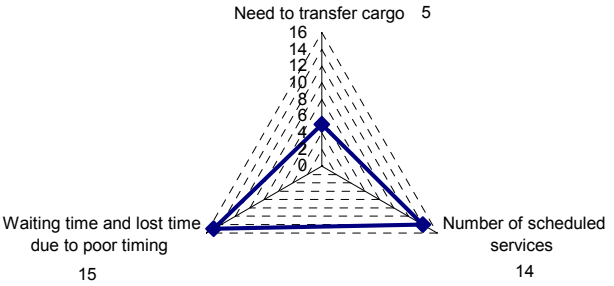
(Number responding: 27; parameter: 31)

Thailand



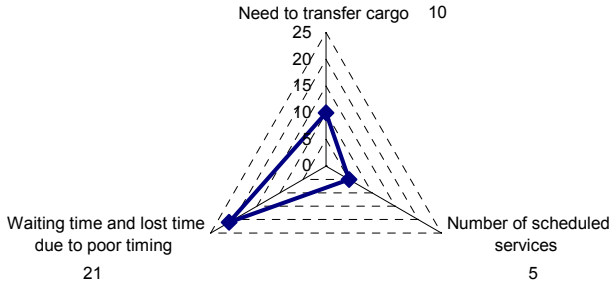
(Number responding: 39; parameter: 42)

Malaysia



(Number responding: 34; parameter: 37)

Singapore



(Number responding: 36; parameter: 54)

5.3 Restrictions on use of transport

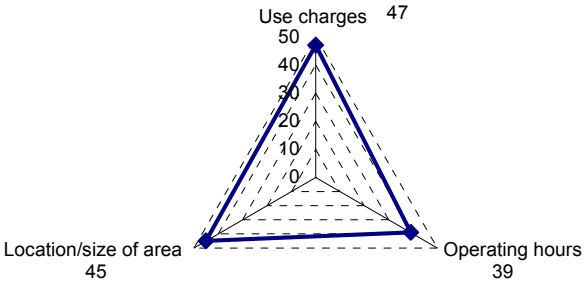
The top priority with regard to restrictions on use of transport for the four countries overall is use charges, at 47, followed by location/size of area at 45 and operating hours at 39.

There are big differences among the countries with regard to these points, with operating hours in first place for the Philippines and Thailand (12 and 18, respectively), and use charges in first place for Malaysia and Singapore (15 and 23, respectively).

There also are differences among transaction types, with the domestic purchase/domestic sale (domestic) and domestic purchase/overseas sale (export) types pointing to operating hours (6 each), and the overseas purchase/overseas sale (international) type pointing to use charges and location/size of area (9 each). The responses were varied for the overseas purchase/domestic sale (import) type, and there was no clear top priority.

Here, it is thought that restrictions on “operating hours” refers to restrictions on cargo handling caused by the small number of scheduled rail services, in addition to customs operating hours.

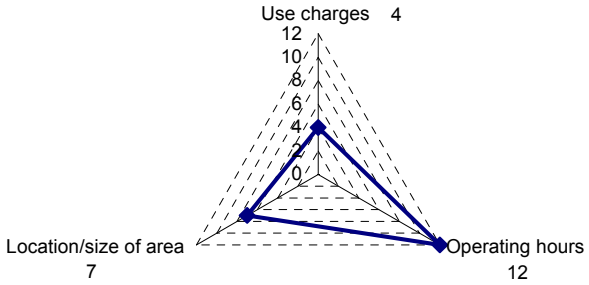
Figure 2-5-7 Restrictions on use of transport (top priority for all four countries/no. of companies)



(Number responding: 131; parameter: 164)

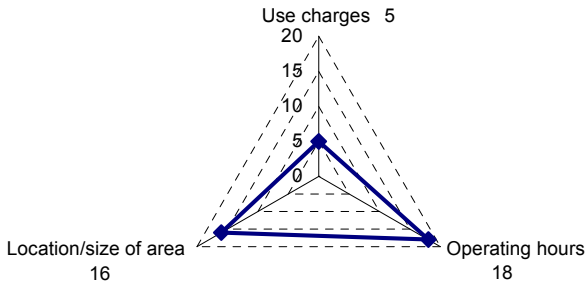
Figure 2-5-8 Restrictions on use of transport (top priority by country/no. of companies)

Philippines



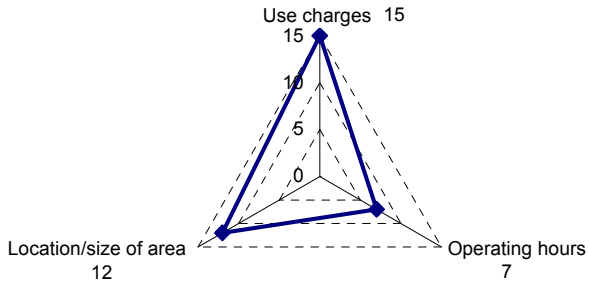
(Number responding: 23; parameter: 31)

Thailand



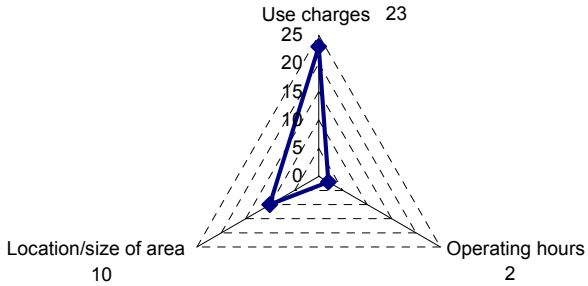
(Number responding: 39; parameter: 42)

Malaysia



(Number responding: 34; parameter: 37)

Singapore



(Number responding: 35; parameter: 54)

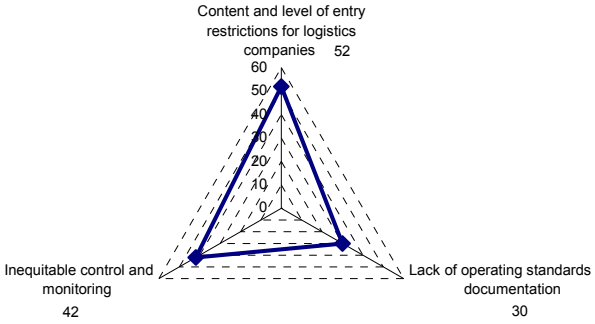
5.4 Entry restrictions

The responses are varied for the four countries overall with regard to the issue of entry restrictions, with "content and level of entry restrictions for logistics companies" in first place, at 52, followed by "inequitable control and monitoring" at 42, and "lack of operating standards and documentation" at 30.

By country, the Philippines and Thailand point to "inequitable control and monitoring" (10 and 15, respectively), Malaysia and Singapore give top priority to "content and level of entry restrictions for logistics companies" (18 and 14, respectively). Singapore's dissatisfaction with entry restrictions is thought to be mainly related to the legal regulations relating to import/export certification, etc., rather than to entry restrictions on domestic logistics companies like the other countries.

By transaction type, the top priority for the domestic purchase/domestic sale (domestic) type is "content and level of entry restrictions for logistics companies," at 6, reflecting the entry restrictions for the domestic transport business, while for the overseas purchase/domestic sale (import) type, the top priority is "inequitable control and monitoring" at 11. Responses were varied for the overseas purchase/overseas sale (international) type, with no clear top priority, but it is thought that the answer "content and level of entry restrictions for logistics companies," at 7, relates to international cargo feeder transport. The responses for the domestic purchase/overseas sale (export) type also were dispersed, with not much difference among them, but "content and level of entry restrictions for logistics companies" is top priority with 4.

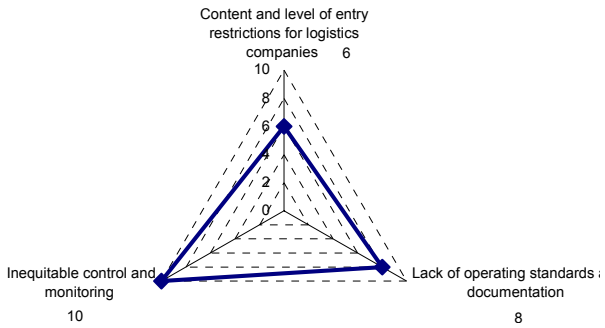
Figure 2-5-9 Entry Restrictions (top priority for all four countries/no. of companies)



(Number responding: 124; parameter: 164)

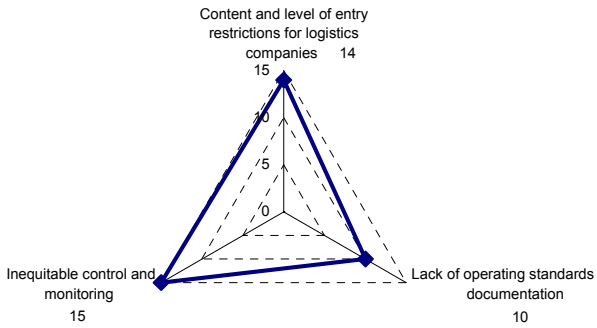
Figure 2-5-10 Entry Restrictions (top priority by country/no. of companies)

Philippines



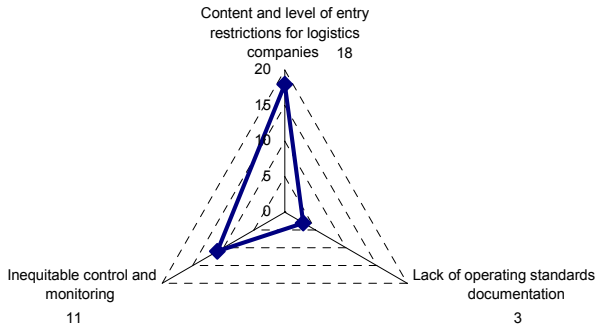
(Number responding: 24; parameter: 31)

Thailand



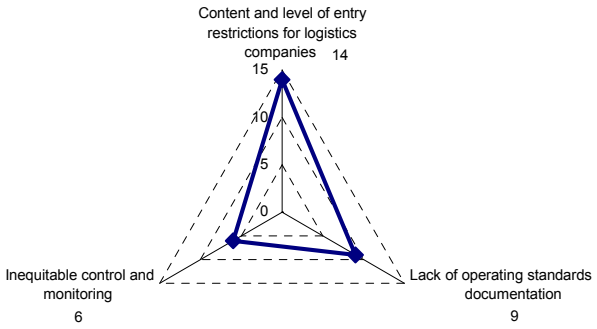
(Number responding: 39; parameter: 42)

Malaysia



(Number responding: 32; parameter: 37)

Singapore



(Number responding: 29; parameter: 54)

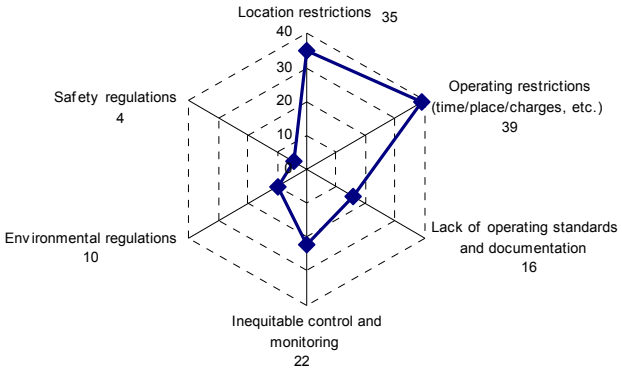
5.5 Business Restrictions

The top priority with regard to business restrictions for the four countries overall is "operating restrictions (time/place/charges, etc.)" at 39, followed by "location restrictions" at 35 and "inequitable control and monitoring" at 22.

By country, the Philippines has "inequitable control and monitoring" and "operating restrictions" as top priorities, with 7 each, while Thailand has about the same priority for "location restrictions," "operating restrictions" and "inequitable control and monitoring," at 11 and 10, respectively. Malaysia points to "operating restrictions," with 13, while Singapore cites "location restrictions," at 13.

By transaction type, "location restrictions" are top priority for the domestic purchase/domestic sale (domestic) type, at 5, while "operating restrictions" are top priority for the overseas purchase/overseas sale (international) type, at 11. The overseas purchase/domestic sale (import) type top priorities are "operating restrictions" and "inequitable control and monitoring," at 6 each. "Location restrictions" and "inequitable control and monitoring" are almost the same for the domestic purchase/overseas sale (export) type, at 4 and 3, respectively.

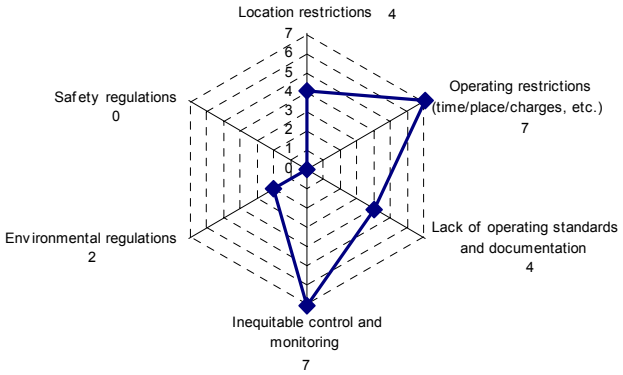
Figure 2-5-11 Business Restrictions (top priority for all four countries/no. of companies)



(Number responding: 126; parameter: 164)

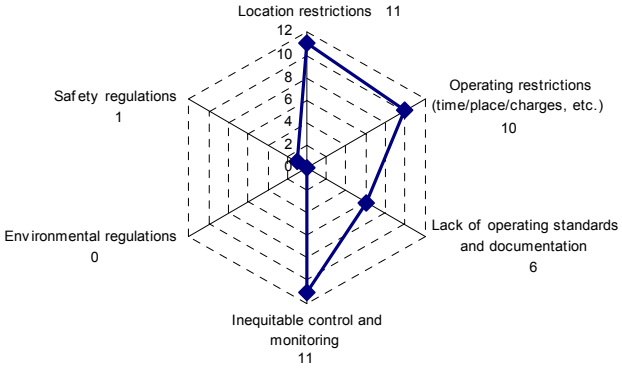
Figure 2-5-12 Business Restrictions (top priority by country/no. of companies)

Philippines



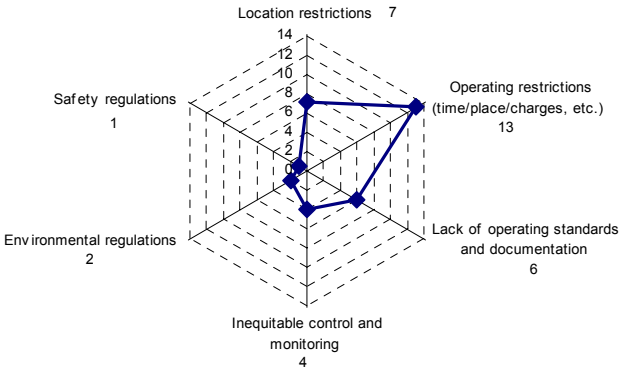
(Number responding: 24; parameter: 31)

Thailand



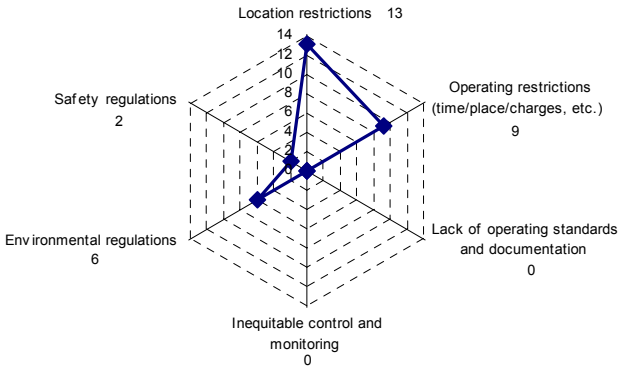
(Number responding: 39; parameter: 42)

Malaysia



(Number responding: 33; parameter: 37)

Singapore



(Number responding: 30; parameter: 54)

6. Overall Assessment

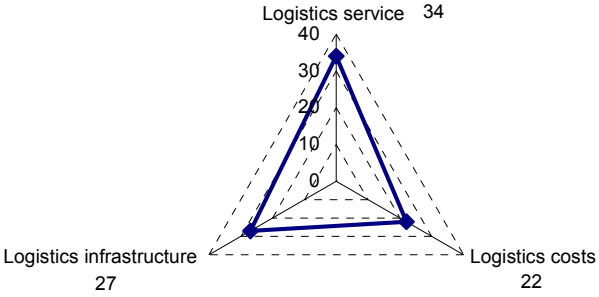
In order to arrive at an understanding of the urgency and priorities for the issue of logistics structure in general, the categories of service, cost and infrastructure were first compared. Goods owners were asked to reply to all questions for logistics service, logistics cost and logistics infrastructure, while logistics companies were asked to evaluate only questions on logistics infrastructure.

The results show that the top priority for improvement in all four countries is logistics service, at 34, followed by logistics infrastructure at 27 and logistics costs at 22. This evaluation clearly is linked to the level of per capita GDP; for example, when looking at the component ratios for numbers of responses, the need for logistics infrastructure development is highest in the Philippines, and falls in order from Thailand, Malaysia to Singapore. The need for improved logistics service is highest in Singapore, followed in order by Malaysia, Thailand and the Philippines.

By transaction type, the demand for logistics service is highest for the domestic purchase/domestic sale (domestic), overseas purchase/domestic sale (import) type and overseas purchase, overseas sale (international) types (5, 12 and 14 respectively; however for the import type logistics infrastructure also stands at 12). Only the domestic purchase/overseas sale (export) type has logistics cost in first place, at 5.

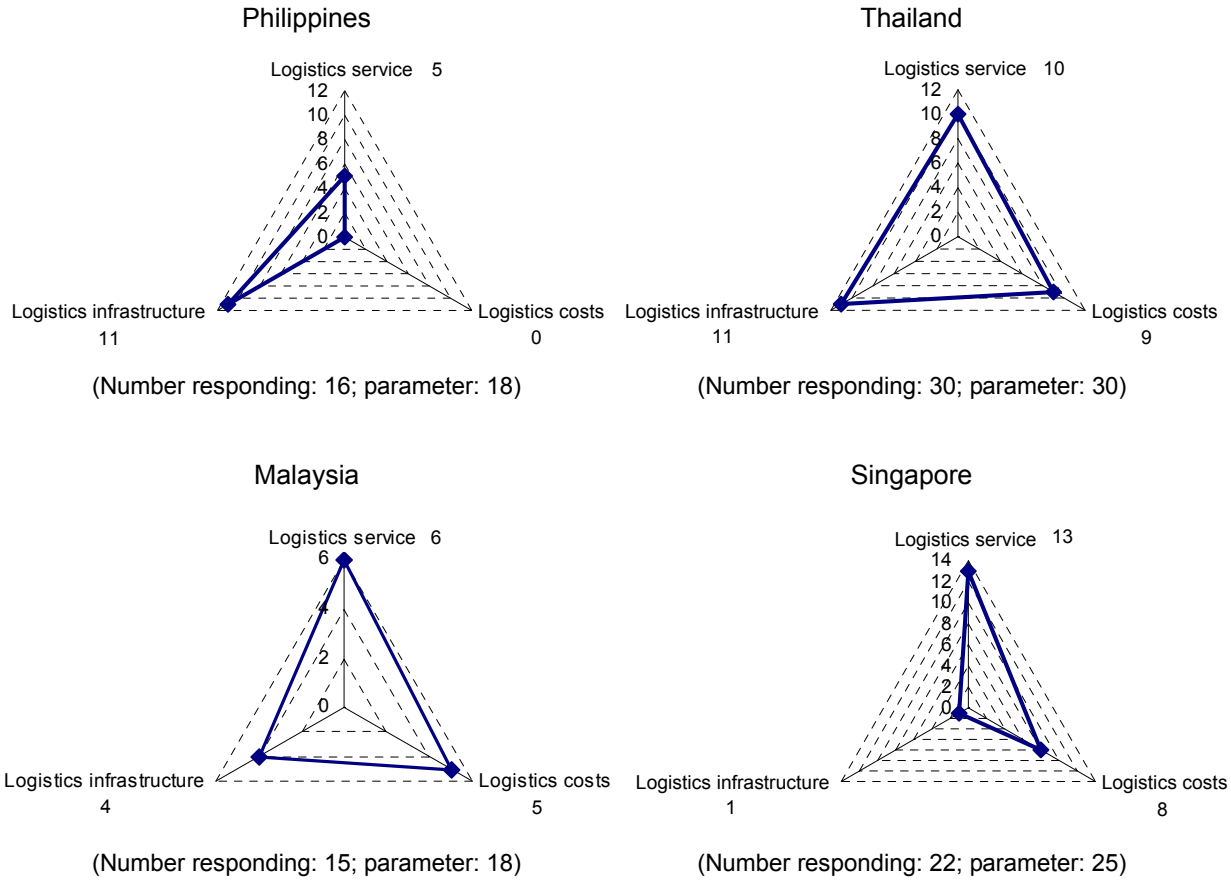
Overall, the reason for the low priority of logistics costs would appear to be that many of the respondents are Japanese companies and thus they are comparing with the level in Japan, and it also reflects the fact that low costs are a factor in expanding abroad.

Figure 2-6-1 Overall Assessment (top priority for all four countries/no. of companies)



(Number responding: 83; parameter: 91)

Figure 2-6-2 Overall Assessment (top priority by country/no. of companies)



The survey by questionnaire was carried out in order to complement the results of the hearing survey, which had a limited number of respondents due to time constraints. As a result, in spite of the short time involved in this overseas survey, 164 responses were obtained and a high level of concern with respect to this issue was evidenced.

The survey results show that logistics service, rather than logistics infrastructure, in particular "information," has the highest priority. The issues pointed out here are tracing control for cargo and products, the lack of stable, high-speed communications lines, which relates closely to the hard logistics infrastructure, and delays in ICT.

Other issues often noted were damaged cargo and inspection errors.

The results of the hearing carried out in order to gain knowledge on the causes, background and substance of these concrete problems are organized below, and combined with the systematic realities, measures required for structural improvements are summarized.

