# **Terminal Evaluation**

### Asia

1. Outline of the Project					
<b>Country:</b> Malaysia		<b>Project title:</b> Capacity Building of SIRIM BHD on Product Test on IEC 335 & IEC 598 in Malaysia			
<b>Issue/Sector:</b> standardization, Electrical Engineering and Electronics, Industrial Minerals		Cooperation scheme: Expert Team Dispatch Program			
<b>Division in charge:</b> First Training Division, Experts Assignment Department (Southeast Asia Division, Social Development Cooperation Department since 2000)		Total cost:			
Period of Cooperation	Fiscal year 1999 - 2002	<ul> <li>Partner Country's Implementing Organization:</li> <li>Standards and Industrial Research Institute of Malaysia (SIRIM)</li> <li>Supporting Organization in Japan:</li> <li>Ministry of Economy, Trade and Industry (METI),</li> <li>Japan Electrical Safety and Environment Technology</li> <li>Laboratories</li> </ul>			

#### **Related Cooperation:**

None

#### 1-1 Background of the Project

As Malaysia mainly exports electrical/electronic products, it is crucial to conduct accurate safety Tests in accordance with IECEE (IEC System for Conformity Testing to Standards for Safety of Electrical Equipment) within Malaysia in order to improve product quality and promote exports.

The Standards and Industrial Research Institute of Malaysia (SIRIM) is the only testing laboratory in Malaysia with ISO and other manufacturing standards certification, and as such it offers technical and consulting services on manufacturing processes and product development and promotion of standardization and quality management. However, SIRIM was unable to attain a qualified Testing laboratory (CBTL) certification under the IECEE. Therefore, the Government of Malaysia requested the Government of Japan to implement an Expert Team Dispatch Program to improve capacity in electrical/electronic fields.

#### **1-2 Project Overview**

To be able to attain the status of a qualified testing laboratory under IECEE requirements, the Project provides for SRIRIM staff both in Japan and Malaysia.

#### (1) Overall Goal

To enable SIRIM to attain the status of a qualified Testing Laboratory (CBTL) and participate in the CB Scheme.

#### (2) Project Purpose

To be certified CBTL/NCB under the IECEE scheme, SIRIM's capacity is developed in safety testing electrical products as stipulated in IEC 335 and IEC 598.

(3) Outputs

1) SIRIM can conduct the safety test under IEC335 and 598.

- 2) The SIRIM staff understands the methods of the necessary safety test for parts under IEC335 and 598 and for insulators.
- 3) SIRIM staff understands the outline of the requirements under the IECEE-CB Scheme.

(4) Inputs		
Japanese side:		
Short-term Experts	4	Long-term
Experts 2		
Trainees received	5	
Local Cost (equipment)	61 Million Yei 135 Malaysia	n ı Ringgit (386 Million Yen)
Malaysian Side:		
Counterparts	5	
Local Cost		
2. Evaluation Team		
Members of Evaluation Team	 nesia office ioned to I.C. N	etwork Sdn. Bhd.)

Period of Evaluation	2 December 2001 - 29	Type of Evaluation:
	March 2002	Terminal Evaluation

#### 3. Results of Evaluation

#### 3-1 Summary of Evaluation Results

#### (1) Relevance

The Project aimed at capacity building so SIRIM could attain CBTL certification. The Project also aimed at increasing exports through properly conducted safety testing of electronic products for the domestic market and overseas markets. This was in line with the 8th Malaysian Development Plan and it is considered that the Project has relevancy.

#### (2) Effectiveness

At the end of 2001, counterparts were trained and able to conduct safety tests on all 14 types of products under IEC 335and to interpret the standards and cross reference them to related standards. As a result, the capacity of SIRIM was expanded and SIRIM had sufficient capacity to apply for CBTL certification under the IECEE-CB scheme. In view of this, it is considered that the Project was effective.

#### (3) Efficiency

The activities and inputs were carried out as planned. The equipment provided by JICA was utilized effectively, which contributed to capacity building sufficient for SERIM to conduct the necessary testing under IEC335 and 598. None of the equipment was found to be unsuitable. The participants put their acquired knowledge and skill into practice and achieved good results. Therefore, the input provided has produced desirable outputs.

#### (4) Impact

As of the end of 2001, SIRIM was able to apply to IECEE-CB for certification under IEC335. Assessment by IECEE-CB of the capacity of SIRIM will be carried out in May 2002, which means the Overall Goal will be accomplished. The counterparts applied what they have learned in Malaysia and in Japan to their work at SIRIM, as well as disseminated their knowledge to other staff in SIRIM.

#### (5) Sustainability

SIRIM recognizes that it is necessary to continuously expand its capacity to meet the requirements of introducing new products into the market. The counterparts in SIRIM have tried to disseminate their acquired knowledge and skill to other staff. Although it may take some time, they have become instructors with the necessary knowledge and skill to become teachers for the newcomers in the field. The existing maintenance unit at SIRIM has been strengthened, and 5 percent of its operational budget has been set aside for this maintenance purpose. Judging from the above, the Project demonstrates sustainability and the ability to maintain the effects of the Project in terms of human resources and finance.

#### 3-2 Factors that promoted realization of effects

#### (1) Factors concerning Planning

The Project had a clear and concrete objective.

- (2) Factors concerning the Implementation Process
- 1) The inputs plan was coordinated properly
- 2) Experienced and highly-qualified experts were dispatched from Japan.
- 3) A fairly good organization was set up in SIRIM for management and coordination work for the Project.
- 4) Counterparts were enthusiastic in their efforts to obtain new technology.

#### 3-3 Factors that impeded realization of effects

(1) Factors concerning Planning

N/A

(2) Factors concerning the Implementation Process

The staff who had not been instructed directly by the Japanese experts lacked the basic experience and knowledge required to conduct testing.

#### **3-4 Conclusion**

The capacity of SIRIM to conduct testing has been enhanced. SIRIM was able to fully comply with IEC 335 and IEC 598 standards and requirements.

#### 3-5 Recommendations

(1) SIRIM should expand its coverage of appliances in the three fields not covered by the Japanese experts for testing under IEC 335.

(2) SIRIM should implement in-house training by the counterparts who received training under the Project for new employees, through specific training sessions, seminars, etc.

(3) SIRIM should ensure that the counterparts who received various trainings during the Project continue to do related works requiring the use of the knowledge and skills learned during the Project.

(4) SIRIM should improve the maintenance unit, and enhance maintenance and management within the organization to ensure continuous maintenance of the testing equipment.

(5) SIRIM should concentrate on quality testing and consistency of testing, rather than overemphasizing quick services to customers.

#### 3-6 Lessons Learned

(1) It is important that the objectives of each project be clear and concrete at the time of project planning.

(2) It is important to properly combine the activities such as lectures by experts, workshops and equipment donation.

## 3-7 Follow-up Situation

N/A