

# Terminal Evaluation

## Asia

### 1. Outline of the Project

**Country:**

Philippines

**Project title:**

The Project on Electrical and Electronics Appliances Testing

**Issue/Sector:**

Private Sector Development

**Cooperation scheme:**

Project-type Technical Cooperation

**Division in charge:**

First Technical Cooperation Division,  
Mining and Industrial Development  
Cooperation Department

**Total cost:**

498 million yen

**Period of  
Cooperation**

1 April 1999 - 31 March  
2003

**Partner Country's Implementing Organization:**

Bureau of Product Standards (BPS), Department of Trade and Industry (DTI)

**Supporting Organization in Japan:**

Electrical Power Safety Division, Nuclear and Industrial Safety Agency (NISA),  
Ministry of Economy, Trade and Industry (METI)

**Related Cooperation:**

Project-type Technical Cooperation; "Industrial Standardization and Electrical Testing Project"

### 1-1 Background of the Project

In the Philippines, the testing techniques which were the bases of industrial standardization and certification system for electrical and electronics appliances (Product Standards Certification mark system) were insufficient. Therefore, the government of the Philippines requested the government of Japan for a Project-type Technical Cooperation with the aims of enhancing functions of the Bureau of Product Standards (BPS) laboratory which was in charge of appliance testing at BPS, the Department of Trade and Industry (DTI) in 1991.

Upon the request, as the Philippine government puts an emphasis on consumer safety, the Japanese government decided to carry out the technical cooperation in the electrical appliances field among other testing fields, targeting lighting apparatuses, writing instruments, and electrical wires taking into consideration. The Japanese government implemented a cooperation of a four-year project of "Industrial Standardization and Electrical Testing Project" in August, 1993. At the terminal evaluation survey in February 1997, it was confirmed that the project purpose would be accomplished by the end of the project.

Upon the success of the above project, the government of the Philippines requested to the government of Japan for a new Project-type Technical Cooperation with the aims that the BPS laboratory would attain a wider range of functions of examining and testing home electric appliances.

### 1-2 Project Overview

The project implemented cooperation on transferring testing techniques through on-the-job-training (OJT) or seminars at the BPS laboratory, in order to improve the techniques of electrical and electronics appliances testing in the Philippines.

#### (1) Overall Goal

Safety of the electrical and electronics appliances in the market of the Philippines is improved.

#### (2) Project Purpose

The BPS laboratory is able to provide appropriate technical services on electrical and electronics appliances testing.

### (3) Outputs

- 1) The machinery and equipment related to electrical and electronic appliances testing is provided, installed, operated and maintained properly.
- 2) Testing of main electrical and electronics appliances is able to be implemented by counterpart personnel.
- 3) Seminars and training courses related to electrical and electronic appliances testing are implemented.

### (4) Inputs

Japanese side:

Long-term Experts	7	Equipments	157 million yen
Short-term Experts	15	Local Cost	13 million yen
Trainees received	15		

Jordan's Side:

Counterparts	32		
Land and Facilities			
Local Cost		30,336,316 peso (approx. 79 million yen)	

## 2. Evaluation Team

### Members of Evaluation Team

Team Leader/General: Takanori TANAKA, Deputy Managing Director, Mining and Industrial Development Cooperation Department, JICA  
Technical Transfer Plan 1: Wataru TAKASE, Technology Transfer Planning, Manager, Planning & Coordination Bureau, Product Safety Sector, Japan Quality Assurance Organization  
Technical Transfer Plan 2: Takashi HATSUMI, Technology Transfer Planning Manager, Electronics & Information Technology Group, Yokohama Laboratory, Japan Electrical Safety & Environment Technology Laboratories  
Evaluation Management: Kazuhiko SAKAMOTO, First Technical Cooperation Division, Mining and Industrial Development Cooperation Department  
Evaluation Analysis: Ichiro TOYOTA, Toyo Engineering Corporation

<b>Period of Evaluation</b>	8 October 2002 - 25 October 2002	<b>Type of Evaluation:</b> Terminal Evaluation
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## 3. Results of Evaluation

### 3-1 Summary of Evaluation Results

#### (1) Relevance

The Philippines are making efforts to ensure the consistency of national standards and international standards such as IEC by 2020. Especially the consistency in the fields of electric and electronics with high needs is required. Therefore, the project purpose was in line with the industrial policies of the Philippine government and the policies of the Japanese government on the ODA of the Philippines which aims at fostering and modernization of various industrial establishments in the Philippines. It also met the needs of electric and electronics industries in the Philippines aiming at improving international competitiveness through improving the quality of products. Therefore, the relevance of the project was extremely high.

#### (2) Effectiveness

The management system of the project was stable and the retention rate of the counterparts was high. Under the supervision of experts and by the counterparts' efforts in the testing process, the BPS laboratory has responded to the expanding demand for

appliances testing. There was no impeding factor to the project. The project was consistent with the policies of the Philippine government. Also the project has gained the supports from the industry as the foundation was established. Therefore, the effectiveness of the project was noticeably high.

### (3) Efficiency

Inputs such as the experts and equipment were smoothly implemented. The specialized fields of dispatched experts, the type, number and specifications of delivered equipment were matched with the needs. The Philippines' side fulfilled its obligations described on the minutes of discussions. Judging from the above factors, the efficiency of the project was high.

### (4) Impact

There were some positive impacts observed throughout the project. The improvement of appliance safety techniques led to the consumer protection as well as to the improvement of safety design techniques of manufacturers. Manufactures had high expectations of the roles played by the BPS laboratory. For example, the manufacturers who were clients of the BPS laboratory reviewed their manufacturing process of appliances so as to pass the safety test. Other staff who were instructed techniques by the counterparts who acquired techniques from Japanese experts improved their daily works. Judging from the above facts, the positive impact of the project was extremely crucial.

### (5) Sustainability

The project purpose matched the policies of the Philippine government, and the government will continue the support for the enhancement of testing capacities of the BPS laboratory and the institutional capacities of the private testing organizations which complement the function of the BPS laboratory. The capacity and technical levels of the counterparts were high enough so as to ensure the technical sustainability. Judging from the above, the sustainability of the project effects was extremely high.

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

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### (1) Factors Concerning the Planning

While making plans for the technical transfer through OJT, the counterparts gained the capacity to implement and offer electrical and electronics appliances testing based on international standards and other technical services (seminars and training courses).

### (2) Factors concerning the Implementation Process

As a close communication and contact system were developed within the project team, the activities were improved surely and quickly.

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

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(1) Factors Concerning the Planning As the maintenance cost of correction machinery was not included in the planning, the machinery was not always corrected accordingly, and the assurance of traceability \* was sometimes difficult.

\*Traceability : A continuous chain of comparison in which the standard or the measuring instrument is corrected continuously by higher standards, so that the process to establishing the international standard and the national standard is assured.

### (2) Factors Concerning the Implementation Process

N/A.

## **3-4 Conclusion**

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The technical transfer through OJT contributed to the capacity building of the BPS laboratory and met the needs of electric and electronics industries such as the implementation of electrical and electronics appliances testing or seminars/training courses that were transferred to the laboratory. The industry had high expectations for the BPS laboratory and as a result of technical transfer, the BPS laboratory can prepare to be a member of the IECEE-CB scheme (\*\*), with an eye to the ASEAN MRA (\*\*\*). Therefore further enhancement of the project effects was expected.

\*\*CB Scheme: Based on the international standard (IEC standard), a certification organization authenticated by IEECEE (International Electrotechnical Commission (IEC) Electrical Apparatus Safety Standard Adaptability Test System) implements appliances safety testing. The IECEE issues the certificate that the appliances match the standard. The IECEE simplifies the appliances safety certification procedures of each country by utilizing this CB (certification body), with the aim of trade promotion.

### \*\*\*MRA: Mutual Recognition Agreement

Mutual Recognition: The mutual agreement to accept the guarantee given by the third party. Even in situations where the standard and compatibility evaluation procedures vary among countries, if the third party (compatibility evaluation agency), which is approved by the government of the exporting country, conducts the evaluation of compatibility based on the standards of the importing country, the evaluation results are guaranteed to be approved by the agreement as they are considered to have the same level of compatibility evaluation results in the importing country.

### 3-5 Recommendations

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- (1) The number of staff in charge of testing at the BPS laboratory should be increased. To cope with the unexpected situations such as absence due to illness or resignation of staff, the BPS laboratory should strengthen its system. The rotation among staff should be conducted by staff themselves so that they can implement appliances testing in sections other than their own section.
- (2) To respond to the increasing demand for seminars and training on product testing techniques in the industry of the Philippines, the BPS laboratory should improve the contents of the courses.
- (3) To grasp the causes of the problems on testing results, the BPS laboratory should organize its system so as to adjust the usage records of appliances testing equipment and to implement follow-up research.
- (4) In order to utilize statistical data and information on accidents and troubles caused from electrical and electronics appliances, the BPS should organize its system so as to gather, accumulate and utilize the above data and information for consumer protection.
- (5) To respond to the increasing demands for product safety testing, the BPS together with the BPS laboratory, should organize mid-term and long-term plans on private product safety laboratories, approve private product safety laboratories, and improve the level of product testing.
- (6) To promote the consumers' consciousness on the safety of electrical and electronics appliances, the BPS and the BPS laboratory should cooperate with the Philippine Product Safety and Quality Foundation (PPSQF). The BPS and PPSQF should monitor items required to take the testing and should ensure the products that have not passed the product safety tests to not be distributed in the Philippine market.
- (7) The BPS should implement necessary preparation to be a member of the IECEE-CB scheme, taking into view the Philippines' participation to ASEAN MRA.
- (8) The BPS and BPS laboratories should utilize their experiences on electrical and electronics appliances safety testing so as to be able to join the international standard preparation such as PNS (Philippine National Standards) and IEC.

### 3-6 Lessons Learned

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In case equipment requiring correction is applied in a project, a plan considering the cost of correction should be prepared to ensure the traceability of the equipment. Furthermore, the organizational enforcement is indispensable.

### 3-7 Follow-up Situation

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