

## 2. 質問状（第1回質問状、追加質問状）

### タイ工業標準試験研修センターアフターケア質問状（概要）

#### 1 アフターケア協力の概要

アフターケア協力とは、プロジェクト協力期間終了後、協力効果を促進し自立発展性を保つために、国際協力事業団（以下 JICA）が実施する技術協力事業の一つです。アフターケア協力では、以下に述べる範囲内で技術協力が実施されます。

この「範囲」は、専門家のリクルート結果、及び措置される予算の状況によって変更する場合があります。

##### 1 本体協力時に供与した機材に対する協力

- (1) 機材の修理・保守のための短期専門家を派遣する。
- (2) 必要なスペアパーツ、部品を供与する。

##### 2 討議議事録（R/D）の範囲内での追加協力

- (1) 短期専門家を派遣する。
- (2) 必要な機材を供与する。

##### 3 研修員受入なしの原則

アフターケア協力では研修員の受入れは行わない。

##### 4 アフターケア協力の期間

アフターケア協力は、アフターケア協力のミツ署名日から開始し、2002年3月まで（2001年度中）実施する予定である。

今般、JICA はタイ工業標準試験研修センター（以下本体協力と呼ぶ。）に対しアフターケア協力を2001年度に実施する予定であり、2000年11月末頃に調査団を派遣する予定です。

調査団の派遣目的は、プロジェクトの現状を調査すること、アフターケア協力実施についてその実現可能性及び必要性を判断すること、アフターケア協力が実現可能かつ必要と判断された場合には、関連施設などの調査及びタイ王国（以下、タイ）政府関係者との一連の協議を通じて、アフターケア協力の詳細な内容を立案することにあります。

アフターケア調査団の活動を効率的に進めるため、関連機関の現状について関連データ・情報を得る必要があるところ、以下の質問にお答え願います。回答はタイ事務所を通じて、遅くとも10月27日までをお願いします。

今次質問状に対する回答をいただく前、並びに回答をいただいた後から調査団派遣までに、補完情報を得るために、再度質問状をお送りする可能性があることをご理解下さい。ご協力に感謝いたします。

## II 要請されているアフターケア協力の内容に関する質問

### 1 実施機関について (TISI および EEI)

#### (1) 組織および人員配置

- a TISI の組織図および人員配置について
- b EEI の組織図および人員配置について
- c TISI および EEI と他のタイ政府組織の関係について
- d 公社化政策の現状
- e 本体協力時のカウンターパートの現在の業務 (離職者、退職者を含む)

#### (2) 役割、位置付け、活動につて

- a EEI の役割と位置付けについて
- b EEI の TISI における位置付け
- c 国家開発計画等との関係
- d EEI および TISI の基本活動方針
- e 他国及び国際機関との協力

#### (3) 予算状況

- a 1995 年から 2000 年までの実績
- b 2001 年から 2003 年までの計画
- c タイ側のローカルコスト負担
- d 1995 年から 2000 年までに購入した主要機材および 2001 年から 2003 年までの機材購入予定

#### (4) 活動詳細について

1995 年から 2000 年までの TISI および EEI の活動状況について、以下に上げる添付書類 (Annex10~13) に整理してください。

- a 試験実績について (Annex10)
- b トレーニングコースの実績について(Annex11-1, Annex11-2)
- c カウンセリングの実績について(Annex12)
- d その他の主要な活動について(Annex13)

### 2 アフターケア協力の内容

#### (1) 本体協力時に供与した機材に対する協力

##### a 供与機材

本体協力で供与した供与機材の現状について、添付書類 (Annex1) を利用し、整理してください。

##### b 供与機材に対する協力 (スペアパーツ等)

本体協力で供与した供与機材に対するスペアパーツおよび消耗品の追加供与が必要な場合は、添付書類 (Annex2) を利用し整理してください。複数ある場

合は、優先度の高い順に記入して下さい。

c 供与機材に対する協力（専門家派遣）

機材の修理・保守のために必要な専門家が必要な場合は、添付書類（Annex3）に記入して下さい。複数ある場合は、優先度の高い順に記入して下さい。

(2) 追加協力

a 専門家

R/D の範囲内で短期専門家を追加派遣する必要がある場合は、添付書類（Annex4）を利用し整理してください。また、各専門家について、技術移転内容を詳しく記入して下さい。

b 機材

上記 a の専門家の技術移転に必要な機材がある場合には、優先度の高い順に、添付書類（Annex5）に記入して下さい。

c C/P 候補者

アーカーア協力のための C/P を添付書類（Annex6）に記入して下さい。

3 その他の電気・電子インSTITUTEの活動に関する最新情報

以上

QUESTIONNAIRE  
FOR THE AFTERCARE PROGRAMME  
ON THE TECHNICAL COOPERATION PROGRAMME  
FOR THE INDUSTRIAL STANDARDIZATION, TESTING AND TRAINING CENTER

To : the Authorities Concerned of the Government of the Kingdom of Thailand

From : the Authorities Concerned of the Government of Japan

**I Concept of the Aftercare Program**

The Aftercare Program is one of the Technical Cooperation Programmes implemented by Japan International Cooperation Agency (hereinafter referred to as "JICA" ) in order to promote the output of the projects which already terminated by extending supplementary technical cooperation within the following scope. This program will apply to the projects which have been operated sustainably by recipient governments since JICA s assistance was terminated. The said scope is subject to change within the limitation of the budget as well as availability of personnel dispatched as experts.

- 1 Taking additional care of the machinery and equipment already provided by JICA
  - ( 1 ) by dispatching short-term experts for repair and maintenance
  - ( 2 ) by providing necessary spare parts
  
- 2 Supplementary technical cooperation within the scope of the Record of Discussions (hereinafter referred to as "R/D" )
  - ( 1 ) by dispatching short-term experts
  - ( 2 ) by providing necessary machinery and equipment
  
- 3 Training of counterpart personnel in Japan is not included within the scope of the Aftercare Programme in principle
  
- 4 The Aftercare Programme for the Project will be extended from the date of the signing of the Minutes of Discussions for the Programme, November, 2000 to March, 2002.

In this connection, JICA is planning to implement the Aftercare Program on the Technical Cooperation for the Project on the Industrial Standardization, Testing and Training Center (hereinafter referred to as "the Project") during the Japanese fiscal year 2001, and to send an Aftercare Study Team (hereinafter referred to as "the Team") toward the end of November.

The propose of the Team is to survey the present situation of the Project through a field survey and a series of discussions with the authorities concerned of the Government of Thailand. The Team will find out the possibility of the Project, then the Team will work out the Aftercare Programme on the Project.

In order to make the activities of the Study Team as effective as possible, JICA needs to get relevant data and information on the present situation of the Project and Electrical and Electronics Institute (hereinafter referred to as "EEI" ) by asking some questions mentioned below. It would be highly appreciated if the authorities concerned of the Government of Thailand prepare the answers and send them back through JICA Thailand Office at its earliest convenience, not later than October 27, 2000.

Please understand that the JICA headquarters may send additional questionnaires to get complementary information, before receiving your answers, and before the dispatch of the study team. Thank you very much for your cooperation in advance.

## **II Questions for the Implementation of the Aftercare Programme on the Project**

- 1 Organization and other related issues about TISI and EEI since the termination of the project
  - ( 1 ) Organization and staff allocation
    - a Present Organization chart of TISI and its description of staff allocation
    - b Present Organization chart of EEI and its description of staff allocation
    - c Relations of EEI and TISI with other governmental organizations in Thailand
    - d Degree of corporatization (denationalization) of EEI
    - e Present positions and activities of the former counterpart personnel of the Project
  - \* Please fill in the attached documents ( Annex 1).

( 2 ) Function, placement and activities

- a Function and placement of EEI in Thailand
- b Placement of EEI in TISI
- c Function of EEI in national development plan of Thailand.
- d Basic guidelines of activities of EEI and TISI
- f Relations with other bi-lateral and multi lateral aid agencies, which had assisted, have assisted and will assist EEI

( 3 ) Budgetary condition

- a Settlement accounts from Thai fiscal year 1995 to 2000
  - \* Please fill in the attached documents ( Annex 2).
- b Budget from Thai fiscal year 2001 to 2003
  - \* Please fill in the attached documents ( Annex 2).
- c Allocation of the budget for local cost expenses for the implementation of the Aftercare Programme
  - \* Please fill in the attached documents ( Annex 2).
- d Main equipment provided by the Thai side from 1995 to 2000 and main new equipment planned to be installed by the Thai side from 2001 to 2003
  - \* Please fill in the attached documents ( Annex 3).

( 4 ) Activities

Frequency of activities of EEI and TISI for testing from Thai fiscal year 1995 to 2000 and the detail

\* Please fill in the attached documents as follows. If you need more space to fill, please make photocopy of the original form.

- a Testing Activities (Annex 4)
- b Training Courses (Annex 5-1, Annex 5-2)
- c Counseling Services (Annex 6)
- d Other main activities (Annex 7)

2 Contents of the Aftercare Program

( 1 ) Taking additional care of the machinery and equipment already provided by the Government of Japan

- a Name, specification, maker, date of provision, and present condition (e.g. operation, maintenance) of the machinery and equipment provided by JICA;

- \* Please fill in the attached documents (Annex 8 : If you need more space to fill, please make photocopy of the original form.).
  - b Necessity of spare parts and consumables to be provided by JICA, and availability of spare parts and consumables in Thailand and the quotations ;
    - \* Please fill in the attached documents (Annex 9). If you have more than two (2) items, please fill the form from the one with higher priority.
  - c Necessity of repairs by Japanese experts
    - \* Please fill in the attached documents (Annex 10). If you have more than two (2) items, please fill the form from the one with higher priority.
- ( 2 ) Supplementary technical cooperation within the scope of R/D
- a The themes within the scope of R/D which need supplementary technical cooperation by the Japanese short-term experts and detail contents of the task for the said experts ;
    - \* Please fill in the attached documents ( Annex 11 : If you need more than one (1) , please make photocopy.).
  - b Name, quantity, specification, maker, reasons of necessity, availability in Thailand and the quotation of the machinery and equipment needed to be provided in order to transfer the technology on the said themes ;
    - \* Please fill in the attached documents ( Annex 12 : If you need more than one (1) , please make photocopy.).
  - c Plan for assignment of the Thai counterpart personnel for the Aftercare Programme ; Number, name and age, sex, their present position and their qualification.
    - \* Please fill in the attached documents ( Annex 13).

### III Other relevant information

**ANNEX 1**

**LIST OF FORMER COUNTERPART PERSONNEL OF THE PRESENT POSITION AND  
ACTIVITIES**

NO	NAME	AGE	SEX	PRESENT POSITION	PRESENT ACTIVITIES	REMARKS



## ANNEX 2

### BUDGETARY CONDITION OF FTU FOR THE IMPLEMENTATION THE AFTERCARE PROGRAMME

a. Settlement Accounts from 1993 Malaysian fiscal year to 1997

Unit: baht

	1995	1996	1997	1998	1999	2000
Budget of TISI						
Budget of EEI						

b. Budget from 2001 Thai fiscal year to 2003

Unit: baht

	2001	2001	2003
Budget of TISI			
Budget of EEI			

c. Perspective of defrayal of local cost expenses for the implementation of the  
Aftercare Programme by EEI

(a) expenses for the internal transportation for the machinery and  
equipment to be provided by Japan

Baht: \_\_\_\_\_

(b) expenses for the supply of the machinery, the equipment and other  
materials necessary for the Aftercare Programme other than provided by  
Japan.

Baht: \_\_\_\_\_

(c) all the other running expenses for the Aftercare Programme

Baht: \_\_\_\_\_

**ANNEX 3**

**MAIN EQUIPMENTS PROVIDED AND MAIN PLAN OF INSTALLING EQUIPMENTS BY THAI SIDE**

Date of Provision	Name	Specification	Maker	Operation(*1) problems if any	Maintenance(*2) Problems if any	Remarks

(\*1) A: Operate more than three (3) times in a week  
 B: Operate one (1) or two (2) times in a week  
 C: Operate a few times in a month  
 D: Hardly operate since the termination

(\*2) A: Maintain regularly.  
 B: Maintain sometimes  
 C: Hardly maintain (operation now)  
 D: Need to repair (stopping now)

ANNEX 4

1 TESTING ACTIVITIES

Unit: set

Testing for	1995	1996	1997	1998		1999		2000	
				TISI	EEI	TISI	EEI	TISI	EEI
Standards Development									
Product Certification									
Surveillance									
Private Sector									
<b>Total</b>									

2 Record of Electrical and Electronics Appliances Testing in EEI

Unit: time

Year / Appliance	1998	1999	2000	2001 (Target)	2002 (Target)	2003 (Target)
(Example) Electric flat iron Refrigerator Television Receiver . . .						

**ANNEX 5-1**

**TRAINING ACTIVITIES IN TISI AND EEI**

Unit: time

Year	TISI		EEI	
	Target	Actual	Target	Actual
1995				
1996				
1997				
1998				
1999				
2000				
2001				
2002				
2003				

**ANNEX 5-2**

**LIST OF TRAINING COURSE IN TISI AND EEI FROM 1995 TO 2000**

No	DATE / VENUE	THEME	LECTURER	ATTENDANCE

## ANNEX 6

### RECORD OF COUNSELING SERVICE IN TISI AND EEI

#### 1 TISI

Year	Name of factory	Days	Contents of Counseling(*1)
1995			
1996			
1997			
1998			
1999			
2000			

#### 2 EEI

Year	Name of factory	Days	Contents of Counseling(*1)
1998			
1999			
2000			

(*1) Contents of Counseling	(1) 5S, (2) Total Productive management, (3) QC Story and Cause-and -Effect Diagram (4) QC Process Chart, (5) Total Quality Management in factory, (6) Other about QC techniques by request, (7) Others
-----------------------------	---

ANNEX 7

OTHER MAIN ACTIVITIES IN EEI

No	Content of Activities	Remarks

## ANNEX 9

### NECESSITY OF REPAIR, SPARE PARTS AND CONSUMABLES OF MACHINERY AND EQUIPMENT PROVIDED BY JAPAN

Priority (*1)	Name	Necessity of repair (*2) and the detail	Necessity of spare parts and consumables (*2) and the detail	Availability of spare parts and consumables in Malaysia (*3) and the quotations	REMARKS (*4)

(\*1) Please clarify the priority among the items by putting numbers ( No 1 as the highest priority)

(*2) A: Must B: Necessary C: If possible	(*3) A: Available B: Not available	(*4) any relation with supplementary technical cooperation (Annex 3, Annex 4 )
--	---------------------------------------	--



## ANNEX 10

### Cooperation for machinery and equipment already provided by the Government of Japan (Japanese Expert)

Priority (*1)	Number of machinery and equipment (*2)	Details of Expert's role ( repair or/and maintenance)	Period of Dispatch of Japanese Expert			Remarks
			From	To	Period(months)	

(\*1) Please clarify the priority among the items by putting numbers (No 1 as the highest priority)

(\*2) Please correspond to the machinery and equipment number of ANNEX 1.

**ANNEX 11**

THEME No. \_\_\_\_\_

**THEMES WHICH NEED SUPPLEMENTARY THCHNICAL COOPERATION BY THE  
JAPANESE SHORT-TERM EXPERTS**

1. Field of the Japanese expert (Theme field): \_\_\_\_\_

2. Period of Training: From \_\_\_\_\_ to \_\_\_\_\_ (\_\_\_\_\_ months)

3. Detailed Subjects of Guidance by Experts:

4. Counterpart:

5. Qualification required to the Expert:

## ANNEX 12

### LIST OF THE MACHINERY AND EQUIPMENT NEEDED TO BE PROVIDED

ON THE THEME No. \_\_\_\_\_

1. Name of machinery and equipment: \_\_\_\_\_  
(Number of Priority: \_\_\_\_\_)
2. Quantity
3. Specification
4. Maker (Price unit JP ¥ 1, 000)
5. Reasons of necessity
6. Availability in Thailand and the quotation

## ANNEX 13

### LIST OF THAI COUNTERPART PERSONNEL FOR THE AFTERCARE PROGRAMME

NO	NAME	AGE	SEX	PRESENT POSITION	QUALIFICATION	REMARKS

タイ工業標準化試験研修センター協力事業アフターケア  
追加質問状（概要）

前回の質問状に回答頂きありがとうございます。さて、前回の質問状に対する回答状を基に日本国内の有識者でアフターケアプログラムについて勉強会を行った結果、以下の質問事項について確認する必要があるとの結論に至りました。アフターケア協力の実施の可否および協力内容を検討するために必要な事項であることから、可能な範囲で11月20日までに回答願います。

- 1 EEI の現在および将来の位置付けについて（政府、政策との関わり）詳細を説明願います。  
（なぜなら、基本的に日本政府（JICA）は政府組織あるいは公的機関を対象に協力を実施しているため。）
- 2 EEI の運営体制および民間企業との関わりについて、詳細を説明願います。
- 3 競合するような民間の試験場の有無および EEI との技術レベルの格差について回答願います。
- 4 タイにおける認証制度の仕組み（TIS マーク）と EEI の現時点での役割および将来的な方向性について説明願います。
- 5 Lighting and luminaries products, Household electrical appliance, Electronic appliances and IT appliances の製品分野について
  - (1) タイ国の強制品目（品目リストを送付願います。）
  - (2) タイ国安全規格（TIS）と IEC 規格の整合性（TIS と IEC 規格の整合化されている規格の対比表を送付願います。）もし現在、整合していなければ将来の整合化の予定の有無について教えてください。
- 6 EEI の業務内容詳細（試験実績、試験品目等）  
現在の EEI における主要な試験品目および実績について、特に家電分野については詳細な情報をお願いします。

7 EEI は基本的に5年後に独立採算の組織になることが予定されておりますが、貴回答によると5年後も追加の投資のためや運営費について政府予算から支出される可能性があるように記載されておりますが、そのような可能性はあるのでしょうか。

8 本体協力時に供与した機材については、その使用状況を把握する必要があるところ、前回送付した質問状の Annex8 により使用頻度およびメンテナンス状況について回答願います。

9 追加協力機材について

(1) 価格の算出根拠および仕様について説明願います。

(2) 追加供与を要望している機材の現地調達の可能性について回答願います。

(3) ANNEX 12 の Thermostat and temperature limiters test apparatus と Automatic controller test apparatus の用途にどのような差を想定しているか回答願います。

(4) タイ側が調達予定の「Laser radiation taster」と日本側に要望している「Laser test apparatus」の仕様の違いはなんでしょうか。

10 本体協力時に移転された技術が現在、どのように活用されているかを確認する必要があることから、可能な範囲で当時の C/P の配属先を回答願います。

11 777-777プログラムで専門家から技術移転を受ける予定の C/P の実務経験（安全試験分野）について（短期専門家派遣の分野と期間設定の為）

(1) 実務経験年数

(2) 製品毎の経験数

12 第1回目の質問状に対する回答として要請がなされた短期専門家の技術移転内容について

(1) 概論説明（座学） or/and 実技

(2) 具体的な技術移転対象製品の指定

以上

ADDITIONAL QUESTIONNAIRE  
FOR THE AFTERCARE PROGRAMME  
ON THE TECHNICAL COOPERATION PROGRAMME  
FOR THE INDUSTRIAL STANDARDIZATION, TESTING AND TRAINING CENTER

To : EEI  
From : JICA

Thank you very much for your Prompt response of the last questionnaire. As a result of discussions about the aftercare programme among the Japanese side, we have reached conclusions that it would be necessary to confirm the following points.

In order to make the activities of the Study Team as effective as possible, we need relevant data and information on the present situation of EEI by asking some additional questions mentioned below. It would be highly appreciated if the authorities concerned of the Government of the Kingdom of Thailand prepare the answers and send them back through JICA Thailand Office at its earliest convenience, not later than November 20, 2000.

- 1 Please give us a more detailed explanation about the placement of EEI in the government and in the governmental policies. (JICA basically executes technical cooperation for a governmental organization or a public organization.)  
Such as legal status, degree of privatization of its function, budgetary support from the government.
- 2 Please give us a more detailed explanation about management system of EEI and relation with private sector, especially the relation with private companies that are members of the board of committee for EEI.
- 3 Are there any competitive private testing institutions for electrical and electronics appliances with EEI? If any, what are the differences between them and EEI in terms of services including technology?
- 4 Please explain a mechanism of the certification system using the TISI mark, the function of EEI and the future direction of said system.

- 5 Compulsory standard product and International standard (IEC)
- (1) Please send us the each list of Thai compulsory standard product in the field of lighting and luminaries products, household electrical appliance, electronic appliances and IT appliances.
  - (2) Are there any adaptability of safety standard of Thailand (TISI standard) to the IEC standard. If there are, please provide us with the list of relationship of the two standards, which could describe its adaptability. If there are not, is there any plan to adjust TISI standard correspond to the IEC standard in future?
- 6 Please give us information about your performance in 1999 and 2000 such as the number of testing and kinds of testing products in the field of electrical and electronic appliances. The detailed information especially in the household electrical appliances would be appreciated.
- 7 Basically, we understand that EEI is expected to be able to finance by itself in 5 years. However according to your answers, EEI may receive governmental support for its additional investment and operation cost even of 5 years. Could you explain in which year EEI is planning to be financially independent from the government?
- 8 In order to know the present conditions of the machinery and equipment provided in the Project, please clarify how often they have been used and maintained by filling the Annex 8 attached to the last questionnaire.
- 9 Additional machinery and equipment to be provided
- (1) Please explain the basis of the calculation to estimate the price of the machinery and equipment you requested. And please describe the specification of them.
  - (2) Please let us know the possibility of the local procurement of the machinery and equipment you additionally requested.
  - (3) Regarding the answers in Annex 12, we could not recognize the differences between Thermostat and temperature limiters test apparatus and



Automatic controller test apparatus only by their name. Therefore could you give us more detailed descriptions of them? (If you could send us the specification of each equipment, we would appreciate it very much.)

- (4) What are the differences between Laser radiation tester (Annex3) you are going to procure by yourself, and Laser test apparatus (Annex 12) you requested the Japanese side to provide you? (If you could send us the specification of each equipment, it would be helpful.)
- 10 As it is very important to know how effectively the technology transferred in the Project are PRESENTLY utilized, please exam and let us know the present occupation of the C/P at that time as much as possible.
- 11 The experiences of proposed C/P who are going to receive technology transfer from Japanese experts in the aftercare programme (safety testing for electrical and electronic appliances). Please give us the information relative to each point below
- (1) Years of their actual experiences
  - (2) Number of testing experiences by products
- 12 The detailed contents of technology you are expecting to receive from Japanese experts
- (1) For each field of technology you requested, please clarify which type of technology transfer you assume to take between lecture or/and hands-on-training.
  - (2) If you assume to use any specific products for the technology transfer in each field, please specify them concretely.