

## Indonesia

### Rehabilitation of Radio and Television Networks (II)

Report Date: March 2001

Field Survey: August 2000

#### 1. Project Profile and Japan's ODA Loan



Location Map of Project Area



Maintenance Center in the Suburb of Jakarta

##### (1) Background

The main objectives of public broadcasting within Indonesia's National Development Plan are (1) provide the people of Indonesia with information, education and culture, (2) permeate national ideas to the people of Indonesia, and (3) support the National Development Plan. Public broadcasting serves an extremely important role in promoting the national language and other educational uses for this large and multi-ethnic nation. In 1993 television and radio broadcasts in Indonesia were overseen by the Directorate General of Radio, TV and Film, Ministry of Information. Broadcasts were provided to all of Indonesia by the Indonesia National Radio Station (RRI) and the Indonesia National Television Station (TVRI), both of which are directly managed by this ministry.

RRI uses mid- and short-wave broadcasts at 49 locations nationwide to achieve a population coverage (percentage of the overall population that can receive the broadcasts) of around 80%. TVRI has 12 broadcast stations (for producing programs), 6 mobile program production stations and 313 relay stations. The TVRI wave has achieved a population coverage of 68% and as of the end of March 1993 (appraisal for this project) there were around 8.35 million image receptors were registered.

There has been a sharp drop in the function of the broadcasting equipment due to their deterioration over time. Proper maintenance equipment has not been improved as the maintenance system is under-funded. The need for spare parts for repairs and an organization to perform regular inspections and maintenance were recognized. There was also a fear that the performance of the broadcasting equipment will continue to deteriorate unless this situation is addressed. Based on these considerations a greater emphasis was placed on recovering the function of this equipment in the 5th Five-Year Plan (89/90~93/94). As a result, priorities were placed on rehabilitating existing equipment, improving the maintenance system, making improvements to raise the quality of the programming and expand the broadcasting network.

## **(2) Objectives**

This project was to strengthen the deteriorating function of broadcasting equipment for three maintenance centers in Jakarta, Medan and Ujung Pandang (built during Phase I Project) due to age and a poor maintenance system, and also aimed to improve broadcast facilities and establish maintenance system.

## **(3) Project Scope**

This was Phase II project providing spare parts and additional equipment in order to establish and promote functions at the three maintenance centers built by the Phase I project. The following were included in the scope of this project.

- i) Data transfer system
- ii) Measurement equipment
- iii) Spare parts
- iv) Consulting services (technical instructions covering inventory management, preventative maintenance, maintenance procedures, data analysis and equipment maintenance)

## **(4) Borrower/Executing Agency**

The Republic of Indonesia / Directorate General of Radio, Television and Film, Ministry of Information (at the time of project implementation), currently Directorate General of Supervising State-Owned Enterprises, Ministry of Finance

## **(5) Outline of Loan Agreement**

Loan Amount/Loan Disbursed Amount	¥708 million / ¥708 million
Exchange of Notes/Loan Agreement	October 1993 / November 1993
Terms and Conditions	Interest rate: 2.6%, Repayment period: 30 years (10 years for grace period), General Untied (Partially untied for consulting services)
Final Disbursement Date	December 1998

## **2. Results and Evaluation**

### **(1) Relevance**

Maintenance centers continue to play an important role of providing spare parts and maintenance services for equipment and facilities used by both RRI and TVRI stations, and their role of contributing to the development of broadcasting sector in Indonesia is growing. The objective of this project has been to establish a maintenance system and improve broadcasting facilities by bolstering the functions of the maintenance centers, and this objective continues to be maintained even at the time of evaluation. There have also been no major changes to the scope of the project, and thus this project was deemed to be relevant.

## **(2) Efficiency**

This project was executed by the (former) Directorate General of Radio, TV and Film, Ministry of Information.

The project was completed roughly six months behind schedule, but this was mainly due to delays caused by the procedures for ordering and taking delivery of the equipment and facilities. Still, this did not result in a major delay in the implementation schedule, except the delay in procurement. There were no particular problems in terms of the efficient implementation of the project.

## **(3) Effectiveness**

The goal of this project was to bolster the functions of these maintenance centers, but it is difficult to see these results in terms of normal operating and effect indicators. Furthermore, jurisdiction over RRI and TVRI was transferred to the Ministry of Finance, and this transfer made it harder to obtain data from the Indonesian side. Therefore, it was difficult to make a quantitative evaluation on whether or not the objectives of this project were achieved. However, the following information was obtained from interviews with the maintenance centers.

### **i) Establishment of Maintenance System for Broadcasting Equipment**

In addition to the equipment to be installed at the maintenance centers, this project also provided advisory services by the instruction of consultants in the software aspect regarding preventative maintenance, maintenance procedures, the collection of equipment maintenance data, data analysis and inventory management. The staff at the maintenance centers observed that this all contributed to an improved maintenance system for the broadcasting equipment.

### **ii) Prolonged Life for Broadcasting Equipment**

According to TVRI, it was confirmed that more careful maintenance of the broadcasting equipment and facilities has brought about an overall prolonging of equipment life, coupled with the effects of above i).

### **(iii) Contributed to an Improved Level of Broadcasting and Reception in Indonesia**

The maintenance centers improved and expanded through this project were able to more effectively maintain broadcasting equipment and facilities for TVRI and RRI, which helped to improve the quality of the programming and support reception of these programs.

## **(4) Impact**

This project made some contribution to Indonesia's social welfare by providing information, education and entertainment by raising the quality of programming which is one of the top objectives of this project. It had no direct impact on the environment due to the project character as broadcasting. As the maintenance centers were already constructed by Phase I project, the implementation of this project did not require the acquisition of land that could lead to some social problems.

## **(5) Sustainability**

### **1) Operation and Maintenance**

The equipment installed by this project at the maintenance centers is being operated and maintained in accordance with the original plan.

The maintenance center in the Indonesian capital of Jakarta has a staff of 24 people; 16 technicians and 8 office and security personnel (as of the end of August 2000). This center said that their staffing level is adequate. RRI and TVRI have a technical training center that is working to raise the technical skills of not only their staff members, but the members of the maintenance centers. However, continuous financial support is not in place and thus this training has been infrequent and irregular, and there are some concerns about the sustainability of the positive effects.

## **2) Operation and Maintenance Status**

### **<Status of Providing Spare Parts>**

Receiving orders and shipping procedures for spare parts between radio and television stations and maintenance centers are as follows. The procedure is that when the center receives an order it checks its inventory management database to confirm whether or not the product is in stock and then makes preparations to ship the part. The various centers work together to adjust their inventories in order to meet these requests. However, when none of the centers has the requested part, an external order must be made. In this case there are internal decisions and procedures that can take a great deal of time. In fact there are some cases in which it takes several months for the requested part to be sent from the center to the broadcasting station. In some cases the needed part cannot be provided in a timely fashion.

### **<Status of Jakarta Maintenance Center>**

The Jakarta Maintenance Center was visited in August 2000 and the storage area, working area and inventory management database were all inspected. The conditions of the facilities were as follows.

- **Storage Area**

This area was used to store spare parts for broadcasting equipment and facilities. These parts were carefully arranged and separated by TV-use and radio-use. All of the parts had tags so that the party ordering the part and the party sending the part could be easily identified. 24-hour security was also provided, thus it is assumed that these parts are in safe hands.

- **Working Area**

During the visit the technical staff was not performing any maintenance operations, but all of the tools and parts were neat and in order.

- **Inventory Management Database**

The relevant system was configured with DOS-V personal computers that were about 10-years old. Three of the five computers were broken and inoperable. There were no problems with the database itself, but the head of the center said that he would like to see the machines upgraded and equipped with more commonly used software like Windows.

## **3) Sustainability**

### **<Strengthening of Preventative Maintenance>**

This project provided advisory services covering preventative maintenance, maintenance procedures, the collection of equipment maintenance data, data analysis and inventory management. This has contributed to building a basic maintenance system for Indonesia's broadcasting sector. Japan International Cooperation (JICA) has been providing technical assistance (2000~2002) with the aim of bolstering a maintenance system based on the preventative maintenance concept put forth by this project. This cooperation has consisted of (i) understanding the current situation of the maintenance centers, (ii) introducing a

maintenance management program (MMP), (iii) improving the system for providing spare parts, (iv) establishing a maintenance center homepage. It is expected that these efforts will strengthen the effective and efficient budget plan and the maintenance system introduced by this project.

<Maintenance of the Maintenance Centers>

The Ministry of Information, the executing agency for this project, was decided to dissolve and its duties transferred to the Ministry of Transport when the cabinet of President Wahid was reorganized in October of 1999. Then in accordance with the government regulations Nos. 36 and 37 concerning RRI and TVRI promulgated by the President in July 2000, maintenance centers became independent agencies under the Ministry of Finance, Directorate General of Supervision State-Owned Enterprises, responsible for obtaining their own personnel and financing. The maintenance centers have been operated under these circumstances with personnel dispatched from RRI and TVRI. The minimum budget required for maintenance is provided by the Ministry of Finance through TVRI and RRI. However, there are concerns as to whether or not the center will be provided in the future with the budget needed for renewing equipment and facilities.

### Comparison of Original and Actual Scope

Item	Plan	Actual
Project Scope	<p>(1) Maintenance Center (Jakarta, Medan, Ujung Pandang) Provision of maintenance equipment and facilities</p> <ul style="list-style-type: none"> <li>• Relay equipment</li> <li>• Backup equipment</li> <li>• Modules / units</li> <li>• Spare parts</li> </ul> <p>(2) Consulting service</p>	<p>(1) Maintenance Center ( Jakarta, Medan, Ujung Pandang )</p> <ul style="list-style-type: none"> <li>- Backup equipment for TV and radio studios</li> <li>- Spare parts for radio and TV relay equipment</li> <li>- PCs, WAN systems and software needed for a data processing system</li> <li>- Measurement equipment</li> </ul> <p>(2) Consulting service</p>
Implementation Schedule	<p>(1) Consultant contract: ~ Nov. 1993</p> <p>(2) Facility and equipment contract ~ May 1995</p> <p>(3) Manufacturing and installation Nov. 1996</p> <p>(4) Completion: Nov. 1996</p>	<p>(1) Consultant contract: ~ Dec. 1993</p> <p>(2) Facility and equipment contract ~ Nov. 1996</p> <p>1) No.80/PA/RTF/1995: Jan. 16, 1995 2) No.81/PA/RTF/1995: Feb. 20, 1995 3) No.87/PA/RTF/1996: Nov. 15, 1996</p> <p>(3) Manufacturing and installation ~ Apr. 1997</p> <p>(4) Completion: Apr. 1997</p>
Project Cost		
Foreign currency	¥621 million	N.A.
Local currency	¥213 million	N.A.
Total	¥ 834 million	N.A.
ODA loan portion	¥708 million	¥708 million
Exchange rate	1Rp. = ¥0.059	N.A.