Summary

The first democratic presidential election in Indonesia took place in June of 1999, resulting in a new government and, in October of that year, the formulation of a national development plan for 2000-2004. In this plan, the following items are set forth as guidelines for a fundamental national policy: freedom of the press; improvement of the content of news programs by Television of the Republic of Indonesia (TVRI); and equal dissemination of useful information to all social classes. Along with this policy, TVRI became a Public Corporation (=PERJAN) for the first time since being established as Governmental Corporation in 1962. As a result TVRI has played an increasingly important role as a public broadcaster.

On the other hand it cannot be denied that TVRI has been slow to update its technology. TVRI urgently needs technological and equipment innovations, as setting up information networks has become the norm in the broadcasting sector.

Currently, TVRI's public broadcasting services reach 82% of the country's population. Much of the broadcasting equipment of the TVRI News Division is old and deteriorating. Thus, one of the most important tasks at hand is to begin replacing the equipment as soon as possible, to ensure the production of high-quality news programs. However, little progress is being made in this direction because of insufficient funds. The News Division, one of the country's most important broadcasting organs, has managed to operate by using and repairing existing equipment as best it can. But this invites the constant threat of broadcast malfunctions.

TVRI has accumulated a large quantity of videotapes of historical materials since it began broadcasting, but long-term storage has resulted in deterioration of the materials.

Given this background, the Indonesian government has requested that the Government of Japan provide grant aid to replace and reinforce the equipment of TVRI's News Division, to prevent possible interruptions of its broadcasts.

In response, the government of Japan dispatched a basic design study team under the Project for Improvement of Broadcasting Equipment for TVRI Jakarta News Division in the

Republic of Indonesia. For 35 days--from August 19th to September 21st, 2001--the team conducted a study of the relevance of the plan and the optimum methods and scale of cooperation.

After the study team returned to Japan, a draft of a basic design report was formulated and another mission was sent to Indonesia. For 11 days--from November 18th to November 27th, 2001--the basic design was explained to the project staff on the Indonesian side.

In response to a request from the Indonesian side, the study team examined the usage, service life and trouble of each piece of existing equipment, as well as TVRI's broadcasting activities and future plans. After modifications and additions were made to the initial request, the project scale was decided on the basis of the following design policy:

- Determine the scale of technical cooperation in proportion to the production capacity of the News Division and keep the scale to a minimum.
- Replace the existing deteriorated analog equipment with the latest digital equipment.
- Convert existing news videotapes from analog to digital and store thereof along with new digital tapes.

The outline of the planning that was ultimately proposed is shown below:

Item	Equipment	Quantity of existing equipment	Quantity. of requested equipment	Final modified plan
A	1-to-1 editing system	5 sets (analog and digital)	5 sets (digital)	5 sets (digital)
В	A/B roll editing system	1 set (analog) 1 set (digital) (under repair)	2 sets (digital)	1 set (digital)
С	Non-linear editing system	1 sets (digital)	2 sets (digital)	1 set (digital)
D	On-air VTR system	3 sets (analog)	3 sets (digital)	5 sets (digital)
Е	Foreign program recording system	1 set (analog)	4 sets (digital)	3 sets (digital)
F	Camera system for news coverage	31 sets; 3 sets (digital) 28 sets (analog)	25 sets (digital)	19 sets (digital)
G	Studio recording VTR system	3 sets (analog)	3 sets (digital)	3 sets (digital)
Н	Character-generator / Computer-graphics system		3 sets (digital)	2 sets (digital)

Item	Equipment	Quantity of existing equipment	Quantity. of requested equipment	Final modified plan
I	Broadcast tape storage system	Tape storage system	Digital archive system	Broadcast Tape storage system
J	Repair parts	1 set	1 set	1 set

Through the provision of news production equipment under this project, the News Division's equipment in TVRI--cameras, editing systems, news studio equipment, and on-air VTR systems--are to be completely digitized.

Since this project is aimed at enhancing the production and broadcasting capabilities of the News Division, it is important that the new digital equipment and associated technology is fully utilized to produce and broadcast new, higher-quality programs. This will require the introduction of soft components for program production.

Items	Former term	Later term	
1. Period	30 days	40 days	
2. Instructors	2 persons	3 persons	
3. Contents of guidance	Basic theory on program production and how to write a program production scripts	Operation method for the project equipment and practical training for program production	
4. Outputs Training textbook		Three 5-minute program tapes	

If this project is implemented through Japan's grant aid cooperation, it would take 3.5 months for detailed design and 8.0 months for procurement and installation--i.e. 11.5 months in total.

TVRI would be the implementing agency of this project and has secured a sufficient budget and adequate organizational structure to implement the project. It is also confirmed that there would be no problems in terms of management and maintenance power after implementation.

The effects to be obtained from implementation of the project are anticipated as follows:

(1) Direct effects

1) Indonesia as a whole is targeted for benefits

- 2) It will be possible for 82% of the population (167 million people) to receive reliable news programs produced with the new digital equipment.
- 3) The News Division will produce 50% (9.5 hours/day) of the total broadcast hours.

(2) Indirect effects

- 1) Production hours of the News Division will be shortened, while the number of news program transmission hours will increase.
- 2) Historical news materials (films and analog tapes) will be transferred to digital tape that can be used for rebroadcast and preserved for a long period without deterioration in quality.
- 3) Strengthening news programs will increase the capability of the News Division to report on natural disasters and other emergencies. This wider coverage is expected to help reduce the number of victims of natural disasters.

(3) Suggestions

It will be necessary to strengthen the broadcasting equipment operation and maintenance system in order to run the project effectively and efficiently.

In this regard, it is recommended that preventive maintenance, troubleshooting, etc., be reinforced for each item of equipment installed under the project, as detailed below:

- 1) Determining the tendency for each piece of equipment to occur trouble in daily operation
- 2) Obtaining data on the frequency of the trouble and storing the necessary amount of spare parts based on this data.