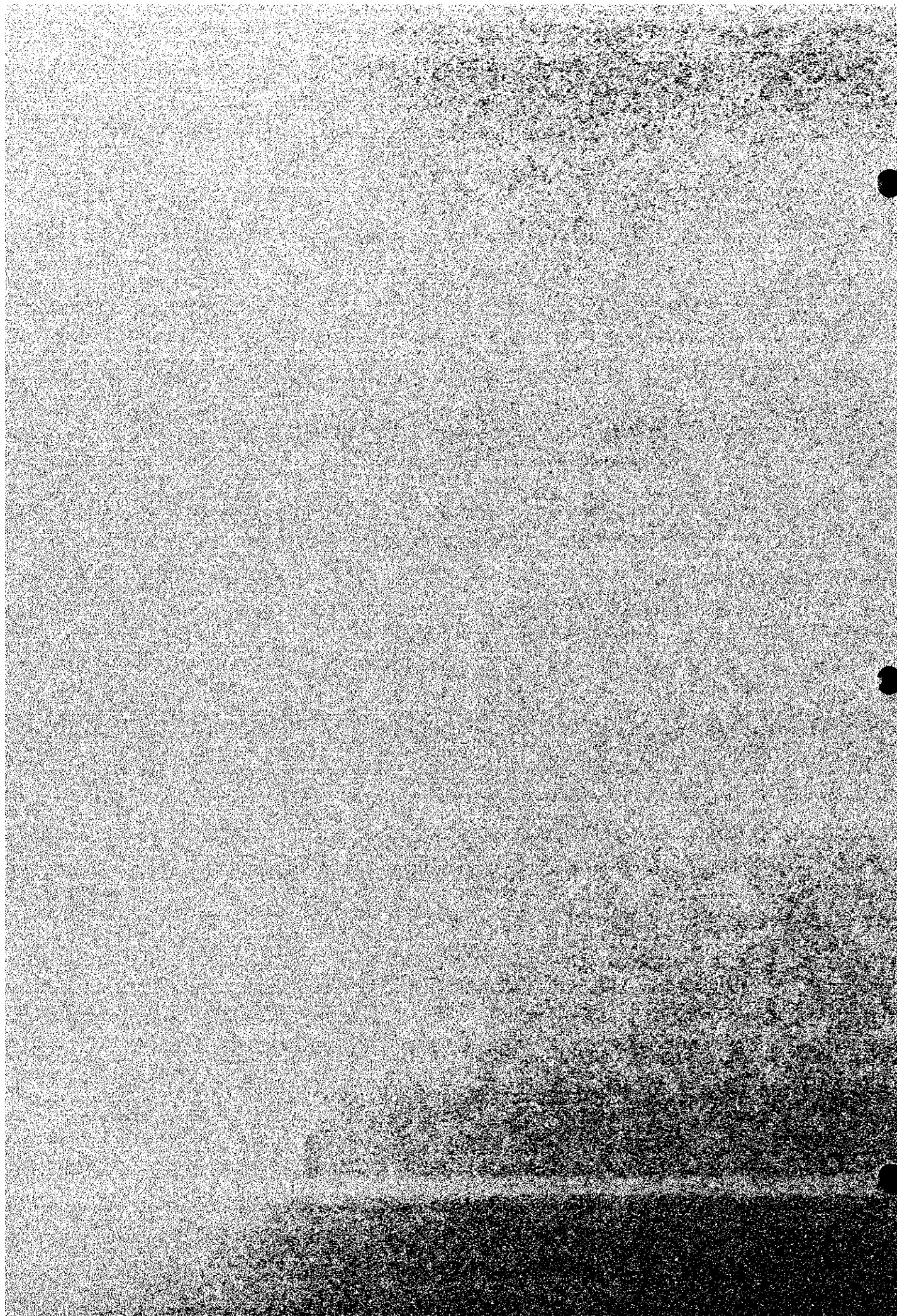


ANNEX-VI

**PRIMARY SUPPLIERS OF ELECTRICAL AND
ELECTRONIC PARTS/COMPONENTS**



Annex VI PRIMARY SUPPLIERS OF ELECTRICAL AND ELECTRONIC PARTS/COMPONENTS (1/7)
(ALPHABETICAL ORDERING)

No.	Supplier	Estab.	Employee	Ownership	Products
1	A & P Polypack	1963	800	TH:100	Plastic parts
2	A.C. Rubber	n.a.	n.a.	n.a.	Rubber
3	Amagasaki Pipe	1992	22	JP:100	Pipes (Copper)
4	Asian Packing Service (Thailand)	n.a.	n.a.	n.a.	Packing Box
5	Asian Stanley International	1989	451	TH: 17.5 JP: 72.5 US: 10	Light Emitting Diodes (LED)
6	Bangbon Plastic Group	1987	216	TH:100	Plastic Parts
7	Bangkok Coil Center	1989	60	TH: 49 JP: 51	Cut Sheets/Slit Coils
8	Bangkok Metal Industry	1989	170	TH: 64 JP: 36	Copper Tubes
9	Bangkok Metropolis Motor	1980	412	TH:100	Aluminium Diecast
10	Bangkok Pacific Steel	1981	150	TH:100	Silicon Sheet
11	Bel Thai Industry	1988	33	TH: 75 BLG:25	Printed Circuit Board
12	C.M. Industry	1980	343	TH:100	Plastic Injection Parts
13	Century Inoac	1988	103	TH: 51 JP: 49	Plastic Parts (electrical)
14	Century Plastic	1973	350	TH:100	Plastic Parts
15	Chai Mongkol	n.a.	n.a.	n.a.	Plastic Parts
16	Chai Yosh	n.a.	n.a.	n.a.	Press Parts
17	Chaiyaboon Brothers	n.a.	n.a.	n.a.	Solvent
18	Chat Chawan Electronics	n.a.	n.a.	n.a.	Electronic
19	Chavin Metal Products	n.a.	n.a.	n.a.	Metal Parts
20	Cheval Electronic Enclosures	1980	250	TH: 18 US: 32 SGP:40	Press parts
21	Chinsan Electronic Industrial (Thailand)	1991	105	TH: 15 TIW:85	Capacitors (aluminum electrolytic)
22	Choke Chai Lohakit	n.a.	n.a.	n.a.	Aluminium Diecast
23	Daikin Industries (Thailand)	1991	600	JP:100	Compressors for Air Conditioners
24	Daisin Kogyo	1984	1,000	TH: 51 JP: 49	Aluminum Die-casting Parts
25	Delta Electronic (Thailand)	1988	1,480	TIW:100	Power Supply (switching)

Source: JICA Team's Compilation of directories and information from electrical and electronic set makers.

Annex VI PRIMARY SUPPLIERS OF ELECTRICAL AND ELECTRONIC PARTS/COMPONENTS (2/7)
(ALPHABETICAL ORDERING)

No.	Supplier	Estab.	Employee	Ownership	Products
26	Draco PCB	1990	227	TH:60.62 TIW:39.38	Printed Circuit Board
27	Dry Color Hoechst	1976	246	GE:100	Pigment
28	Eason Paint Products	1985	60	TH:100	Surface Treatment Paint
29	Elec & Eltek (Thailand)	1988	2,200	HK:100	Printed Circuit Boards
30	Far-Sights Electric	1989	210	TH: 70 n.a.: 30	Cord, Plug Cord
31	Farsight Development	n.a.	n.a.	n.a.	Wire
32	FDK Tatung (Thailand)	1992	63	JP: 50 China:50	Ferrite Core
33	Fec (Thai)	1988	233	FRA:100	Printed Circuit Boards
34	Ferko Industrial	1964	150	TH:100	Styrofoam (packaging), Insulator Materials
35	Focus Plastic	n.a.	n.a.	n.a.	Plastic Parts
36	Four Lucky Industries	n.a.	n.a.	n.a.	Plastic
37	Fujikura (Thailand)	1985	2,800	JP:100	Cord Assy (Key board, Interface)
38	Fujitsu (Thailand)	1989	3,399	JP:100	Metal Shaft
39	Furukawa Metal (Thailand)	1991	262	TH: 51 JP: 49	Copper Tube
40	Hana Microelectronics	1978	1,418	TH:100	Capasitors/Printed Board
41	Heng Charoen Metal	1973	250	TH:100	Fan Components
42	Hexa Color (Thailand)	1989	70	TH: 51 JP: 49	Pigment
43	Hitachi Bangkok Cable	1982	230	TH: 62 JP: 38	Lead Wire
44	Intertools	1978	80	TH:100	Mould & Dies
45	Johoku (Thailand)	1988	146	TH: 6 JP: 94	Wiring Harnesses
46	K.H. Metal Products	1991	250	TH:100	Press Parts
47	K.I. Enterprise	n.a.	n.a.	n.a.	Felt
48	K.L. Container	n.a.	n.a.	n.a.	Packing Box
49	Kohnam Electric	n.a.	100	n.a.	Cord, Wireharness
50	Kojo Part Standard	n.a.	n.a.	n.a.	Press Parts

Annex VI. PRIMARY SUPPLIERS OF ELECTRICAL AND ELECTRONIC PARTS/COMPONENTS (3/7)
(ALPHABETICAL ORDERING)

No.	Supplier	Estab.	Employee	Ownership	Products
51	Krathum Ban Casting	n.a.	n.a.	n.a.	Balancing Weight (Metal)
52	Krungtep Union Mfg.	1979	340	TH: 75 JP: 25	Plastic Parts
53	KSS Electronics (Thailand)	n.a.	n.a.	n.a.	Electronic
54	Kulthorn Kirby	1982	920	TH:100	Compressor for Refrigerator
55	KV Electronic Assembly	1990	52	TH:100	Coil/Transformers
56	Kyoto Electric Wire	1989	96	TH: 25 JP: 75	Power Cord(electric), Printed Circuit Boards
57	Lacasa	n.a.	n.a.	n.a.	Speaker Box
58	Leng Power	1988	20	TH:100	Assembly
59	Lib Seang Limited Partnership	n.a.	n.a.	n.a.	Varnish Tube
60	Maporn Plastic	n.a.	n.a.	n.a.	Plastic Bag
61	Matsushita Refrigeration	1989	300	JP:100	Evaporators/Thermostats
62	Mitsui Toatsu Chemical	n.a.	7	n.a.	Premix, Refnate
63	Mizuki Electronics (Thailand)	1987	2,156	JP:100	VCR Components
64	Molex (Thailand)	1989	139	TH: 7 US: 93	Wire
65	Monsanto Chemicals Thailand	1987	40	TH: 26 US: 74	Resin
66	MSC PR Two Limited	1983	135	TH:100	Rubber
67	Muramoto Electron	1987	2,800	TH: 29 JP: 71	Press Parts for Magnetron, Shadow Mask & IMS for TV
68	Murata Electronics (Thailand)	1989	1,800	JP:100	Piezoelectric Buzzer, Ceramic Capacitor
69	Nakagawa East South Asia	1989	298	TH: 20 JP: 80	Switches
70	Nan Dee Intertrade	n.a.	n.a.	n.a.	Stapler
71	National Thai	1961	2,070	TH: 51 JP: 49	Speaker
72	NEC Technologies (Thailand)	1988	176	JP:100	Tantalum Chip Capacitor, Subminiature Relays
73	Nicom Jackol	n.a.	n.a.	n.a.	Spacer (Metal)
74	Nikkei Siam Aluminium	1969	395	TH: 22 JP: 75	Aluminium
75	Nippon Paint (Thailand)	1968	505	TH: 60 JP: 40	Surface Treatment Paint

**Annex VI PRIMARY SUPPLIERS OF ELECTRICAL AND ELECTRONIC PARTS/COMPONENTS (4/7)
(ALPHABETICAL ORDERING)**

No.	Supplier	Estab.	Employee	Ownership	Products
76	Nissei Trading (Thailand)	1983	43	TH: 51 LAOS:25 JP: 24	Plastic Dip Moulding/Coating
77	OKI (Thailand)	1991	241	JP:100	IC/Opto Electronic Device
78	OTG Thai	1988	136	JP:100	Ferrite Core
79	P & Son Industry	1970	147	TH: 99 TIW: 1	Surface Treatment Painting
80	P.P. Complex	n.a.	n.a.	n.a.	Stapler
81	Paibul ECP	n.a.	n.a.	n.a.	Assembly
82	Paibul Packaging	n.a.	n.a.	n.a.	Metal Panel Sheet
83	Paibul Printing	n.a.	n.a.	n.a.	Metal Name Plate/ Metal Panel Sheet
84	Paisan Loha	n.a.	n.a.	n.a.	Stand
85	Pan Industrial Supply	1987	18	TH:100	Cable Harness (radio/audio), Printed Circuit Board Assembly
86	Panasonic Welding Industry (Thailand)	1991	55	TH: 51 JP: 49	Printed Circuit Board Assembly
87	Pelmec Thai	1985	618	TH:100	Ball Bearing
88	Phien Charoen	n.a.	n.a.	n.a.	Plastic Parts
89	Posa Plastic	n.a.	n.a.	n.a.	Injection Wage
90	Printed Circuit Technology (Thailand)	1989	500	JP:100	Printed Circuit Boards, Switch, IC
91	Raymond (Thai) Membrane Switches	n.a.	n.a.	n.a.	Sticker
92	Rehau	1972	118	GE:100	Gasket, Magnet
93	Rohm Apollo Electronics	1988	750	JP:100	Transistor
94	S & T Enterprise	n.a.	n.a.	n.a.	Metal Materials
95	S. Saha Tara Thailand	1977	165	TH:100	Sticker
96	S. Sguan Patana	n.a.	n.a.	n.a.	Tape
97	S.C.H. Electric	n.a.	n.a.	n.a.	AC Cord
98	Saha Charoen Metal Plastic	n.a.	n.a.	n.a.	Injection Wage
99	Saha Tara (Thailand)	1977	165	TH:100	Self-Adhesive Tape, Stickers
100	Saha Union	1979	n.a.	n.a.	Plastic Parts

Annex VI PRIMARY SUPPLIERS OF ELECTRICAL AND ELECTRONIC PARTS/COMPONENTS (5/7)
(ALPHABETICAL ORDERING)

No.	Supplier	Estab.	Employee	Ownership	Products
101	Sang Rung Ruang	n.a.	n.a.	n.a.	Metal Shaft
102	Sanyo Universal Electric	1959	4,644	TH: 51 JP: 49	Refrigerator/Compressors
103	Showa International Trading (S.I.T.)	n.a.	n.a.	n.a.	Connector
104	Siam Compressor Industry	1990	580	TH: 60 JP: 40	Compressors for Air Conditioner
105	Siam Electric & Metal	n.a.	n.a.	n.a.	Press Parts
106	Siam Electric Industry	n.a.	190	n.a.	Magnet Wire
107	Siam Insulation	n.a.	n.a.	n.a.	Foam Packing
108	Siam Steel Service Center	1985	705	TH: 51 JP: 49	Steel
109	Siam Tinplate	1992	246	TH: 60 JP: 40	Tin Plate
110	Sino Thai Yong	n.a.	n.a.	n.a.	Mild Steel/Steel Wire
111	Siri Rung Roj Engineering	n.a.	n.a.	n.a.	Condenser
112	Sony Magnetic Products (Thailand)	1988	566	JP:100	Cassette tapes
113	Sony Semiconductor (Thailand)	1989	216	JP:100	IC
114	Sound & Light Industry	n.a.	n.a.	n.a.	AC Cord
115	Srithai Superware	1963	3,000	TH:100	Injection Wage/Plastic Parts
116	Srithepthai	n.a.	n.a.	n.a.	Resin
117	Sritong	n.a.	n.a.	n.a.	Plastic Parts
118	Sritong Electro Chemical	n.a.	n.a.	n.a.	Aluminum Plate
119	Sritong Electrochemical	n.a.	n.a.	n.a.	Alminum Plate
120	Star Electronic	n.a.	n.a.	n.a.	Speaker
121	Sui Hua	n.a.	n.a.	n.a.	Wooden Case
122	Sum Hitechs	1989	80	TH: 19 JP: 81	IC, Metal Coating (chromium)
123	Sumitomo Electric (Thailand)	n.a.	n.a.	n.a.	Magnet Wire
124	Summit Electronic Components	1988	300	TH:100	VHS head, FDD head
125	Sunny Precision (Thailand)	1989	65	TH: 20 JP: 80	Plastic Pars (electronic)

Annex VI PRIMARY SUPPLIERS OF ELECTRICAL AND ELECTRONIC PARTS/COMPONENTS (6/7)
(ALPHABETICAL ORDERING)

No.	Supplier	Estab.	Employee	Ownership	Products
126	Super Fine Works	n.a.	n.a.	n.a.	Plastic Parts
127	Surapim	n.a.	n.a.	n.a.	Display Box
128	SYK Spare Parts	1967	280	TH:100	Yoke Axle (Metal)
129	T. Krungthai Industry	1965	350	TH:100	Plastic Parts
130	Takahashi Plastics	1988	300	TH: 66 JP: 34	Plastic Injection Parts
131	Tanin Condenser	1977	1,062	TH: 27 JP: 73	Condenser
132	Tanin Hitech	1981	19	TH:100	Attenuators (microwave ovens)
133	Techno Foam	1990	118	TH: 60 JP: 40	Foam Packing
134	Thai Arrow Products	1962/3	10,508	TH: 10 JP: 90	Terminal, Connector
135	Thai Asahi Denki	1989	260	TH: 5 JP: 78 TIW: 17	Resistor
136	Thai Chanathorn Industry	1984	380	TH:100	Magnet
137	Thai Compressor Mfg.	1988	490	TH: 60 JP: 40	Compressors for Air Conditioners
138	Thai Container Industry	n.a.	n.a.	n.a.	Packing Box
139	Thai CRT	1986/89	13,770	TH: 70 JP: 30	CRT
140	Thai Electroplating	n.a.	n.a.	n.a.	Surface Treatment Painting
141	Thai Foam	1963	180	TH:100	EPS Foam Packaging, EPS Foam Sheet
142	Thai Hitachi Enamel Wire	1980	350	TH: 69 JP: 24	Enamel Wire
143	Thai Industrial Parts	1990	100	TH:100	Surface Treatment Painting/ Press parts
144	Thai Kansai Paint	1970	200	TH: 60 JP: 40	Paints & Thinner
145	Thai Kodama	1988	87	TH: 52 JP: 48	Plastic Parts
146	Thai Mitsuwa	1988	380	TH: 55 JP: 45	Cabinet Front Assy for VTR
147	Thai Multicore	1981	35	TH:100	Solder Bar/Wire
148	Thai Polyglass & Chemical	1985	20	TH:100	Plastic Sheet
149	Thai Refrigeration Components	1989	94	TH: 70 JP: 30	Evaporator for Refrigerator
150	Thai Steel Service Center	1981	250	TH: 51 JP: 49	Steel Sheet

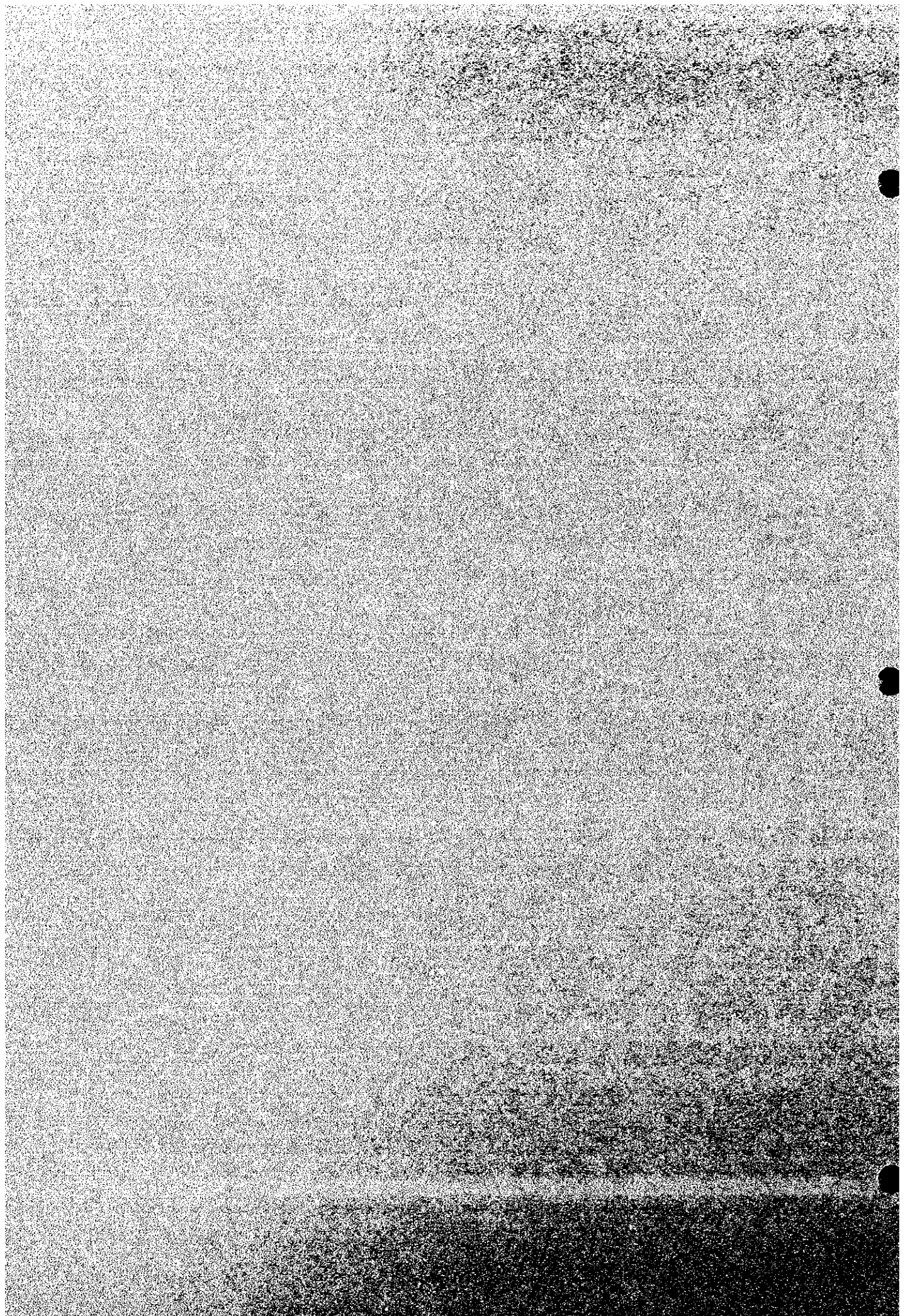
Annex VI PRIMARY SUPPLIERS OF ELECTRICAL AND ELECTRONIC PARTS/COMPONENTS (7/7)
(ALPHABETICAL ORDERING)

No.	Supplier	Estab.	Employee	Ownership	Products
151	Thai Tinplate Mfg.	1958	634	TH: 60 JP: 40	Tin Plate
152	Thai United Plastic Industry	n.a.	n.a.	n.a.	Injection Wage
153	Thai Varodom	n.a.	n.a.	n.a.	Injection Wage
154	Thai Wire & Cable Services	1988	797	TH: 10 JP: 90	Wiring Harnesses (electrical)
155	Thai-Sanei	1987	140	JP:100	Metal Parts for microwave ovens/refrigerators
156	Thep Chai	n.a.	n.a.	n.a.	Plastic Parts
157	Thong Samut	n.a.	n.a.	n.a.	Plastic Shrink Film
158	Thongchai Manufacturing	1988	36	TH:100	Press Parts for Electrical Appliance
159	Toho Foam (Thailand)	1989	135	TH: 62.5 JP: 18.75 SGP:18.75	Foam (EPS for packaging)
160	Tong Heng Long	n.a.	n.a.	n.a.	Stand
161	Toyo Valve Thailand	1990	155	TH: 24 JP: 76	Brass Casting
162	Union Nifco	1988	27	TH: 52 JP: 48	Plastic
163	Union Plastic	1969	120	TH:100	Plastic Parts
164	Unique Plastic	n.a.	n.a.	n.a.	Plastic Bag
165	Universal Trading	n.a.	n.a.	n.a.	Resin
166	V. Brother Industry	n.a.	n.a.	n.a.	Surface Treatment Thinner & Paint
167	Virasak Engineering	1985	25	TH:100	Switching Power Supply, Electronic Thermostat
168	Watana Bhand Panich R.O.P. (Packaging)	n.a.	n.a.	n.a.	Stapler
169	Watana Inter Trade	n.a.	55	n.a.	Aluminium
170	Winson Screen	n.a.	n.a.	n.a.	Color for silk screen
171	Wireforms	1988	80	TH: 65 IND,SGP:35	Springs(precision)/ Press parts
172	World House	n.a.	300	n.a.	Plastic Color
173	World Pigment Chemical	1973	250	TH:100	Plastic Compound
174	Yoni Seri	n.a.	n.a.	n.a.	Terminal
175	3K Plastic	n.a.	n.a.	n.a.	Plastic Parts



ANNEX-VII

**QUESTIONNAIRE TO PARTS/COMPONENTS
SUPPLIERS IN THAILAND**



B. Your Products and Raw Materials

Write five(5) of your products in order of sales amount in 1993. To each product, clarify (B1) the main processing method and (B2) for what the product is used, using a symbol of the following classification:

	Name of products	B.1 (A - K) Processing Method	B.2 (1 - 10) Components/parts of:
1			
2			
3			
4			
5			

B.1 (Processing method)

- | | | |
|-----------------------------------|--------------------------------------|-----------------------------------|
| A. Casting | B. Forging | C. Press/stamping work |
| D. Plastic moulding | E. Rubber moulding | F. Machining |
| G. Heat treatment | H. Surface treatment/Electro plating | |
| I. Glass working | J. Sheet work/welding | |
| K. Assembling of parts/components | | L. Others (specify in the column) |

B.2 (The product is a part/component of:-)

- | | | |
|--|------------------------------------|---------------|
| 1. Passenger cars/Vans | 2. Pick-up trucks/Mini buses | 3. Big trucks |
| 4. Big buses | 5. Motorcycles | 6. Television |
| 7. Video tape recorder (VTR) | 8. Other audio-visual equipment | |
| 9. Electrical home appliances (White products) | | |
| 10. Office automation (OA) equipment | 11. Others (specify in the column) | |

B.3 How do you evaluate competitiveness of your raw materials that you are purchasing?

	<u>Satisfied</u>	<u>Fair</u>	<u>Not satisfied</u>
1. Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Cost	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Others (specify)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C. Your Customers and Market

C.1 Your market in 1993.

1) Your customers

- | | | |
|-----------------------------------|----|-------------------|
| 1. Subcontracting business (OEM) | :(|)% of total sales |
| 2. General market or after-market | :(|)% of total sales |
| 100 % | | |

2) Your market

1. Domestic market : ()% of total sales
 2. Direct export : ()% of total sales (Countries :)
 3. Indirect export : ()% of total sales
 100 %

C.2 Information on your customers

1) Write the name of the top three (3) customers in order of the sales amount in 1993.

1.	Name of Customers	Ownership ¹⁾			Share to Total Sales ()%	No. of Years of Business with Your Company
		A	B	C		
2.		A	B	C	()%	
3.		A	B	C	()%	

Note 1): Clarify the ownership of the customer by (A) the pure domestic, (B) a joint-venture with a foreign investor(s), (C) fully owned by a foreign investor(s).

2) Total number of your customers in 1993: _____ Companies

D. Machinery & Equipment (M & E)

D.1 Write the critical M & E in your factory in order of importance on the production line.

Name	Capacity	Brand/Country	Year of Make
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

D.2 How do you evaluate the modernization level of your M & E when compared with the international level.

1. Modernized enough 2. Medium level 3. Still low

D.3 Is your existing production capacity good enough to cope with market demand?

1. Over capacity 2. Appropriate 3. Short capacity

D.4 Do you have a plan to modernize your existing M & E and/or expand the existing capacity by purchasing new M & E?

1. No plan so far.
2. Yes, we do.

If yes, please answer the following question of 1) and 2).

1) Names of M & E you desire to buy.

	Name	Capacity	Country/Brand	Price
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____

2) When you buy new and modern M & E, what kind of problems do you face?
Choose two (2) answers applicable.

1. Difficulty to get financing sources.
2. High interest rates of loans.
3. Too expensive to buy the M & E.
4. Insufficient market size for installation of the modern M & E.
5. Insufficient information such as catalogues on modern M & E.
6. Lack of capability and knowledge to operate the modern M & E.
7. Others (Specify: _____)

D.5 Do you have interest in buying reconditioned, used or second-hand M & E?

1. Yes
2. No

E. Production Technology

E.1 What is the most serious or frequent complaints that your customers raise to you?
Choose two (2) answers applicable.

1. Quality (low or uneven)
2. Pricing (high)
3. Delivery (delay or inconstant)
4. Production capacity (not enough to meet the demand)
5. Technological capabilities of Development (insufficient)
6. Others (Specify: _____)

E.2 What kind of industrial standards do you usually use? Choose all answers applicable to your company.

1. International standards (ISO, IEC)
2. Foreign standards (Specify: _____)
3. Thai Industrial Standards (TIS)
4. Customer's standards
5. Your own company's standards

6. None
 7. Others (Specify: _____)

E.3 At present, do you have any technical assistance from foreign based companies or a foreign consultant(s)? And, what kind of technical assistance do you desire in the near future? Choose one or more answers from following:

(Note) The "Foreign based companies" include companies in overseas joint-venture companies in Thailand and companies in Thailand owned by foreign investors.

	<u>Present</u>	<u>Future</u>		<u>Country</u>
1.	<input type="checkbox"/>	<input type="checkbox"/>	Production licence	(_____)
2.	<input type="checkbox"/>	<input type="checkbox"/>	Training in Thailand	(_____)
3.	<input type="checkbox"/>	<input type="checkbox"/>	Training in Overseas	(_____)
4.	<input type="checkbox"/>	<input type="checkbox"/>	In-house advisory services	(_____)
5.	<input type="checkbox"/>	<input type="checkbox"/>	Extension advisory services	(_____)
6.	<input type="checkbox"/>	<input type="checkbox"/>	Advisory services as required	(_____)
7.	<input type="checkbox"/>	<input type="checkbox"/>	Others(Specify: _____)	(_____)

E.4 If you anticipate such technical assistance/cooperation from overseas in the future, what kind of relation with the foreign investors do you desire?

1. Joint-Venture
 2. An onerous contract (Licensing with Royalty, Training, etc)
 3. Others (Specify: _____)

E.5 In order to compete in the international market and with imported goods, continuous efforts to modernize your production technology are indispensable. To this end, the advanced technologies shall be efficiently transferred to your company from overseas. What kind of measures or supports do you desire for the technology transfer from overseas. Choose three (3) answers applicable from the following forgetting your cost burden required for those services.

1. Seminar for introduction of new/modern technologies
 2. Workshops for production technologies easily applicable to your factory
 3. Training of key personnel in Overseas.
 4. Training of key personnel in training centers of Thailand
 5. Extension advisory services by a foreign consultant(s) periodically visiting your factory as per a schedule for 1 to 2 years.
 6. Permanent advisory services by a foreign consultant(s) being stationed at your factory for 1 to 2 years.
 7. Acquiring of licence with a training program.
 8. Technological information supply by publications
 9. Strengthening of various technical institutions and centers e.g. MIDI, TISI,, laboratories and universities.
 10. Others (Specify: _____)

E.6 Do you desire the governmental or public support for the above technology transfer (E.5) in terms of financing and/or institutional set-up.

1. Yes 2. No

F. Quality Control

F.1 With which of the following is your factory equipped for quality control. Choose all answers applicable to your company.

1. Organizational establishment by a department/division specialized for inspection and/or QC.
2. Employment of a full-time inspector(s).
3. Inspection by operators/workers themselves on the production line.
4. Finished goods inspection system.
5. Semi-finished goods inspection system between a process and another.
6. Introduction of a QC circle(s).
7. Proposal system or movement for employees to improve the production management.

G. Manpower

G.1 What is the educational background of your employees by grade of education? Write in the number of personnel.

	<u>Technical</u>	<u>Non-technical</u>	<u>Total</u>
1. Diploma & above	_____	_____	_____
2. High school & Vocational certificate	_____	_____	_____
3. Primary & Lower secondary	_____	_____	_____
Total	_____	_____	_____

G.2 How long is the average stay of workers in your factory? _____ years

G.3 How old is the average age of workers in your factory? _____ years old

G.4 What is the problems faced by your company in manpower recruitment and management? Choose two (2) answers applicable to your company?

1. Difficulty to recruit highly educated persons, namely diploma and above.
2. Difficulty in training and education in the company.
3. Lack of discipline and moral for their jobs.
4. Job-hopping (They tend to easily move to another company.)
5. Labour dispute or strikes.
6. Increase in salaries and wages.
7. Others (Specify: _____)

G.5 How do you train or educate your employees? Choose all items applicable to your company.

1. On-the-job training in your factory or customer's factories.
2. By participation to seminars and workshops.
3. By a scheduled training course in schools and centers.
4. Dispatch to overseas.
5. Others (Specify: _____)

H. Financing

H.1 What is your financing sources and a use of them?

	<u>Name of financiers</u>	<u>a) Type</u>	<u>b) S/L</u>	<u>c) Rate</u>	<u>d) Use</u>
1.	_____	_____	_____	_____%	_____
2.	_____	_____	_____	_____%	_____
3.	_____	_____	_____	_____%	_____
4.	_____	_____	_____	_____%	_____

Use the following symbols for filling columns a) to d).

- a) Type (A) State banks
(B) Commercial banks
(C) Non-bank financial corporations
(D) Special institutional credit line provided by the government
(E) Informal financing (family, friends, relatives, groups for credit)
(F) From overseas (off shore)
(G) Others (specify in the column)
- b) S/L S : Short-term loan (repay within on year)
L : Long-term loan (repay within more than one year)
- c) Rate Write the interest rate per year.
- d) Use WC: Use for working capital (purchasing raw materials, bridge loan etc.)
FX: Use for purchasing fixed assets including machinery, equipment land and factory buildings.
Others : Specify in the column.

H.2 At present, do you need loans or credits?

1. Yes 2. No

If yes, answer the following:

Approx. amount : _____ Bahts

For what do you use them? Choose all applicable to you.

1. Working capital
2. Purchase of machinery and equipment
3. Purchase of inspection/measuring equipment
4. Land acquisition
5. Factory building construction
6. Expenditure for R & D
7. Relocation of the factory site
8. Purchase of waste treatment facilities
9. Others (Specify: _____)

H.3 What are your difficulties or problems do you face in borrowing loans from banks or corporations? Choose two(2) answers from the following.

1. Insufficient mortgage or collateral to meet your loan requirement
2. The complicated procedure, the requirements for documentation and long time requirement for evaluation of you application
3. Lack of official credit guarantee system to compliment the insufficient mortgage
4. Banks' passive attitude to finance small- and medium-scale enterprises
5. Banks don't finance the full amount of loan requirements, for example 80% of total requirements is a limit of the loan.
6. Others (Specify: _____)

H.4 Do you desire for the government to introduce a special institutional credit facilities especially for small- and medium-scale enterprises or supporting industries providing them with a reasonable interest rate, a sufficient grace period and a long repayment term?

1. Yes 2. No

H.5 What is the reasonable interest rate of loans for your company in view of cost burden? Write the maximum rate you can accept.

_____ %

H.6 In some countries, there are special leasing programs for small- and medium-scale enterprises as well as supporting industries, being financially supported by governments. Under those leasing programs, small-scale enterprises can lease modern machinery and equipment avoiding the difficulties in borrowing loans as mentioned in H.3. Are you interested in such special leasing program if it is newly introduced in the country.

1. Yes, interested 2. No interest

I. Linkage and Subcontracting

I.1 At present, what kind of assistance/cooperation do you get from your customers? What do you anticipate in the future? Choose all items applicable to your company.

<u>Present</u>	<u>Future</u>	<u>Items</u>
1. <input type="checkbox"/>	11. <input type="checkbox"/>	1) <u>Technical assistance</u> * Licensing * Advisory services * Drawings/Design * R. & D
2. <input type="checkbox"/>	12. <input type="checkbox"/>	2) <u>Financial support</u> * Equity participation * Credit
3. <input type="checkbox"/>	13. <input type="checkbox"/>	3) <u>Managerial assistance</u> * Advisory services * Dispatch of management

4. 14.

- 4) Training
* Training in Thailand
* Training in overseas

5. 15.

- 5) Supplies
* Materials/parts
* Die & mould
* Facilities
* Consignment contract

6. 16.

- 6) Others
Specify: _____

I.2 Do you want to expand or penetrate the subcontract business for selling your products?

1. Yes 2. No interest 3. Sufficient so far

I.3 What are the difficulties you face in expanding or penetrating the subcontracting business as a supplier? Choose two (2) answers most applicable to your company from the following.

1. Lack of companies' information on potential customers.
2. They have already established a business group so that penetration is not easy.
3. Lack of competitiveness of our products in terms of quality, cost and delivery.
4. Insufficient production capacity to cope with big amount of order.
5. We don't know how to contact with the potential customers.
6. Lack of capability in sales activities.
7. Others (Specify: _____)

I.4 Do you know BUILD System for match-making of BOI?

1. Yes 2. No

I.5 Do you want to register your company in the BUILD?

1. Yes 2. No 3. Already registered

I.6 Are you looking for a Joint-venture partner(s)?

1. Yes (Country: _____ Product: _____)
2. No

J. Export Promotion of Your Products

J.1 If you are exporting your products, what export incentives provided by government are you using? e.g. export finance, refund of duties, investment incentive, etc..

Specify: (_____)

J.2 Do you desire to begin or expand direct exports?

1. No idea, so far.
2. Yes.

If yes, answer the following:

Destination (Countries): _____
Anticipated Amount: (_____) % of total sales

J.3 What are your difficulties in promotion of exportation?

Choose all answers applicable to you.

1. Marketing (Market info., How to get inquiries)
2. Procedures for the external trade (Correspondence, Documentation, Shipping)
3. Contract (Legal matters, Guarantee)
4. Severe requirements of buyers in quality, cost and delivery.
5. Insufficient production capacity to meet lots of orders
6. Unstable order (spot-order)
7. Financial problem (Lack of working capital for exportation)
8. Intangible barriers in language and business custom, etc.
9. Others (Specify: _____)

J.4 The government of Thailand has a policy to promote exports of parts/components as CKD. What support do you request to the government?
Specify your request taking into account referring to J.3 too.

K. Managing Director (MD) or Owner of the Company

K.1 Background or the previous job of the MD

1. Dispatch from a foreign company
2. Employee/Management/Partner of this company
3. Successor to your families or a relative
4. Spin-out from a foreign based company in Thailand
5. Spin-out from a domestic company
6. Spin-out from a governmental or public institution
7. Others (Specify: _____)

K.2 1. Age of the MD: _____ years old
2. Career in this business: _____ years

K.3 Expertise of the MD

1. Technical/Production
2. Sales
3. Administration/Accounting

4. Legal
 5. Others (Specify: _____)

K.4 Educational background of the MD

1. Overseas university/college
 2. Thai Diploma or above
 3. Thai high school or vocational certificate
 4. Thai primary or lower secondary
 5. Others (Specify: _____)

K.5 Do you desire to participate in an educational program for entrepreneurship, if any, to learn the advancing managerial technologies?

1. Yes 2. No

L. Possibility of Relocation

L.1 Do you have a plan to relocate your factory to a new site?

1. Yes 2. No 3. Under consideration

L.2 If you relocate your factory site, where is the new location?

District _____ Province _____
 Zone I Zone II Zone III

L.3 What is the reason to relocate?

1. Better access to your parent company or main clients
 2. More investment incentives
 3. Expansion of the production site
 4. In accordance with the government's guideline for relocation
 5. Better infrastructures (i.e. traffic, transportation, industrial water, telecommunications, labor force)
 6. Others (Specify: _____)

M. Support of the Government

M.1 Do you know the name and its functions of the following technical institutions? Please check what you know.

1. MIDI (Metal Working and Machinery Industries)
 2. TISI (Thai Industrial Standard Institute)
 3. ISTTC (Industrial Standardization, Testing and Training Center)
 4. TMDPC (Thailand Management Development and Productivity Center)
 5. TISTR (Thailand Institute of Science and Technological Research)
 6. TPA (Technological Promotion Association (Thai-Japan))
 7. TTC (Technology Transfer Center)

M.2 Have you ever used any technical, marketing, training and managerial institutions, such as the above institutions, Universities, private laboratories and so on? If yes, please specify.

<u>Name of Institutions</u>	<u>Objectives</u>
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

M.3 What kind of problems have you faced in using such institutions? Choose two (2) answers applicable to you.

1. Lack of information about the services & functions they provide.
2. Complicated procedures for application
3. Time consuming for the services (Not quick services)
4. Those institutions are far in location
5. Obsolete equipment and technologies in the institutions
6. Expensive in service charges
7. Others (Specify: _____)

M.4 Freely describe your requests to the government of Thailand.

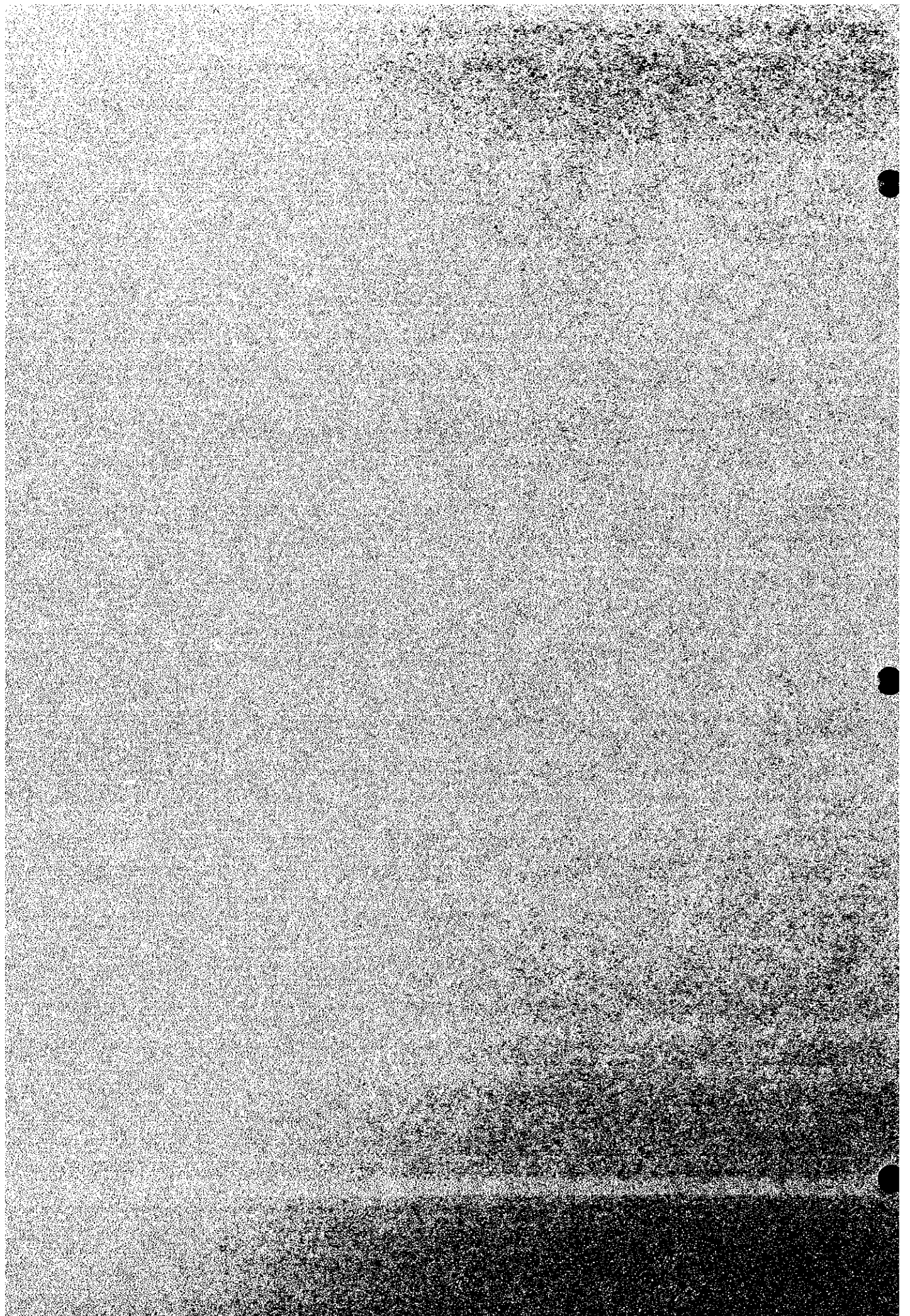
N. Overall Grading by Seriousness

N.1 We have raised various questions in the item A to the item M in this questionnaire. What is the most urgent or serious matters for modernization or growth of your company from an overall point of view? Please choose three (3) items from the following and put 1, 2, 3 in the parenthesis in the order of seriousness and urgent needs.

1. () Modernization of machinery and equipment
2. () Transfer and modernization of production technology
3. () Up-grading of quality control technology
4. () Up-grading of capabilities of manpower
5. () Financial support by institutional credit facilities
6. () Promotion of match-making and subcontracting business
7. () Promotion of direct export of parts/components
8. () Education of management/entrepreneurs
9. () Strengthening of various technical institutions
10. () Others (Specify: _____)

ANNEX-VIII

**QUESTIONNAIRE TO PARTS/COMPONENTS
SUPPLIERS IN JAPAN**



QUESTIONNAIRE

Please fill in the blank or make check marks where needed to reply.

1. About your company:

1.1 General aspects

- 1) Company name _____
- 2) Year founded: 19 _____ 3) Paid-in capital: ¥ _____
- 4) No. of employees: _____ 5) Listed/unlisted on the Stock Exchange

1.2 Please identify the five most important products of your company, in terms of sales, in sequence starting with the most important. If products are parts, please indicate below the type of part and type of processing.

(Type of parts)

- ① Passenger cars ② Pick-up trucks ③ Large trucks ④ Large buses
- ⑤ Motorcycles ⑥ TVs ⑦ VTRs ⑧ Audio equipment ⑨ "White goods" appliances
- ⑩ Office automation & telecommunications equipment
- ⑪ Others (Write in space provided below)

(Type of Processing)

- A. Casting B. Forging C. Presswork D. Plastics moulding
- E. Rubber moulding F. Machining G. Heat processing
- H. Plating and surface treatment I. Glass processing
- J. Sheet working/welding K. Parts assembly
- L. Others (Write in space provided below)

	Products of your company	Type of parts 1) - 10)	Major processing methods, A - K
1)			
2)			
3)			
4)			
5)			

1.3 Please give the approximate share in sales of automobile parts and electrical and electronic parts.

Automobile parts: About _____% Electric & Electronic parts: About _____%

1.4 What kind of customers buy your products (multiple answer)

- 1) Ship directly to the REM market (including shipment of replacement parts)
- 2) Supply directly to assemblers
- 3) Supply to primary subcontractors
- 4) Supply to secondary subcontractors
- 5) Others (Specify: _____
_____)

1.5 Approximately how many companies buy products from you?

_____ companies

2. Impact on your company of internationalization of assembly industry

Japan's assembly industry, including companies that assemble automobiles and others that assemble appliances, are increasing their assembly operations outside of Japan, and are increasing their purchasing of parts outside of Japan. In connection with that, Japanese parts makers are expanding their own overseas operation. Conversely, direct exports of finished products from Japan, and parts procurement in Japan, are declining. Please indicate in the spaces provided below what impact these changes have had on your company.

[Note: There also has been influence of the recession in Japan, but please try to reply only from the standpoint of the above internationalization of Japanese companies.]

2.1 What was the impact on the value of your company's shipments by the reduction in the direct exportation of finished parts from the Japanese assembly industry?

- Great reduction slight reduction no impact
 slight increase great increase

2.2 What was the impact on your company's shipments of products by the increased overseas production by the assembly industry?

- Great reduction slight reduction no impact
 slight increase great increase

2.3 What was the impact on the value of shipments of your company's products by the strategical changes to overseas procurement of parts in the assembly industry?

- Great reduction slight reduction no impact
 slight increase great increase

2.4 Do you have any cases where your clients had previously bought your products but recently substituted imported ones for them?

- Yes, for many products Yes, for some products
 No, for few products

2.5 To which country would the change be made.(multiple answer where applicable)

- ① Malaysia ② Thailand ③ Indonesia ④ Philippines ⑤ Singapore
⑥ Taiwan ⑦ S. Korea ⑧ China ⑨ Hong Kong ⑩ North America
⑪ Europe ⑫ Others

3. Export business

3.1 Has your company done any direct exports up to the present time?

Yes No

If "Yes", please answer the following question.

3.2 Please provide your response below, regarding major export items and destination and their trend for the past 3 years.

	Export destinations	Trend for the past 3		
years				
<u>Major export items</u>	<u>(Countries; multiple answers)</u>	<u>(Overall exports)</u>		
_____	_____	<input type="checkbox"/> Increased	<input type="checkbox"/> Fell	<input type="checkbox"/> No change
_____	_____	<input type="checkbox"/> Increased	<input type="checkbox"/> Fell	<input type="checkbox"/> No change
_____	_____	<input type="checkbox"/> Increased	<input type="checkbox"/> Fell	<input type="checkbox"/> No change

Export destination

- ① Malaysia ② Thailand ③ Indonesia ④ Philippines ⑤ Singapore
⑥ Taiwan ⑦ S. Korea ⑧ China ⑨ Hong Kong ⑩ North America
⑪ Europe ⑫ Others (Specify)

3.3 Is your company presently importing parts?

Yes No

If "Yes", please reply to the following question.

3.4 Please provide your response below, regarding major import sources and the trend for the past 3 years.

years	Import destinations	Trend for the past 3
<u>Major import items</u>	<u>(Countries; multiple answers)</u>	<u>(Overall exports)</u>
_____	_____	<input type="checkbox"/> Increased <input type="checkbox"/> Fell <input type="checkbox"/> No change
_____	_____	<input type="checkbox"/> Increased <input type="checkbox"/> Fell <input type="checkbox"/> No change
_____	_____	<input type="checkbox"/> Increased <input type="checkbox"/> Fell <input type="checkbox"/> No change

Import destinations

- | |
|--|
| ① Malaysia ② Thailand ③ Indonesia ④ Philippines ⑤ Singapore
⑥ Taiwan ⑦ S. Korea ⑧ China ⑨ Hong Kong ⑩ North America
⑪ Europe ⑫ Others (Specify) |
|--|

4. Overseas investment

4.1 Does the company have experience in investing overseas? If "Yes", please respond to 2) below.

- 1) No experience
- 2) Have experience (please give details below)

Country	Share of equity (%)	Item produced	Year overseas activities began

4.2 Please tell about plans for future investment overseas.

4.2.1 Does the company have plans at present for investment overseas? Select one of the following.

- 1) Have concrete plans now.
- 2) Plans are not in concrete form, but company does have intention to invest overseas.
- 3) At this time, no plans are being considered.

4.2.2 Regarding general plans for overseas investment, please respond to the following. Even if final decisions have not been made, please give an idea of what can be expected.

- 1) Production items _____
- 2) Country where investment is expected to be made (in case of more than one country, answer may be in the form of a regional designation, such as ASEAN).

- 3) Desired share of equity
 100% More than 50% Less than 50%

- 4) Method of obtaining machinery and equipment
 New purchase Used machines, equipment
 Combination of new and used

5) Does your company intend to own its own production site and/or physical plant or building?

- We want to own our land and building to lay them out freely.
- We want to own a production space in a factory building which is designed for selling.
- At least at the outset, it would be good enough to lease a production space in a factory building.
- Other (Specify: _____)

5. Reasons, motivation and problems of investing overseas

5.1 Select the suitable items from the following, with regard to the reason and motivation for investing overseas.

- 1) Decline in price competitiveness caused by appreciation of the yen.

- 2) High cost of land, labor, utilities etc. in Japan.
- 3) Hollowing-out in the domestic market caused by overseas expansion or shift by major customers (or parent company).
- 4) Respond to requests of parent or related companies to expand oversea.
- 5) One part of an aggressive program for international business.
- 6) Other (Specify: _____)

5.2 Where is your company seeking buyers of its products (markets) for products made overseas?

- 1) Mostly in the industrialized countries.
- 2) Third countries, by means of exports (including instances of keeping overseas markets originally supplied from the company's Japan base).
- 3) Japan, by importing the products to keep markets there.
- 4) Other (Specify: _____)

5.3 On what does your company lay emphasis when selecting a location for overseas investment? From the following, select the five most important items and place a check mark in the corresponding boxes. When Thailand and/or Malaysia is being considered, how would those countries be evaluated? Give you rating to as many items as you can.

- Relatively superior × Worrisome
 △ In between "relatively superior" and "worrisome"

Please pick 5	<u>Important Items</u>	Use above symbols for evaluation	
		<u>Thailand</u>	<u>Malaysia</u>
1)	<input type="checkbox"/> Is there a buyer or a market in the country where investment is to be made?	<input type="checkbox"/>	<input type="checkbox"/>
2)	<input type="checkbox"/> Can engineers and technical workers required be hired?	<input type="checkbox"/>	<input type="checkbox"/>
3)	<input type="checkbox"/> Is the labor there competitive in terms of quality and cost?	<input type="checkbox"/>	<input type="checkbox"/>
4)	<input type="checkbox"/> Can raw materials and material inputs be purchased in that country?	<input type="checkbox"/>	<input type="checkbox"/>

- | | | | | |
|-----|--------------------------|--|--------------------------|--------------------------|
| 5) | <input type="checkbox"/> | Are there parts suppliers or related companies present there? | <input type="checkbox"/> | <input type="checkbox"/> |
| 6) | <input type="checkbox"/> | Is there an adequate supply of electricity and water? | <input type="checkbox"/> | <input type="checkbox"/> |
| 7) | <input type="checkbox"/> | Is there an adequate infrastructure such as industrial sites, roads and telecommunications services? | <input type="checkbox"/> | <input type="checkbox"/> |
| 8) | <input type="checkbox"/> | Are there good incentives for foreign investors? | <input type="checkbox"/> | <input type="checkbox"/> |
| 9) | <input type="checkbox"/> | Is it possible to obtain enough testing and certification services? | <input type="checkbox"/> | <input type="checkbox"/> |
| 10) | <input type="checkbox"/> | Is there a dependable partner there? | <input type="checkbox"/> | <input type="checkbox"/> |
| 11) | <input type="checkbox"/> | Are interest rates and financial conditions favorable? | <input type="checkbox"/> | <input type="checkbox"/> |
| 12) | <input type="checkbox"/> | Is there any anti-Japanese sentiment, or do they welcome investment from Japan? | <input type="checkbox"/> | <input type="checkbox"/> |
| 13) | <input type="checkbox"/> | Are political conditions stable? | <input type="checkbox"/> | <input type="checkbox"/> |
| 14) | <input type="checkbox"/> | Does the economy have good growth potential and low inflation? | <input type="checkbox"/> | <input type="checkbox"/> |
| 15) | <input type="checkbox"/> | Other (Specify: _____) | <input type="checkbox"/> | <input type="checkbox"/> |

5.4 It is likely that your company experienced various kinds of discomfort or anxiety prior to making the decision to invest overseas. Please identify three main points aspects of such discomfort or anxiety experienced in the past or being experienced now from the following.

- 1) We wished/wish to do some studies in the country but could not find the right party that would cooperate with us.
- 2) We didn't/don't know how to carry out a feasibility study.
- 3) We lacked/lack the right persons to send to the country and run the factory we would build.
- 4) We wanted/want to have a fully-owned subsidiary, but couldn't do so because of restrictions in that country.
- 5) We lacked/lack knowledge of how to look for a partner overseas.
- 6) We didn't/don't have the amount of investment capital needed.
- 7) We were/are not certain we would have a buyer of our products in the country.
- 8) We were/are worried about management of local employees, because of difference in language and practices.

- 9) We were not/are not familiar with procedures, regulations and accounting practices in that country.
- 10) We were/are worried about the safety and well-being of our Japanese employees sent there, and their children's education.
- 11) Other (Specify: _____)

6. Registration of the company

In both Thailand and Malaysia there are registration systems to facilitate the formation of international joint ventures. If your company registers, it becomes possible to broaden the base of possible partners to choose among. There is no registration fee, no any obligation or responsibility connected with registration.

- 1) Desire to register (Thailand Malaysia)
- 2) Do not desire to register

7. Supply or licensing of technology

7.1 Is your company presently licensing any foreign company or companies for use of your company's technology?

- Yes No

If "Yes", please answer the following.

7.2 In what field(s) is (are) the technology (multiple answer where applicable)?

7.3 To what country is technology being supplied (multiple answer)?

- Malaysia Thailand Indonesia Philippines Singapore
 Taiwan S. Korea China Hong Kong North America
 Europe Others

7.4 If your company is requested to supply your technology by foreign companies, how do you react?

- Will give favorable consideration Will decline

If "will give favorable consideration" please answer the following question.

7.5 What kind of technology for products or areas can you provide (multiple answer when applicable)?

7.6 From where such requests will be made (multiple answer when applicable)?

- Malaysia Thailand Indonesia Philippines Singapore
 Taiwan S. Korea China Hong Kong North America
 Europe Others

8. Additional study

We may wish to call at your office to further discuss your company's interest in overseas investment. Would you mind accepting our additional survey on this topic?

- 1) No, we don't mind.
2) Yes, we do, we wish to decline.
-

(Contact point at your company)

Department _____ Person _____
Telephone _____ Facsimile _____