



BASIC DESIGN STUDY REPORT ON THE SUPPLEMENT PROJECT FOR THE RADIO AND TELEVISION TRAINING CENTER IN THE REPUBLIC OF INDONESIA

JULY,1990

JAPAN INTERNATIONAL COOPERATION AGENCY

国際協力事業団 21908

PREFACE

In response to the request of the Government of the Republic of Indonesia, the Government of Japan has decided to conduct a Basic Design Study on the Supplement Project for the Radio and Television Training Centre (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to Indonesia a survey team headed by Mr. Shinya NAKAI, Director of the Second Basic Design Study Division, Grant Aid Study and Design Department, JICA, from April 3 to April 20, 1990.

The team exchanged views with the officials concerned of the Government of Indonesia and conducted a field survey.

After the team returned to Japan, further studies were made. Then, a mission was sent to Indonesia in order to discuss the draft report and the present report was prepared.

I hope that this report will serve for the development of the Project and contribute to the promotion of friendly relations between our two countries.

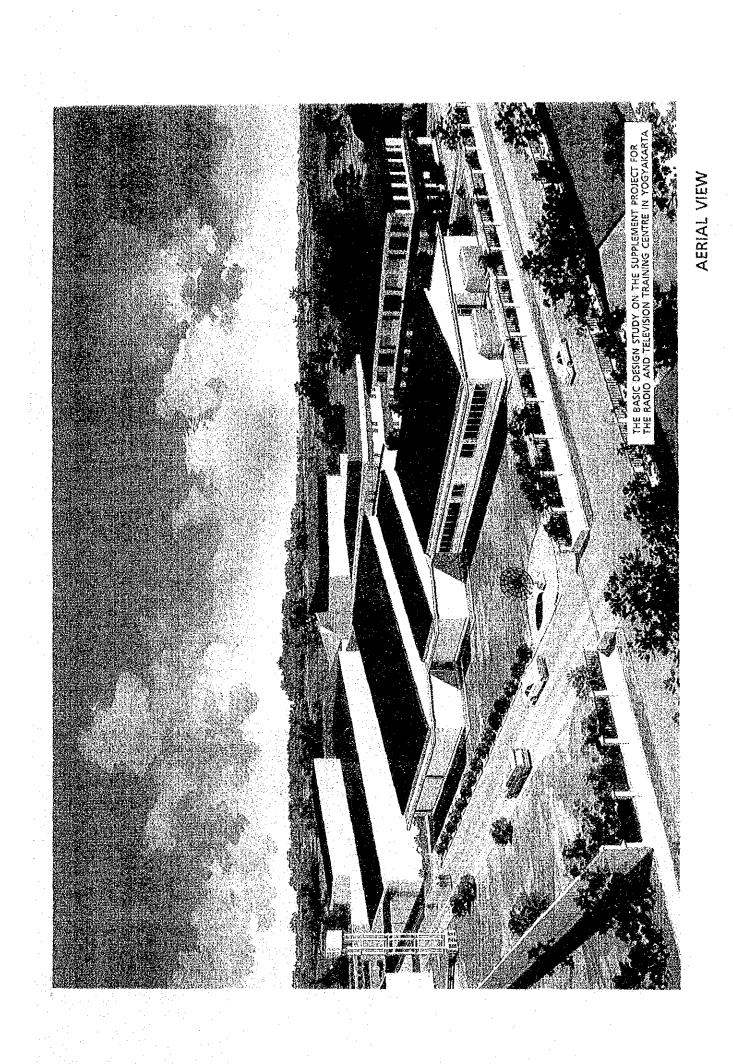
I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Indonesia for their close cooperation extended to the teams.

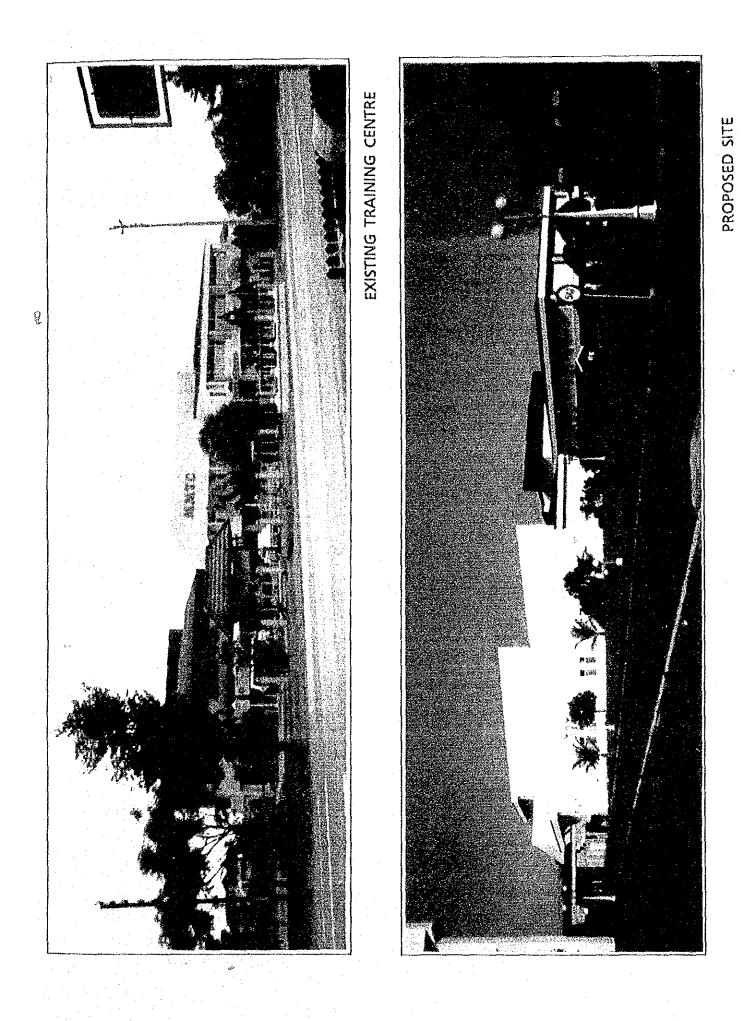
July, 1990

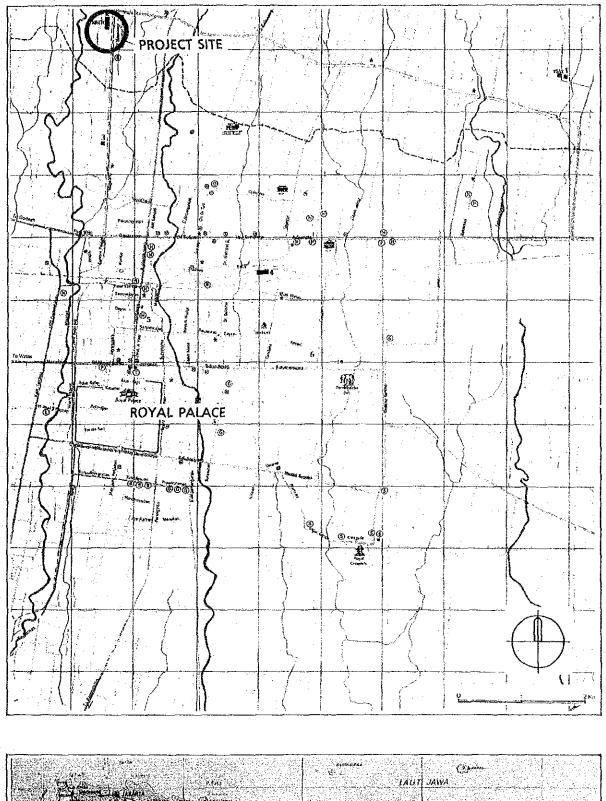
Kensuta Yanag

Kensuke Yanagiya President

Japan International Cooperation Agency









LOCATION MAP

SUMMARY

SUMMARY

The Republic of Indonesia, with a population of more than 160 million living in a vast territory of about 1.9 million square kilometres, is a multi-racial, multi-lingual and multi-cultural country where over 300 different languages are spoken. For achieving national unity and the education of the people, the Government of Indonesia positions broadcasting services as the vital means of communication playing the most effective and efficient roles. Because of their special characteristics of being able to appeal directly to the people's audio-visual senses, radio and television, in particular, have now become a truly powerful means of conveying necessary information to the people to promote their mutual understanding. As a result, a large number of radio and TV broadcasting stations have already been established throughout the country.

At present, in Indonesia, a project to improve and expand the broadcasting networks based on the Five-year Plan for the Integrated Development of Radio and TV Broadcasting is in progress with the result that the broadcasting services are now being expanded and enriched both in Meanwhile, for the purpose of fostering and quality and quantity. training the human resources required for the broadcasting services, the Government of Indonesia planned to establish the Multi-Media Training Centre (MMTC) for all the staff members who are engaged in the mass communication work at the government agencies of Indonesia, and made a request to the Government of Japan for cooperation in the realization of this plan. In response to the request, the Government of Japan decided to assist Indonesia with the training facilities and equipment through provision of grant aid in 1984, and also with the training and education of the employees engaged in broadcasting services through the offering of technical cooperation starting in 1983.

Subsequently, in 1985, the Government of Indonesia designated the MMTC, under a presidential order, as a school authorized to confer scholastic degrees, so that the graduates of the MMTC, upon returning to their respective former posts, may be given opportunities for promotion in accordance with the promotion and appointment system for Indonesia's government employees and also as that the MMTC may formally become a full-

(i)

fledged comprehensive personnel education and training institution. Accordingly, the MMTC carried out an overall realignment of the contents of the training courses it had been conducting until then to conform with the contents of the education system of the country. As a result, diploma-courses were established in three stages, viz., DI to DIM. Up to now, the MMTC, with Japan's technical cooperation, has conducted training in all of the subjects in the DI and a part of the subjects in the DII stages. However, owing to the changes made in the contents of training as mentioned above, a shortage has arisen in the facilities and equipment provided at the beginning and, consequently, the MMTC is now unable to carry out its training in the remaining subjects of the DII stages, nor is it able to start the DII stages.

It was under such circumstances as outlined above that the Government of Indonesia newly requested of Japan the provision of grant aid with regard to the supplying of education and training equipment as well as the technical facilities required to carry out the MMTC's diploma courses completely. In response to this request from the Government of Indonesia, Japan sent a preliminary survey team to Indonesia in April 1989. This team confirmed the contents of the request and the preparedness of the Indonesian side to execute the Project and, at the same time, investigated the appropriateness of this project and the details of the policies for the basic design study.

As a result, the Project was judged as being appropriate as an object of Japanese grant aid and, accordingly, the Japan International Cooperation Agency sent the Basic Design Study Team to Indonesia from April 3 to 20, 1990 for consultations with the Ministry of Information of Indonesia and the officials concerned at the MMTC about the contents of the facilities and equipment to be provided under the grant aid. The team also conducted a survey of the project site and the gathering of materials and data required. Furthermore, after its return to Japan, the team analyzed and examined the results of its survey in Indonesia, drew up the basic design and maintenance and management plans for the facilities and equipment to be provided its draft Basic Design Study Report. And in order to explain the contents of the above-mentioned draft report to the Indonesian side, another survey team was sent to Indonesia from June 26 to July 5, 1990 for such an explanation and reaffirmation with the officials concerned of the Indonesian government.

As a result of the surveys and studies made as mentioned above, the contents of the Project have been established as follows:

	Proposed facilities	Main Equipment
1.	Joint Lecture Room	200-inch video projector
2.	Programme Production Training Room	Non-Professiona I VTRs for playback-only use monitors, etc.
3.	Language Laboratory	LL system
4.	TV Studio	ENG-type video camera, studio lighting, ‡inch VTR, etc.
5.	Radio Studio	Audio-mixer, tape-recorder, CD player, cassette-tape player, audio-dubbing system, etc.
6.	Post-production Room	‡inch VTR, editor, switcher, etc.
7.	Video Editing Room	Video editing equipment, etc.
8.	ENG Equipment Maintenance	ENG camera with built-in VTR.
	Room	Battery charger, etc.
9.	Electronics and Digital Training Room	Boards/panels of various types of electronic circuit and digital circuit; and measuring instruments; etc.
10.	Radio Frequency Training Room	VHF TV transmitter (1kW)
		Antenna and receiver for receiving transmissions from the PALAPA satellite
		Microwave experiment set
		Spectrum analyzer
11.	Electric Power Training Room	Diesel-engine-driven generator
		Power-distribution console, transformer, AC/DC motors, etc.
12.	Videotape Storeroom	Lockers and shelves

The total amount of the estimated expenses to be borne by the Indonesian side for the Project is 26,400,000 rupians. The construction period required is 12 months.

(iii)

As a result of execution of the Project, it will become possible to carry out completely all of the diploma courses (DI to DM) at the MMTC and this, in turn, will contribute to the further enhancement of the qualitative level of human resources at Indonesia's broadcasting services and also to the improvement of the technological levels and programme contents of the nation's broadcasting. At the same time, it is expected that, as a result of execution of the Project in Indonesia as a multiracial archipelago country, the broadcasting will contribute more and more to national development through the conveying of social information, dissemination of daily-living knowledge such as hygiene and medicine, and further spreading of education including unification of the national language.

Ċ	0	N	Т	E	N	Т	S

		+	
1			
		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	

-			Page
PI	REFACE		
PI	ERSPECTIVE		
LC	CATION M	ΑΡ	
รเ	JMMARY		
CI	HAPTER 1	Introduction	1
0.			
C	HAPTER 2	Background of the Project	5
		Present Status of Radio and Television Broadcasting	
14 1	2-1	in Indonesia	5
	2-1-1	Historical Background of Development of Radio	
		and Television Broadcasting	5
	2-1-2	Present Status of Radio and Television Broadcasting	10
	2-2	Development Plan and Personnel Plan for Radio	
.*		and Television Broadcasting	23
	2-2-1	How the Broadcast Development Plans Were Implemented in the Latter Half of the 1980s	23
	2-2-2	Targets of the Development Plans for Radio	
		and Television Broadcasting	27
	2-2-3	Projects Currently in Progress	31
¹	2-2-4	Development Projects Required for the Future	31
•	2-2-5	Problems Confronting Broadcasting in Indonesia	37
	2-2-6	Present Status of Personnel Assignment and	
		Necessity of Training	43
	2-3	Current Condition of Multi-Media Training Centres	49
	2-3-1	Outline	49
	2-3-2	How Japan's Grant Aid Programme and Technical Cooperation are Being Implemented	59
		e de la constante de la constan La constante de la constante de	

	2-3-3	How the Diploma-Course Training Programmes are Being Conducted	67
	2-3-4	How Training Courses Other than Diploma Courses (Enrichment Courses) are Being Conducted	87
	2-3-5	Current Condition of Training Facilities and Training Equipment	89
	2-4	Process Leading to the Request and the Contents of the Request	132
	2-4-1	Process Leading to the Request	132
	2-4-2	Contents of the Request	134
CHAI	PTER 3	Contents of the Project	141
	3-1	Objectives	141
	3-2	Examination of the Contents of the Request	142
	3-2-1	Examination of the Appropriateness and Essentiality of the Project	142
	3-2-2	Examination of the Execution and Operational Plans	135
	3-2-3	Examination of Relations, including Overlapping, with Other Similar Projects	150
	3-2-4	Examination of the Contents of Facilities and Equipment Requested by Indonesia	159
	3-2-5	Examination of Essentiality of Technical Cooperation	169
	3-2-6	Basic Policy for Execution of Cooperation	170
	3-3	Outline of the Project	171
	3-3- 1	Executing Agency and the Operational System	171
	3-3-2	Operational Plans	174
	3-3-3	Location and Condition of the Project Site	200
	3-3-4	Outline of Facilities and Equipment	213
	3-3-5	Maintenance and Management Plans	218
	3-4	Technical Cooperation	220
			ars.

. . .

CHAPTER 4	Pacie Device	223
CHAFTEN 4	Basic Design	
4-1	Design Policy	223
4-2	Analysis of Design Criteria	225
4-3	Basic Plans for Facilities and Equipment	227
4-3-1	Facilities and Layout Plans	227
4-3-2	Architectural Designs	228
4-3-3	Equipment Plan	252
4-3-4	Basic Design Drawings	264
4-4	Implementation Plan	286
4-4-1	Implementation Policy	286
4-4-2	Construction Supervision Plan	286
4-4-3	Procurement Plan	288
4-4-4	Implementation Schedule	289
4-4-5	Estimated Project Cost to be Borne by the Government of Indonesia	292
andra an an Arrana An Arrana An Arrana		
CHAPTER 5	Project Evaluation and Conclusion	293

APPENDICES

 Member List of Survey Team 							
 Member List of Survey Team 					~		
1. INTERIOUS LIST OF SULVEY LEAVE	6/1	mbor	1 1 6 4	At.	SHEWOW	10.000	
	. 1911	nnoer	1131	01	JUI 464	rcam	
				- ·			

- 2. Survey Schedule
- 3. Member List of Concerned Parties in Indonesia
- 4. Minutes of Discussions
- 5. List of Data on Indonesia

- iii -

CHAPTER 1 Introduction

CHAPTER 1 Introduction

Indonesia, a multi-island country possessing great diversity of peoples and cultures, is currently pushing ahead its extensive plans of expanding radio and TV broadcasting networks for the purpose of promoting national unification and modernization. With the objective of educating and training the competent personnel required for these expansion plans, the Government of Indonesia drew up the plan of establishing the Multi-Media Training Centre (MMTC) and in 1979 officially requested of Japan provision of the necessary facilities and equipment for the MMTC and technical cooperation in the setting up and running of the MMTC. In response to this request, Japan started, in October 1983, to offer technical cooperation to the MMTC in the training of broadcasting personnel and in 1984 carried out the provision of facilities and training equipment to MMTC with the Japanese government's grant aid.

At first, MMTC was established as an institution to provide basic training and education. However, considering the fact that, in Indonesia, the fostering of candidates for senior staff positions was also urgently required, MMTC in 1985 was designated as an educational institution authorized to confer academic degrees under presidential order. As a result, the need arose for MMTC to include a wide range of academic subjects in its curriculum in order to enhance the contents of its education to a level befitting an institution authorized to confer degrees to its graduates. And in response to this need, the contents of the technical cooperation have also been changed accordingly.

At present, at MMTC, the DI courses (five fields: "D" means "Diploma") and a part of the DI courses (3 of the 8 fields) are being conducted.

However, as a result of the changes made in the curriculum as mentioned above, a shortage occurred in the facilities and equipment required, and moreover, when it comes to the remaining DIL courses (5 fields) and all of the DIM courses (11 fields), the very running of the courses is in difficulty, with the result that the fostering of middleclass staff, the personnel that Indonesia needs most acutely, cannot be promoted sufficiently. It was against such a background that the Government of Indonesia requested Japan for grant aid cooperation to provide MMTC with the facilities and equipment that are both necessary and adequate in conducting the above-mentioned training courses according to the original schedule.

In response to this request, the Japanese government decided to conduct a Preliminary Study and accordingly, JICA sent to Indonesia from April 10 to 22, 1989, a study team headed by Junichi Aoki, Special Adviser for International Cooperation, Ministry of Posts and Communications. The objective of the study team was to examine the appropriateness of the Project and to make a preliminary basic design study.

After the submission of the Preliminary Study Report, the Japanese government decided to conduct a Basic Design Study and, accordingly, JICA sent to Indonesia from April 3 to 20, 1990, a study team headed by Shinya Nakai, Director, Second Basic Design Study Division, Grant Aid Survey Department, Japan International Cooperation Agency. The study team held a series of discussions in Yogyakarta city with the officials concerned regarding this Project and, at the same time, conducted a survey of such aspects as the existing facilities and equipment at MMTC, the condition of the construction site for the new facilities and training plans. The study team also conducted a survey on the Radio Training Centre and TV Training Centre in Yogyakarta as similar types of institutions. Meanwhile, the study team and its Indonesian counterparts compiled the Minutes of Discussions summarizing the basic agreements reached between the two sides and signed the document.

After returning to Japan, the study team conducted a series of domestic analyses based on the results of the survey it had conducted in Indonesia and confirmed the appropriateness of the Project as an object of grant aid cooperation. At the same time, the study team compiled the results of the study, such as the basic design, estimate of construction expenses, construction plans, effects of the Project and conclusion, into a Draft Final Report. Subsequently from June 26 to July 5, 1990, the team again visited Indonesia, this time led by Mr. Toru NAKAYA, Assistant Director, Administration Division, Broadcasting Bureau, Ministry of Posts and Telecommunications. In addition to discussing the Draft Final Report with its Indonesian counterpart, the JICA team compiled the basic matters

- 2 -

agreed between the two parties into the Minutes of Discussions which was signed by the Indonesian and the Japanese sides. The present Report has been compiled on the basis of the results of the foregoing activities.

Incidentally, the composition of the study team, the schedule of the field survey, the list of the Indonesian officials concerned and the Minutes of Discussions are included in the Appendices.

CHAPTER 2 Background of the Project

CHAPTER 2 Background of the Project

2-1 Present Status of Radio and Television Broadcasting in Indonesia

2-1-1 Historical Background of the Development of Radio and Television Broadcasting

(1) General Conditions in Indonesia

Indonesia is the largest archipelago in the world, consisting of some 13,700 large and small islands which are scattered widely across a vast area of about 5,000km from east to west and about 1,800km from south to north. With a total land area of about 1.92 million km², Indonesia is about 5.1 times as large as Japan. The nation's total population is about 165 million (1985) and it includes more than 200 different ethnic groups with languages and cultures of their own. It is, therefore, a multi-racial, multi-lingual and multi-cultural nation.

The nation's population distribution is remarkably uneven; 61% of the entire population live on the island of Java which accounts for only 6.9% of the total area of the country. The average population density of the whole country (per 1km²) is 85 persons, but the corresponding figures are 755 persons in Java, 14 in Kalimantan and 6 in Irian Jaya, respectively. The population growth rate is about 2.2% (1985).

Indonesia became independent as a republic on August 17, 1945, immediately after the end of World War II. Based on the ideals of PANCASILA and the Constitution which was promulgated on August 18, 1945, Indonesia has endeavored ever since then toward the attainment of its national unity and national development.

(2) Process of Development of Broadcasting Services in Indonesia

The history of broadcasting in Indonesia can be traced back to 1925 when the nation was under the colonial rule of Holland. The national radio broadcasting service in the Republic of Indonesia was started on September 11, 1945 when RRI, Radio Republik Indonesia, was established immediately after the nation's independence. The operation of the RRI began with eight broadcasting stations in major cities in Java and Sumatra but by the end of the 1960s it had been expanded to the level of operating shortwave broadcasting stations in 49 cities throughout the country.

However, in those times, the majority of the services in the provinces outside Jakarta were operated with low-power stations and superannuated equipment made in the 1950s and, moreover, owing to the frequency conditions in the shortwave band and also to the wavepropagation characteristics of shortwave, satisfactory reception of broadcasts was not possible except in the areas surrounding the broadcasting stations. Hence, there was the need of introducing mediumwave radio broadcasts.

Meanwhile, with regard to television broadcasting, TVRI, Televisi Republik Indonesia, was inaugurated on August 24, 1962 for the immediate purpose of broadcasting the 4th Asian Games held in Jakarta that year. Full-scale TV broadcasting in Indonesia began on January 1, 1963 with an average daily broadcasting time of 2.5 hours. After that, in 1965, a TV studio was constructed in Yogyakarta, and it had become possible by the end of the 1960s for TVRI to broadcast about five hours a day of programmes through eight transmitting stations in Java with the construction of self-operated microwave circuits linking Jakarta-Yogyakarta-Surabaya.

However, the nation still faced such problems as the fact that the TV service was confined to the island of Java and that the technical facilities were of a small scale and superannuated.

The 1960s for Indonesia was the most difficult period in terms of economy. Even though the Indonesian government attached great importance to the broadcasting services and intended to make positive use of broadcasting for national development, improvements of facilities did not proceed as quickly as had been desired and, moreover, it was extremely difficult to secure enough funds to cover the expenses of programme production, facilities operation, maintenance, etc. Such circumstances further contributed to superannuation of facilities and obstructed broadcasting activities.

- 6 -

Toward the end of the 1960s, Indonesia at long last entered a period of stability both economically and politically, and began progress on the road to construction of a modern state. With the aim of further developing the national economy, the Government of Indonesia started a 5year development plan with fiscal 1969 as the initial year. The government, in parallel with this development plan, put special emphasis on the development of the broadcasting media as the major means of spreading education aimed at the fostering of human resources as the driving power of national development, especially through the spreading of Indonesian as the national language, with the ultimate objective of ensuring the spread of national ideals and of attaining national unity. The government also placed high expectations on the broadcasting media as a vehicle to spread family planning in order to hold down the excessive Thus, with a view to reconstructing and increase of the population. expanding the broadcasting services that had been more or less at a standstill during the 1960s, the Indonesian government submitted a plan to expand the broadcasting networks to the IGGI (Inter-Governmental Group of Indonesia) in December 1970.

The Japanese government judged this plan as being one deserving assistance from Japan and conducted a series of surveys from 1971 to 1972 and, as a result, decided to offer economic assistance to Indonesia in the reconstruction of the latter's broadcasting services. Following this decision, yen credit loans were provided to Indonesia during the fiscal years from 1972 to 1974.

This project is the first large-scale project in Indonesia's broadcasting services and its contents are as explained on the following table.

- 7 -

Year	Project Programme	Project Code	Object	Project	Year of Completion
1972	Establishment of Medium Wave Radio Network Project	J-10	Radio	Construction of MW Transmitter Station and Installation of Studio Equipment: Jakarta, Surabaya, Medan	1976
	and Improvement of Television Network Project	J~11	τv	Renewal of TV Transmitter: Jakarta, Yogyakarta, Nagrak, Cirebon, Gantungan, Gombel	1976~1978
1973	Improvement of Television Network	M-1/73	τv	Construction of TV Studio: Surabaya Construction of TV Relay Station: Walad, Pasir Bogor, Pasir Sumbel, Banon, Colo	1977~1979
1974	Establishment of Medium Radio Network Project	M-2	Radio	Construction of MW Transmitter Station and Installation of Studio Equipment: Ujung Pandang, Banjarmasin, Palembang, Pekanbaru, Semarang	1977
1974	Improvement of Television Network Project	M - 1/74	τv	Renewal of TV Transmitter and Improvement of Colour TV Studio Equipment: Jakarta Extension of Colour TV Studio Facilities: Yogyakarta Renewal of Standby TV Transmitter: Nagrak, Cirebon, Gantungan Installation of Standby TV Transmitter and Improvement of Colour TV Studio Equipment: Medan, Ujung Pandang, Surabaya Renewal of TV Transmitter and Relaying Transmitter: Gombel (Standby), Pare, Lawang	1980~1981

The 1970s for Indonesia was a period when revenue from oil was coming in steadily. During this period, the Indonesian government energetically carried out expansion and improvement of the broadcasting networks of RRI and TVRI, making effective use of buyer's credits from such countries as the United States, France, West Germany, Britain and the Netherlands, as well as credit loans from Japan.

Those projects planned during the period of Pelita I were completed one after another from the middle of the 1970s to the beginning of the 1980s during the periods of Pelita II and Pelita II. As a result, the

- 8 -

radio and TV broadcasting networks were expanded remarkably across the country.

On the other hand, with regard to the microwave networks in Indonesia, the circuits originating from Jakarta had been completed with Bali (the Trans-Java circuits) and with Medan (Trans-Sumatra circuits) by 1976. However, such circuits covered only 10% of the entire territory of Indonesia. In July 1976, the Indonesian government launched a domestic communications satellite, PALAPA (A1) and began constructing a nationwide communications network. The first PALAPA satellite launched has been succeeded today by PALAPA B1 (launched in June 1983) and PALAPA B2P (launched in March 1987).

These PALAPA satellites have not only brought about a spectacular expansion in various kinds of communications networks including the telephone network across the country but have also made it possible to transmit TV programmes from Jakarta and radio programmes as well, although in the case of the latter, the circuits available were still of a telephone-circuit class. Thus, the PALAPA satellites have come to play a major role in the improvement and expansion of the broadcasting networks.

As for broadcasting equipment, Indonesia used to introduce foreignmade products into its broadcasting operations until the latter half of the 1970s. However, since PUSAT LEN-LIPI, or the National Centre for Engineering Labouratories, was established in 1967 as a division of LIPI, the Institute of Science and Technology, Indonesia has steadily endeavored to localize the production of broadcasting equipment for the national radio and TV broadcasting services. As a result, as from the start of 1980, the home-produced low-power transmitters, viz., FM transmitters and TV relaying transmitters, came to be full introduced to the radio and TV broadcasting networks throughout the country.

Following the process outlined above, the broadcasting services in Indonesia had seen the foundation of their broadcasting networks completed in the present form by the beginning of the 1980s. As for radio broadcasting, the studio facilities at 49 stations across the country (including Jakarta) have been expanded along with the installation of medium-wave transmitting facilities except for the 12 stations in such regions as Irian Jaya in the east of Indonesia. As for TV broadcasting, TV studios with programme-production functions have been expanded at ten stations including Jakarta, and a total of seven mobile production stations using a compact OB van have been distributed across the country. The total number of transmitting stations for TV broadcasting in 1985 exceeded 200 throughout Indonesia.

2-1-2 Present Status of Radio and Television Broadcasting

(1) Outline of Organizations and Operation of Radio and Television Broadcasting

The broadcasting in Indonesia is under the jurisdiction of the Directorate General of Radio, Television and Film (RTF) which belongs to the Ministry of Information (DEPPEN). The broadcasting services are conducted throughout the entire territory of Indonesia by two organizations operated directly by DEPPEN, Radio Republik Indonesia (RRI) and Televisi Republik Indonesia (TVRI).

Radiowave control is under the supervision of the Directorate of Posts and Telecommunications of the Ministry of Tourism, Posts and Telecommunications. As for the programme transmission relay circuits that constitute the broadcasting networks, the domestic circuits are leased from PERUMTEL and the international circuits from INDOSAT.

RRI and TVRI, both of which are independent organizations under the jurisdiction of RTF, are headquartered in Jakarta. The organizational charts of DEPPEN and RTF Directorate General are as shown in Figs. 2-1-1 and 2-1-2, respectively. As to the number of personnel, there are a total of about 50,000 in DEPPEN including its regional offices. Of these 50,000, about 14,400 belong to the RTF Directorate General. (As of the end of March 1990.)

- 10 -

The numbers of personnel in each of the different sections within the organization of the RTF Directorate General are:

National Film Production Centre (PPFN)	346
Body of Film Censors (BSF)	64
Directorate of Film	109
Directorate of Television (TVRI)	5,381
Directorate of Radio (RRI)	8,335
Secretariat of Directorate General	136

Total:

14,371

Within DEPPEN, there are, besides the RTF Directorate General, a number of divisions that are closely related to the operation of radio and TV broadcasting services; the RTF Engineering Centre, the Employees' Educational & Training Centre and the Multi-Media Training Centre (MMTC).

The RTF Engineering Centre was established in 1983 as an organization under the direct control of DEPPEN to exclusively take charge of planning, implementation, development, and maintenance management of the facilities relating to radio, TV and film. The number of personnel of this Centre is relatively small at 43. For the present, this Centre conducts, in cooperation with the sections in charge at RRI and TVRI, mainly the facilities planning for radio and TV and the management of projects.

As the institutions for the training of personnel working in radio and TV broadcasting services, the Radio Operational Training Centre and the TV Operational Training Centre were opened one after the other in 1976 and 1978, respectively. These two Centres have been conducting vocational training courses, the former for RRI personnel and the latter for TVRI personnel. On the organizational chart, both of the two Centres belong to the employees' Educational and Training Centre which is under the direct control of DEPPEN. (To be explained in detail in 3-2-3.)

The Multi-Media Training Centre (MMTC) was established in Yogyakarta in 1985 with the objective of training the leading personnel to be engaged in the information-media work at DEPPEN. On the organizational chart,

- 11 -

this MMTC is placed under the direct control of the Secretariat for the Minister and the Vice Minister.

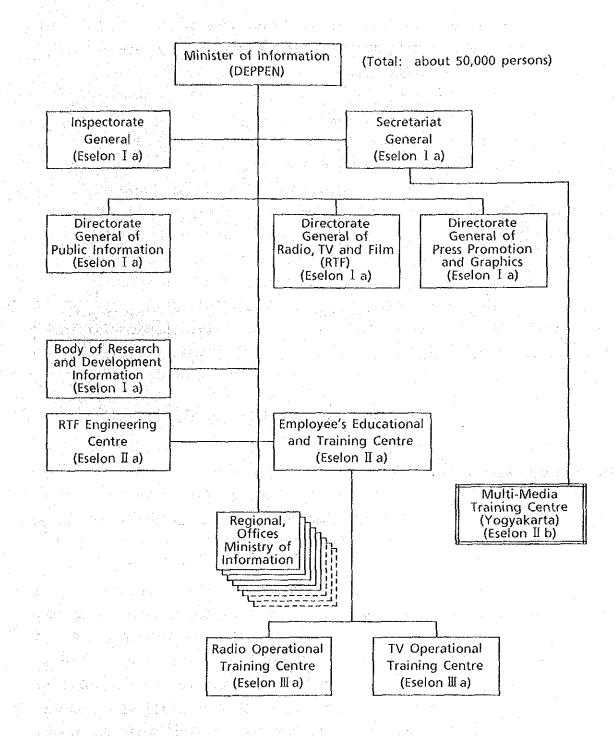


Fig. 2-1-1 Organizational Chart of DEPPEN

- 13 -

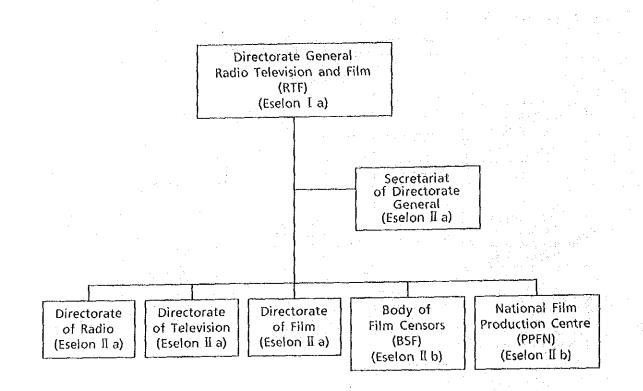


Fig. 2-1-2 Organizational Chart of RTF

- (2) Radio Broadcasting
 - 1) Development and Present Status of RRI's Radio Broadcasting Stations

Until the first half of the 1970s, RRI's broadcasting had all been conducted on shortwave. It was planned along with the national long-term development plan which started from the fiscal year 1969/70 to introduce medium-wave broadcasting networks. Subsequently, as from 1976, construction of medium-wave transmitting stations was started on a large scale with economic assistance from Japan and the Western nations, with the result that major cities and their vicinities have come to be covered by medium-wave broadcasts, excepting those in such regions as Irian Jaya in eastern Indonesia.

At present, in order to extend radio broadcasting service to the remote regions far from the city areas and to remote islands as well, RRI operates broadcasting that makes combined use of medium waves and shortwaves; that is, on medium wave in the case of broadcasts to cities and their vicinities and shortwave for broadcasts to distant provinces and remote islands.

There are a total of 49 RRI stations operating across the country. That is, besides the Jakarta central station as the key station of the nationwide radio broadcasts, there are Nusantara Station as the regional headquarters in five major cities, viz., Medan (Sumatra), Yogyakarta (Java), Banjarmasin (Kalimantan), Ujung Pandang (Sulawesi) and Jayapura (New Guinea). In addition to these, there are 26 Regional-I Stations, one each in the provincial capitals and major regional cities, and 17 Regional-II Stations in the regional cities. Through these stations and making combined use of medium waves and shortwaves, RRI conducts radio broadcasting in the regions that are inhabited by about 68% of the total population of Indonesia. The number of radio receivers as of the end of 1988 was about 30 million sets.

RRI's annual budget in fiscal 1988/89 was 18.7 billion Rp., the entire amount having consisted of a government subsidy. RRI conducts commercial broadcasts which bring in an annual revenue of 340 million Rp. This revenue, however, is deposited entirely into the national treasury. As for radio, no license fee is collected from the listeners.

2) RRI's Broadcast Programmes

RRI in Jakarta broadcasts two series of programmes; one for nationwide reception and the other intended for reception in the metropolitan area. The nationwide programmes are broadcast from two transmitting stations in Jakarta. To Jakarta and its neighboring areas, the programmes are broadcast on medium wave and FM. They are also broadcast nationwide on shortwave. Furthermore, the programmes are relayed to regional stations by relay circuits via the PALAPA satellite. The regional stations outside Jakarta conduct broadcasts of only one programme series.

- 15 -

At present, all the RRI stations, except for the three stations in Irian Jaya, are conducting 24-hour broadcasts. About 20% of the broadcasting hours of each regional station are devoted to the relaying of news and information programmes originating from Jakarta, the remaining 80% being used for the broadcast of programmes produced by each station on its own. Under government order, news and information programmes are simultaneously rebroadcast by the regional non-RRI stations as well.

In addition to the domestic services, external services on shortwave are also conducted by RRI from its transmitting stations in Jakarta and Medan, 12 hours a day in 10 languages.

3) Non-RRI Stations

In Indonesia, there are, besides the state-run RRI stations, a large number of stations run by regional governments and commercial stations. The number of such non-RRI stations reached 617 as of April 1989. The transmitting output of each of these stations is regulated at below 300W. Of the 617 stations, 42 are broadcasting on FM. Following is the breakdown of the non-RRI stations in operation at present:

Commercial stations	479	
Stations run by regional governments	133	
Other radio stations	5	

Total:

617

- (3) Television Broadcasting
 - 1) Development and Present Status of TVRI's Television Broadcasting Stations

Following the start in August 1962 of TV broadcasting in Jakarta, a TV broadcasting station was constructed in Yogyakarta in 1965, but its service was confined to the island of Java. With the start of the 1970s, the work to expand TV broadcasting to regions outside the island of Java began in accordance with the Indonesian government's policy to expand the nation's broadcasting services. Consequently, by 1978, a total of seven TV stations had been constructed, one each in Medan and Palembang in Sumatra, Ujung Pandang and Menado in Sulawesi, Balikpapan in Kalimantan, Dempasar in Bali and Surabaya in Java. Each of these stations is equipped with TV studios and other installations for programme production, having the functions to produce and broadcast 2-3 hours of local programmes a day as well as to relay nationwide programmes from Jakarta. In 1988, a TV station having temporary studio facilities was constructed in the city of Bandung in West Java. As a result, TVRI today operates a total of 10 broadcasting stations in Indonesia.

In view of the fact that the construction of a regional TV broadcasting station normally requires a large number of personnel and an enormous amount of expense, the Indonesian government had decided on the policy of conducting programme production in the regions other than the cities mentioned above by making effective use of compact OB vans that excel in mobility. Accordingly, the government in 1982 established seven Mobile Production Stations equipped with a compact OB van and editing equipment. The videotaped programmes thus produced with the compact OB van are sent to Jakarta and are broadcast as programmes to introduce nationwide the information and cultures that are unique to the regions concerned. These have been contributing substantially to the enhancement of the quality of TVRI's programmes.

Meanwhile, with regard to the expansion and improvement of broadcasting networks, too, the construction of transmitting stations since the start of the 1970s has been pushed ahead at a fast pace, side by side with the construction of studios, with financial assistances from Japan and Western nations. The launching of the PALAPA satellite in 1976 has made it possible for TV programmes to be transmitted nationwide and, as a result of the efforts made to nationalize the production of broadcasting equipment, the construction of small TVRO stations (TV Receive Only Stations) has been further promoted across the country.

- 17 -

The population coverage of TVRI's broadcasts is about 68% and the registered number of TV receivers as of fiscal 1988 is about 5.8 million sets.

TVRI's broadcasting facilities throughout the country at present are as follows:

Broadcasting Stations (with programme-producing capacity) ...10

Jakarta	(Central Station)
Medan	(North Sumatra)
Palembang	(South Sumatra)
Bandung	(West Java)
Yogyakarta	(D.I. Yogyakarta)
Surabaya	(East Java)
Dempasar	(Bali)
Balikpapan	(East Kalimantan)
Ujung Pandang	(South Sulawesi)
Manado	(North Sulawesi)

Mobile Production Stations7

1. 199 Maria

Banda Aceh	(D.I. Aceh)
Padang	(West Sumatra)
Semarang	(Central Java)
Pontianak	(West Kalimantan)
Banjarmasin	(South Kalimantan)
Kupang	(East Nusa Tenggara)
Ambon	(Maluku)

Transmitting Stations ...244

(as of the end of 1989/90, including TV microwave relay stations)

About 80% of TVRI's revenue are derived from TV license fees, the remaining 16% being a government subsidy and 5.6% being the total of payments received for cooperation offered in news coverage (1988/89). The annual budget for 1988/89 was 66.6% billion Rp which was about 3.6 times the amount of RRI's annual budget for the corresponding year.

The collecting of TV license fees since the start of TV broadcasting has been conducted through the nationwide organization of POS and GIRO, an arrangement in which the TV-set owners are requested to pay their fees at the local post offices.

- 19 -

The amounts of TV license fees are regulated by the type and screen-size of each TV receiver. In the case of a typical colour TV receiver with a screen size less than 16", the monthly fee is 2,000 Rp. The monthly TV license fee charged for a 16"-19" set is 2,500 Rp. The current rate of collection of TV license fees is about 55% on a national average, about 25% in Jakarta and about 70-80% in the provinces. Even though efforts are being made to improve the collection rate of TV license fees through PR in the programmes and through periodical door-to-door visits, such efforts have not necessarily been sufficient.

2) TVRI's Broadcast Programmes

At present, TVRI at its Jakarta central station broadcasts on two channels; the programmes for nationwide reception (CH-6) and those for the metropolitan area (CH-8). On the other hand, each of the regional broadcasting stations rebroadcasts the one channel of national programmes from Jakarta and, at the same time, broadcasts 2-3 hours of programmes produced on its own.

The Jakarta central station broadcasts about 7 hours of national programmes from evening to night each day on weekdays and about 13.5 hours a day consisting of the above-mentioned evening-night programmes and the morning-hour programmes on Sundays and holidays. As for the programmes for the metropolitan area, about 2.5 hours are broadcast daily in the evening. Of these broadcasting hours, 80% are devoted to the programmes produced by TVRI and the remainder to the programmes produced by other countries.

In the case of the regional stations and the mobile production stations, they produce programmes for nationwide broadcast on tapes and have them broadcast nationwide from the Jakarta central station in accordance with the integrated programme plans determined for each regional station under the Jakarta central station's annual overall programming plans.

3) Non-TVRI TV Broadcasting Stations

In March 1989, the first-ever commercial TV broadcasting station for Indonesia, RCTI (Rajawali Citra Television Indonesia), started broadcasting in Jakarta. This TV station, under the pay-TV system, broadcasts mainly foreign entertainment programmes on UHF with an output of 50kW in transmitting power to metropolitan Jakarta. Its broadcasting hours by category of programmes are of the following ratios; entertainment 55%, education and culture 20%, news and information programmes 10% and commercials 15%. As to the news and information programmes, the programmes of TVRI are broadcast simultaneously with the broadcasts of TVRI. As of April 1989, RCTI has about 90,000 subscription contracts signed, this number corresponding to about 7% of the total number of TVset owning households in Jakarta.

As of 1990, this RCTI is the only commercial TV station in Indonesia, but plans to set up further commercial TV stations are reportedly being made in Surabaya and other regional cities.

In Indonesia, thanks to the PALAPA satellite, TV-set owners can receive, in addition to the domestic TV broadcasts mentioned above, a number of TV programmes broadcast in the neighboring countries. At present, two Thai TV channels and two Malaysian channels are relaying their respective domestic programmes by leasing a transponder aboard the PALAPA satellite. As a result, through the PALAPA receivers installed on an individual level in various parts of Indonesia, the TV programmes broadcast by the above-mentioned two countries are actually viewed in Indonesia in addition to the TVRI's programmes. With some of the lower-priced PALAPA receivers being available at not more than 1.5 million Rp, the ownership of PALAPA receivers has already reached a level of about 12,000 sets throughout Indonesia. However, PALAPA is a communication satellite whose transmission power is small and so the viewers are required to set up an antenna with a large diameter to receive the transmissions from the satellite. Consequently, there is a problem in the installation of a PALAPA receiver in terms of cost and other conditions. Hence, the pace

- 21 -

of increase in the number of PALAPA receivers is unlikely to be

very fast.

2-2 Development Plan and Personnel Plan for Radio and Television Broadcasting

2-2-1 How the Broadcast Development Plans Were implemented in the Latter Half of the 1980s

From around the middle of the 1970s to the beginning of the 1980s, the radio and television broadcasting in Indonesia developed into a form of broadcasting networks which are roughly the same as what can be seen today. The process of this development was outlined in 2-1-1 (2).

However, in both radio and television, the broadcasting networks in Indonesia at present are serving only about 68% of the entire population. As for the programmes, too, those for nationwide reception are broadcast only on two channels, that is, one each on radio and TV. Consequently, the strong desire has been expressed over the years for the expansion of the broadcasting networks and for the improvement of the programmes both in quantity and quality. In addition, as the superannuation of facilities has progressed steadily over the years, various problems have increasingly come to demand urgent solution, such as inadequacies in operation and maintenance owing to the hasty expansion of broadcasting facilities, as well as other problems such as the shortage of human resources to promote the broadcasting services.

It was under such circumstances as described above that the "Feasibility Study on the 5-year Plan for the Integrated Development of Radio and TV Broadcasting," which was timed with the 4th 5-year plan starting in 1984/85, and the "Study on the Long-term Plan," which took the long-range view up to and beyond the year 2000, were carried out in 1984 in the form of JICA's development studies in accordance with the request made by the Indonesian government to the Government of Japan.

Based on the report submitted by the JICA study team, the Indonesian government established its plans to improve and expand the nation's broadcasting facilities, including the plans to obtain assistance from foreign countries. As a result, the plans for rehabilitation, expansion and improvement of the broadcasting-network facilities were drawn up, making use of credit loans from such countries as the United States,

- 23 -

Britain, France, West Germany and Australia, as well as the yen credit loans from Japan for the "Project for Enhancement of Radio and Television Network" (Phase I: 1985 and Phase II: 1987).

. However, owing to the drop in the export prices of oil under the worldwide recession that continued from the beginning to the middle of the 1980s, the Indonesian economy suffered a serious setback, with the result that the national budget was reduced substantially in all aspects. Consequently, the greater part of the broadcast-related projects were postponed until the period of Repelita V (1989/90-93/94); they are currently being implemented.

Among the broadcasting facilities constructed during the period of Pelita IV, there are, in the case of radio, two 250 kW shortwave transmitting stations for external-broadcast use, one each in Jakarta and Medan, which were constructed with assistance from France. In the case of TV, major achievements are the completion of 49 regional TV relay stations which were constructed with funds provided by the Indonesian government.

As regards the training of personnel who are to be engaged in mass media work including broadcasting, it increasingly became necessary for the Indonesian government to educate and train within the organization the human resources required to ensure the expansion and development of broadcasting services and to carry on smooth day-to-day operations. Thus, with grant aid from Japan, the Multi-Media Training Centre (MMTC) was constructed and was opened officially in July 1985. Japan's technical cooperation with MMTC was started in October 1983 and is continuing today.

Meanwhile, with regard to the development related to broadcasting, the Indonesian government requested of the Japanese government cooperation in order to respond effectively to the abrupt changes in social conditions, especially the economic conditions, and to cope with the results of the hasty expansions of broadcasting facilities made in the past. The Indonesian government's request was also based on its judgment that a variety of problems had arisen in both the facilities and their management and operation owing to the delay in the formation of a management system and software development. Taking into account the timing with the progress of Repelita V, the Feasibility Study was conducted by JICA in 1989 on the short-term plan as well as a review of the current long-term plan on the "Integrated Radio and Television Servicing System Project."

The contents of the above-mentioned projects are as follows:

(1) Study on the "Long-term Plan for the Integrated Development of Radio and TV Broadcasting" (1984)

- This is a long-term plan covering 15 years from 1984/85.
- Its targets are to expand and improve the nationwide broadcasting ۰ networks of 3 radio channels and 2 TV channels and also to enrich the contents of broadcast programmes both in quality and quantity, including those of the regional relay broadcasts as well. Keeping these targets in view, facility plans were drawn up with regard to such aspects of broadcasting activities as programme planning, programme-production facility installation, station-establishment, setting up of transmission facilities and transmission circuit networks, and maintenance of facilities and equipment.

In the aspect of management and operation of broadcasting services, plans were drawn up for on organizational merger of radio and TV, establishment of a maintenance system and improvement of the system for further enhancement of audience reception of broadcasts.

- (2) Feasibility Study on the "Five-year Plan for the Integrated Development of Radio and TV Broadcasting" (1984)
 - This is a short-term plan to be executed during the period of the Fourth 5-year Plan starting in 1984/85.
 - In terms of the contents, this Plan forms a part of the Long-term Plan mentioned in (1) above. Under this Plan, mainly the following plans were drawn up:

 - 1) The plan to improve and expand the programme-production and transmission facilities for nationwide radio and TV broadcasts, and the maintenance and improvement of the radio and TV programme transmission circuit networks.

- 2) The plan to construct the broadcasting network for the 2nd Television (Educational).
- 3) The plan to establish an overall maintenance system and the plan concerning an Overall Maintenance Centre.
- (3) Project for "Enhancement of Radio and Television Network"; Phases I and II
 - A yen credit extended to Indonesia.
 Phase I ... Signed on December 27, 1985. 6.507 billion yen.
 Mainly the enhancement of programme-production facilities, as follows:
 - repairing and renewal of regional radio studios ... 21 stations
 - 2) Improvements made to introduce colour to such programmeproduction facilities as studios and OB vans at three regional stations.
 - Repairing and renewal of self-operated circuits in the island of Java.
 - Phase II ... Signed on December 8, 1987. 8.603 billion yen.
 Mainly the enhancement of the radio and TV transmission facilities and the construction of TV studios at three stations, as follows:
 - 1) Repairing and renewal of facilities at radio transmitting stations and TV transmitting stations (totaling 49 stations).
 - 2) Construction of new TV studios at three broadcasting stations, and enhancement of OB vans and ENG equipment.
- (4) Study on the "Integrated Radio and Television Servicing System Project" (1989)
 - Feasibility studies to review, during the coming ten years, the outcome of the long-term plan established in 1984, and those to

be conducted on the short-term plans to be executed during the period of the Fifth 5-year Plan.

Long-term Plan

Taking into account the current conditions in Indonesia, the possible development budget during the period of the Plan was estimated and the Long-term Plan was drawn up, including also those projects which were either already in the process of execution or had been decided on as at the time of the Study in 1989. In the hardware aspect, the primary target was set on the restoration of the functions of the broadcasting services and so the top priority was given to the repairing and renewal of the facilities and establishment of the maintenance system, followed by the improvement of facilities to enhance the quality of programmes and the level of the broadcasting networks. In the software aspect, plans were drawn up for qualitative and quantitative improvement of programmes and enrichment of educational programmes. Management and operational plans, personnel and financial plans, including the plan to promote the organizational merger of radio and TV, were also drawn up.

• Short-term Plans

医前端 医结核反应

Along the lines of the long-term plans as outlined above, various short-term plans were drawn up and begun to be executed. In the hardware aspect, repairing and renewal of facilities at radio and TV transmitting stations, establishment of a maintenance system, setting up of maintenance bases and enhancement of programme transmission and communication circuits were carried on. In the software aspect, plans were drawn up for the improvement of the work system for programming, maintenance and other activities and the improvement of programmes in quality and quantity, as well as the plans to prepare for the organizational merger of radio and TV broadcasting.

2-2-2 Targets of the Development Plans for Radio and Television Broadcasting

The Indonesian government assigns to the mass media a major role in national development in order to ensure realization of national unity and the PANCASILA and to see to it that the 1945 Constitution and the Guidelines of State Policy take root in this country. In "The Guidelines of State Policy" (1988 GBHN) adopted at the People's Consultative Assembly in March 1988, the activities and the roles of the mass media as a means of national development are mentioned as follows:

- a. Information and mass media as a means for national development should popularize Pancasila and the 1945 Constitution in all aspects of the people's life and enforce the nation's consciousness concerning social matters, nation building and state awareness in the framework of the realization of the Archipelago Outlook, and strengthen national endurance and the maintenance of a healthy and dynamic nation.
- b. Development of information media and national mass media shall be based on the spirit of Pancasila (and the 1945 Constitution) to support the national development of the Pancasila nation. The role of information and the mass media in the effort to popularize the implementation of Pancasila is to enforce this effort.
- c. The objective of the development of information and the mass media is to provide the climate which motivates the development of the role, participation and responsibility of the nation in national development.
- d. Development of information and the mass media as a means of information and two-way communication between the same communities and different communities and between the communities and the government is to be directed towards the uplifting of the spirit of dedication and struggle of the nation, to enforce national unity and to increase the people's consciousness of their rights and duties and national discipline in order to maintain their national cultural values for the enhancement of their Indonesian identity, to increase knowledge of the nation's life, to develop social communication and to convey aspirations and to encourage the nation in its national development. For this reason information and the mass media shall increase the

- 28 -

people's dedication, professional responsibility and capability and shall ensure that the facilities and infrastructure of the mass media work efficiently.

e. In the framework of the efforts to increase the role of the press it is necessary to increase the efforts to develop the press on the basis of Pancasila in order to have a healthy press, being free but responsible, which means a press which functions as the distributor of objective and educational information, exercising constructive social control, conveying the people's aspirations and encouraging communication and the social participation of the people. To this end it is necessary to continuously develop the positive interaction between the press, government and people (all actions are guaranteed to adhere to law and order).

f. In the framework of the efforts to increase and expand the dissemination of information throughout Indonesia, it is necessary to take advantage of the press, radio, television, film, news offices, video, traditional media and rural communication, with the appreciation of the condition of the people characterized by the "bhineka-tunggal-ika" (meaning unity within diverse conditions) and the national identity.

g. In order that social communication and the role of mass media will be effective, it is necessary to increase the pool of trained manpower in quality as well as in quantity to keep up with the advancement of communication technology.

Among the mass media, broadcasting is an economical medium capable of offering information of high quality and in large volume to a wide range of people instantaneously, simultaneously and equally. Thus, broadcasting not only excels as an efficient means of people's education and enlightenment but also carries an important role of providing entertainment and comfort to the people and of helping them nurture vitality for the future.

and the second second

In May 1988, the Director General of RTF announced "A Concept of the Construction and Development of Electric Mass Media, Radio, Television, Film and Video" in line with the above-mentioned "Guidelines of State Policy." In this "Concept," it is explained that the ultimate aim of the development of broadcasting is to offer equal services to the people and that, to that end, it is necessary to improve the quality of the services and the operation and management of the services. As specific targets of efforts, the following points are raised:

- i) Improvement of facilities for programme production and broadcasting networks, and expansion of broadcasting networks.
- ii) Improvement and expansion of transmission network for upward and downward programmes (to and from Jakarta) using the PALAPA satellite.
- iii) Supply of receivers at reasonable prices and in sufficient quantities.
 - iv) Securing of personnel with adequate vocational knowledge.
 - v) Securing of continuous and ample financial sources required in running the broadcasting services.
- vi) Efficient operation through an organizational merger of radio and television.

As to the composition of broadcast programmes, the "Concept" indicates the concepts regarding the improvement and expansion to be made from now on so that, in both radio and TV, the National Programmes and Regional Programmes broadcast on their respective networks may be received in good condition in their target areas, as follows:

i)	RRI	RRI National Pr	ogramme I	General programmes
•			• •	(together with the regional
				stations in the form of a
			÷	"conference system")
		RRI National Pr	ogramme II	Educational programmes
		RRI National Pr	ogramme III	Cultural and entertainment
				programmes

~ 30 -

Foreign Service Programme

Metropolitan Programme

RRI Regional Programme I RRI Regional Programme II

TVRI National Programme 1

TVRI National Programme II

External-broadcast programmes Topics for metropolitan Jakarta Regional general programmes Regional education

General programmes (together with the regional stations in the form of a "conference system") Educational programmes Special Metropolitan Programmes

> Topics for metropolitan Jakarta

Regional Television Services Regional general programmes

2-2-3 Projects Currently in Progress

ii) TVRI

As mentioned in 2-2-1, from the beginning of the 1980s to the middle of that decade, the economic condition in Indonesia deteriorated as a result of the drop of export prices of oil. Consequently, during the period of Pelita IV that started in 1984/85, various projects of rehabilitation and expansion of the broadcasting facilities which had been planned to be carried out with assistance from foreign countries had to be postponed substantially until Repelita V which starts in 1989/90. As of the beginning of 1990, there are a total of 8 projects which are either on-going or have been committed to as projects to be implemented. In addition, there are three more being planned. The outline of such projects is as shown in Table 2-2-1.

2-2-4 Development Projects Required for the Future

In the development study on "Integrated Radio and Television Servicing System Project" conducted by JICA in 1989, an overall review of the long-term plans and a feasibility study concerning the projects to be implemented during the period of Repelita V were conducted. In these studies, reviews were made including the projects which the Indonesian side is currently implementing or has decided to implement or plans to implement hereafter.

As a result, the following judgments were made as being the necessary measures to be taken in order to ensure overall development of broadcasting services in Indonesia. The top priority shall be given, in the hardware aspect, to the promotion of rehabilitation of the superannuated facilities and to the establishment of a maintenance and management system as well as the setting up of maintenance bases, in order to enhance the broadcasting services' functions for the maintenance and nationwide-management of the broadcasting facilities. The second priority in the hardware aspect was given to the improvement and expansion of programme-production equipment and broadcasting networks in order to achieve quantitative and qualitative improvements of the broadcast programmes.

In the software aspect, it was judged that the following measures are required to be taken. In parallel with the improvement of facilities, the broadcasting hours should be extended and the contents of broadcasts should be improved in quality in order to respond effectively to the wishes and requests of the broadcast audience. And in order to strengthen the foundation of the broadcasting services of the future, the organizational integration of radio and TV, which has been studied since around 1984, should be carried out so as to ensure efficient operation of broadcasting services. Furthermore, by taking various other measures including the improvement of quality of personnel, radical steps are required to be taken to improve the overall management and operation of the broadcasting services.

The Indonesian government is currently conducting specific examinations of the above-mentioned matters in an effort to establish concrete plans.

Table 2-2-2 gives a list of the projects currently in progress, the projects which are judged as recommendable for the next stage and the targets of the respective projects.

- 32 -

		Project	ct Outline of Project Creditor Cost REPELITA V				REPELITA VI					7					
					Foreign Currency (in millions)	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	1) TVRI:	Establishment of New TV Network (Bandung)	 Installation of TV Studio Equipment and an OB Van at Bandung Station Installation of New TV Network in West Java Province 	U. K.	\$ 20	10		6									
5 u	2) RRI: TVRI:	Enhancement of R & TV Network (Phase I)	 Rehabilitation of Radio Studios at 21 Regional Stations Improvement of Colour TV Studios and OB Vans (Yogyakarta, Surabaya, Denpasar) Rehabilitation of self-operated microwave circuits in Java Island 	Japan	¥ 6,939	5		12									
- G -	3) RRI:	Improvement of Radio Broadcasting Equipment of RRI Regional Stations	Rehabilitation of Radio Studios at 5 Regional Stations (Bandung, Surabaya, Yogyakarta, Denpasar, Banjarmasin)	Austria	Sch 134.8	10		9		-							
- - -	4) RRI:	Supply of Spare Parts for Radio Transmitter	• Supply of spare parts for RRI Radio Transmitters	U. S. A.	\$ 4.0		4	3									
	5) TVRI:	Television News and Programme Total Editing and Dubbing System	 Installation of Total Editing and Dubbing System for TV News and programme at Jakarta TV Production Centre 	Japan (Grant)	¥ 502		4	3									
	6) RRI:	Rehabilitation of National Radio Studio Jakarta	- Total Rehabilitation of Radio Studios at Jakarta National Station	U. K.	PS 6.3		11	12						-			
itted To	1) RRI: TVRI:	Enhancement of R & TV Network (Phase II)	 Rehabilitation of Radio Transmitters at 33 Regional Radio Stations Installation of TV Studios at 3 Regional TV Stations (Banda Aceh, Samarinda, Ambon) Rehabilitation of TV Transmitters at 16 Regional TV Stations 	Japan	¥ 8,640		11 5 5			12							
C o mm	2) TVRI:	Operation and Extension of Television Production Centre, Jakarta	 Installation of TV Studio Equipment at Studio No. 5 & No. 6, Jakarta Station 	W. Germany	DM 25		1 1 1 1 1 1	9	10								
מרי מרי חרש	1) RRI:	Improvement of Radio SW Transmitter for Overseas Services	• Construction of High-power SW Transmitters for Overseas Services at Jakarta, Medan and Biak	France	\$ 95			8				3					
	2) RRI:	Improvement of Radio SW Transmitter for National Services, RN- I and RN-II	 Construction of High-power SW Transmitters for Domestic National Services at Jakarta and Ujung Pandang 	France	\$ 66					 :	7			12			
٩	3) TVRI:	Extension of Television Network	 Construction of 50 TV Relaying Stations in the Regions 	Indonesia	Local Currency		4				3		4				3 四 1

Table 2-2-1 Current Implementation Programme at the Beginning of 1990

Table 2-2-2 TARGET OF LONG-TERM PLAN

		DETAILED PLAN DURIN		
TARGET ITEMS	PRESENT STATUS AS of 1988/89	ON-GOING & COMMITTED PLAN (as of the beginning of 1990) [() indicates source of finance]	RECOMMENDABLE PLAN FOR NEXT STAGE	TAI
(1) FACILITIES PLAN (Listed according to priority)				Improvement of
1. Rehabilitation of Facilities (1) Radio studio	• Aged equipment with poor function	• Jakarta (UK), 26 Regional Stations: (Japan & Austria)		efficient broadca - Completion of r
(2) Radio Transmitting Station	•Aged equipment with poor function	• Jakarta & Regional Stations: 32 (Japan), • Spare parts (USA)	remaining 22 Regional Stations. • Rehabilitation of aged facilities of radio	- Recovering tran
(3) TV Studio (4) TV Transmitting Station	 Insufficient colour facilities Aged equipment with poor function 	●Regional Stations: 7 (UK, Japan), ● Jakarta (W.G.) ●Regional Stations: 16 (Japan), ● Jakarta (Indonesia)	 transmitting stations. Rehabilitation of aged facilities of TV transmitting stations. 	- Achievement of - Recovering tran
2. Establishment of Maintenance System (1) Maintenance System	 Inadequate maintenance administration and poor maintenance facilities 		 Improvement of maintenance system by establishing a maintenance base at Jakarta and main Regional Stations. 	- Radical improve
(2) Engineering Communication Network	• Only by SSB equipment and telephone communication		 Installation of communication network between Jakarta and each Regional Station. 	- Achievement of
3. Up-grading of Broadcasting Programme (1) ENG and OB Van, etc.	 Mostly by cinefilm for TV news covering Aged equipment including B/W 	●OB Van: 4 units (Japan, UK), ● ENG: 16 (Japan) ●Dubbing System (Japan)	 Introduction of TV Linkups at Jakarta and other Regional TV Stations having production 	- Improvement of
(2) Programme Transmission Network	 Radio: poor sound quality by telephone line No provision of Linkups for both Radio and Television 		capacity. • High quality sound transmission line between Jakarta and all the Regional Stations.	- Improvement of RRI networks by
 Improvement of Broadcasting Network (1) Expansion of RN-I Network 	• 49 stations, population coverage 68%		• Construction of MW stations at unserved areas	
(2) Introduction of MW Transmitter at SW- only-radio-station	• 12 stations	• Regional Station: 2 (Japan)	by radio broadcasts.	- Expansion of a s
(3) Complement of RN- I and Establishment of RN-II	No nationwide network for RN-II	• High power SW transmitter stations at Jakarta and Ujung Pandang for domestic service (France)	stations operated by 517 only.	- Achievement of
(4) Establishment of RN-III (5) Expansion of TVN- I	 Only Metropolitan Service 244 stations, population coverage 68% 	 Jakarta and Regional Station: 7 (Japan) 50 TV relay stations (Indonesia) 	• Construction of TV relay stations in areas	 Extension of FM Extension of TV
(6) Expansion of Overseas SW Service	● Jakarta and Medan,	 High power SW transmitter stations at Jakarta, Medan and Biak for overseas service (France) 	unserved by TV broadcasts.	- Improvement of
(2) UP-GRADING OF PROGRAMME CONTENTS (1) Up-grading Quality and Quantity	 Unsatisfactory contents of programmes No "Conference System" programmes 		 Up-grading of programme contents. Up-grading of Radio regional broadcasts by high-quality programme transmission line. 	Improvement of c win the trust of a - Up-grading of R - Establishment o
(2) Up-grading of Educational Programmes	 Short broadcasting hours of TVN-I programmes No systematic programming for education 		 Live TV broadcasts through national network by TV Linkups. Systematic production of Radio & TV educational programmes. 	networks.
	programmes for both radio and TV			Achievement of e
3) IMPROVEMENT OF MANAGEMENT (1) Integration of RRI and TVRI Organization	 Separate organizations under RTF. Only MMTC and EC were established 		 Integration of RRI & TVRI organization. Establishment of maintenance organization. Establishment of the total system to cope with audience affairs. 	 Completion of o Establishment o Upleveling staff Establishment o
(2) Staff Recruiting and Training	 Training by RRI-TC, TVRI-TC and MMTC Insufficient training 		• Development of staff training including OJT	
(3) Financial Sources	 RRI: Subsidized by National Finance TVRI: Operated by TV license fee, Low rate of Collection: about 55% 		operational financial resources for radio and TV broadcasting activities.	

ARGET AT THE END OF 1998/1999

of programme quality and achievement of stable and Icasting operation of rehabilitation for all the RRI stations (49 stations)

ansmission service and stable and efficient transmission

: of efficient colour TV production of high quality ransmission service and stable and efficient transmission

ovement maintenance standard for all the stations

of smooth and efficient business communications

t of TV programme quality and efficient news gathering

t of sound quality of nationwide programmes for all the by using Palapa Satellite

a stable transmission service by MW

of nationwide coverage service for RN-I and RN-II

FM programme service of high quality to the regions TVN- I programme service to unserved spots

of overseas broadcasting service

of quality and quantity of broadcasting programmes to f audience in radio and TV broadcasts. f RN- I , TVN- I and overseas service programmes t of programme compilation for RN-II and RN-III

of efficient organization and management. of organizational integration it of maintenance system and audience servicing system aff capability it of stable financial conditions