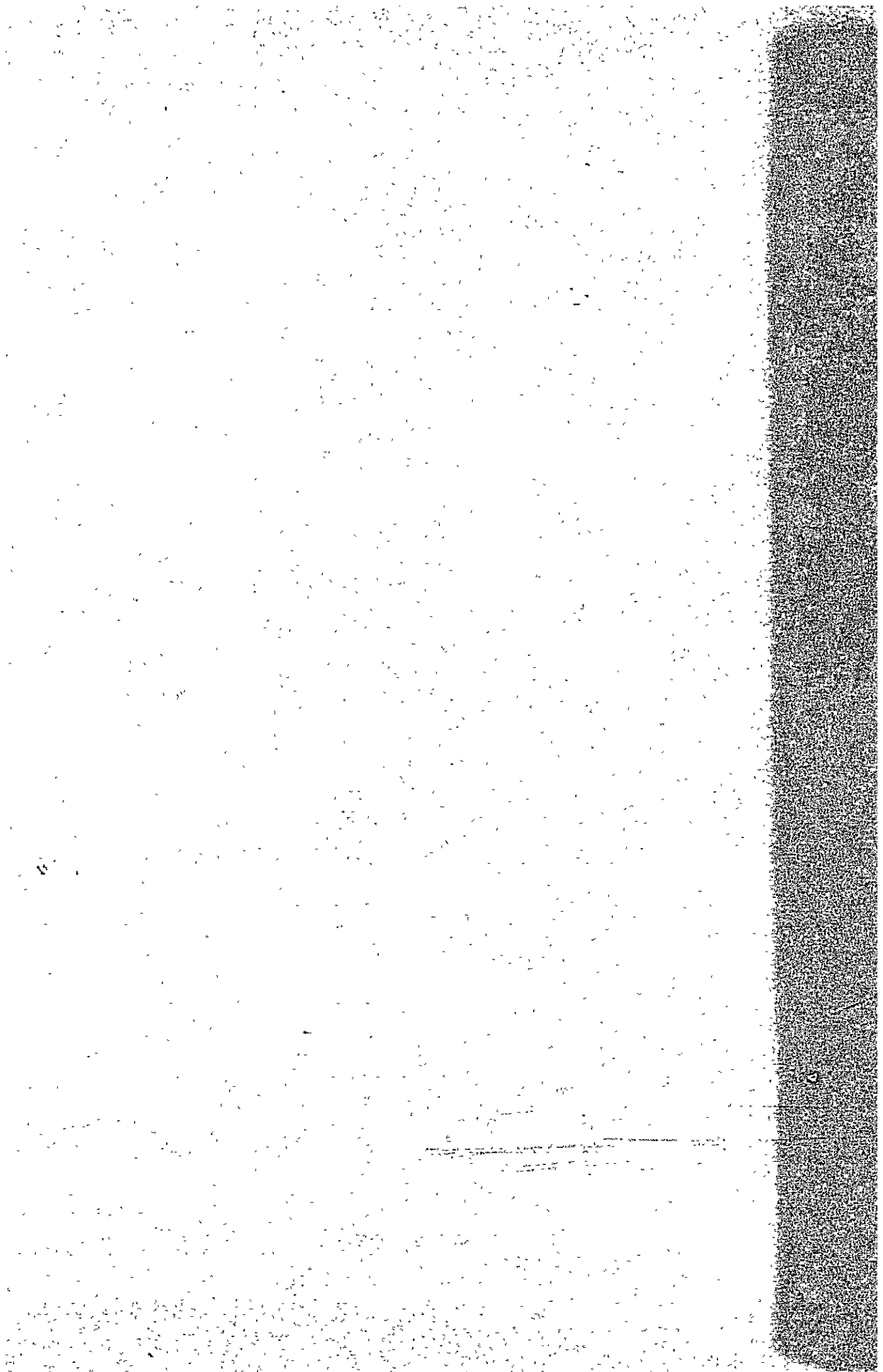


**THE STUDY REPORT  
ON  
THE LONG TERM PLAN  
FOR  
THE INTEGRATED DEVELOPMENT  
OF  
RADIO AND TELEVISION BROADCASTING  
IN  
THE REPUBLIC OF INDONESIA**

DECEMBER, 1964

**THE JAPAN INTERNATIONAL COOPERATION AGENCY**



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**DECEMBER, 1984**

**THE JAPAN INTERNATIONAL COOPERATION AGENCY**

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フィルム作成

## PREFACE



## PREFACE

In response to the request of the Government of the Republic of Indonesia, the government of Japan decided to conduct a study on the Long Term Plan for Integrated Radio and Television Development and entrusted the study to the Japan International Cooperation Agency (JICA).

The JICA sent to Indonesia a survey team headed by Mr. Yojiro Inoue, Deputy director, International Cooperation Division, Ministry of Posts and Telecommunications (M.P.T.), from June 23rd to August 1st, 1983, second team headed by Mr. Hiroaki Sogabe, Special Technical Adviser, International Cooperation Division, M.P.T., from Dec. 18th to Dec. 25th, 1983, and third team headed by Mr. Akio Mizukoshi, special Technical Adviser, International Cooperation Division, M.P.T., from Nov. 20th to Nov. 28th, 1984.

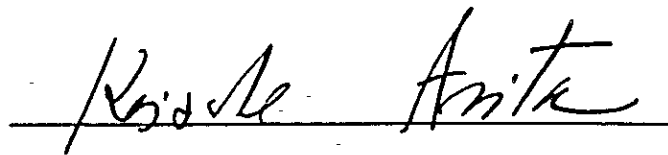
The study teams exchanged views on the Plan with the officials concerned of the Indonesian Government and conducted a series of field surveys.

After the teams returned to Japan, further studies were made and the present report has been 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 deep appreciation to the officials concerned of the Government of the Republic of Indonesia for their close cooperation extended to the teams.

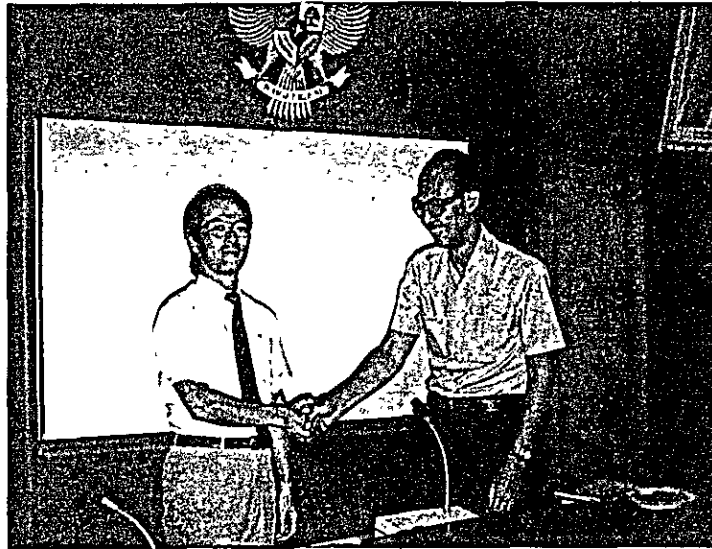
December 1984

A handwritten signature in black ink, reading "Keisuke Arita", is written over a horizontal line.

Keisuke Arita  
President  
Japan International  
Cooperation Agency



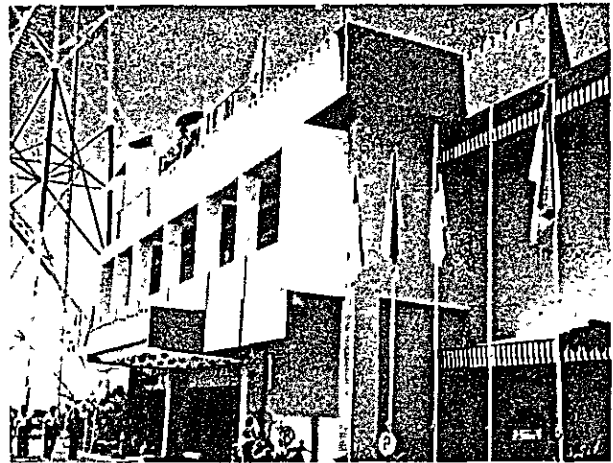




Signing of Minutes of Meeting



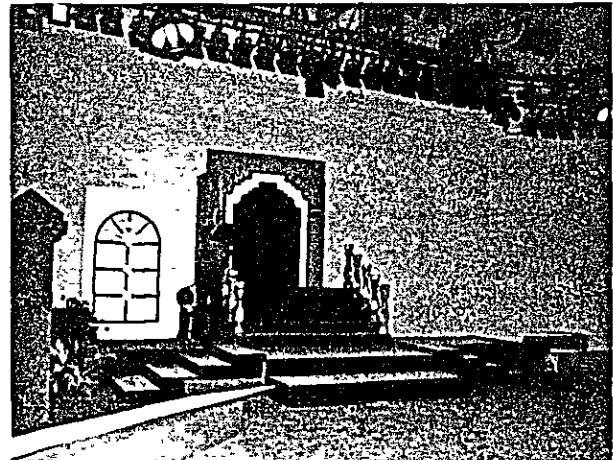
RRI Palangkaraya Station



TVRI Manado Station



Rehearsal at RRI Yogyakarta Studio



Scenery Setting at TVRI Yogyakarta Studio



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## SUMMARY





## SUMMARY

This report concerning a long-term planning of Indonesia's broadcasting system has been worked out on the basis of the analysis of the existing condition of broadcasting activities in Indonesia as a result of the field survey in several times conducted over the period from April, 1983 to March, 1984 as well as a result of the discussion between the survey team and concerned personnel of Indonesia regarding the improvement and expansion plan of their broadcasting facilities and examination thereof.

1. Background information on the preparation of the long term plan of broadcasting system in Indonesia
  - (1) The government of the Republic of Indonesia ordered national broadcasting organization to accept the mission mentioned below to promote the broadcasting activities for the development of human resources of the people of Indonesia by means of the broadcasting activities, which is to be the motiveforce of national development, as a part of the long term national development plan.
    - a) To bring up a wholesome nation of Indonesia through radio and television broadcast.
    - b) To activate mutual communication between the people through radio and television broadcast and strive toward popularization and promotion of constructive activities of the people.
    - c) To strive to popularize and develop the indigenous culture and arts through radio and television broadcast.
    - d) While urging the people to participate in the national construction project through radio and television broadcast and to provide the entire people with the opportunity to share the fruitful results of the development.

- e) In view of the situation that 80% of the Indonesian people live in rural area, to promote the active utility of broadcasting service as a means of education and self-enlightenment.
- f) To contribute toward international friendship through broadcasting activities.
- g) To adopt and utilize the development of coming technology.
- h) The basic thought that the essence of National Development is the development of the Indonesian Human Being as a totality and the development of the entire Indonesian community, both are final end.

The foundations for the implementation of National Development concerned are PANCASILA, 1945 Constitution and Guide Lines of State Policy.

In response to the above mission, RTF mapped out in 1975 a basic plan of the development of radio and television broadcasting activities over a long term of 25 years as a part of governmental long term plan of national development in consideration of how to display the integrated influence of radio and television broadcast to the people of Indonesia and how to effectively and maneuverably develop the actual broadcasting activities for promoting education for the nation and nation's participation to the national construction project.

However, 10 years of time has already passed since the start of 25 years plan and plan itself are so obsolete that the contents of the 25 years plan are so much deviated from the present situation of economic development and the change of the social environmental condition and furthermore electronic technology has progressed remarkably in the past ten years period and the information-oriented society are going to be realized soon.

- (2) As a result, a detailed survey was made on the existing condition of radio and television broadcasting facilities and its operating conditions to check the result of accumulated effort of development in the past 1st, 2nd, and 3rd 5-year plan. Then, 5-year plan for the integrated development of radio and television broadcast based on the finding of the survey in accordance with 4th 5-year national development plan starting from 1984/85 fiscal year.

In this report, 15 years long term plan has worked out in conjunction with the 5th and 6th five years plan (1989 to 1999) following the idea for the current 4th 5-year plan in assuming the trend of the growth of the national economic development, industrial progress, change of the social environments and also the progress of broadcasting technology, etc.

Though, the basic policy for the 25 year plan and conditions settled when deciding the target to be realized in the 25 year plan are subsequently succeeded to this 15 year plan, the following priority order of the assignment of construction budget were settled in consideration with the dissemination of population in the line of transmigration policy in coordinate with social-economic development by utilizing D.S.C.S. of Palapa and other communications system as well, to equalize and disseminate informations throughout the country.

The priority order of assignment of development budget during the plan period is set as follows :

- 1st priority : Expansion of coverage for RN-I, Overseas service and TVN-I.
- 2nd priority : Enlargement of programme production facilities for RN-I and TVN-I.
- 3rd priority : Expansion of coverage and enlargement of production facilities for RN-II and TVN-II.
- 4th priority : Expansion of coverage and enlargement of production facilities for RN-III.  
Construction of transmitter, studio and other production facilities for Metropolitan TV service.

Definition :

RN-I is all kinds of general programmes in character broadcast by National station, Nusantara stations, Regional-I stations and Regional-II stations in accordance with the objectives of each station concerned.

RN-II is all kinds of educational and cultural programmes in character broadcast by National station, Nusantara stations, Regional-I stations and Regional-II stations in accordance with the objectives of each station's concerned, respectively.

RN-III is all kind of music and entertainment programmes in character broadcast by National station, Nusantara stations, Regional-I stations and Regional-II stations in accordance with the objectives of each station's concerned, respectively.

TVN-I is all kind of general programmes in character broadcast by National station, Regional stations for Nusantara, Regional stations and Metropolitan station in accordance with the objectives of each station's concerned, respectively.

TVN-II is all kind of educational and cultural programmes in character broadcast by National station in accordance with the objective of station concerned.

TVN-III (Special Network) is all kind of new programmes invention which may arise in the future, broadcast by the newly developed technology in accordance with the objective of station concerned.

## 2. Present Condition of radio and TV Broadcasting

The outlines of the present condition on the radio broadcasting service by RRI and the TV broadcasting service by TVRI as in 1983, which is the starting year of this long-term plan are summed up as follows:

- (1) The present condition of RRI's radio broadcasting service.  
RRI, the governmental agency for operating radio broadcasting service in Indonesia, was inaugurated as early as September, 1945, and already has a history of 38 years of service. Over the period including the three successive 1st, 2nd and 3rd 5-year plan starting from 1969, it has established radio broadcasting facilities in major cities covering the major part of Indonesia.

As of the end of 1983, RRI has come to operate a total of 49 stations in the country including the National station at Jakarta, five Nusantara stations, 26 Regional-I stations and 17 Regional-II stations with their facilities having been generally completed. By means of these facilities, each station is broadcasting the national network programme and national programme, Nusantara Programme, Regional-I programme and Regional-II programme in accordance with the objectives of each station's concerned on the time sharing basis.

Apart from the above key programme (RN-I), each local station broadcast local programmes for audience living in respective urban for several hours daily, ranging from 6 to 15 hours depending on the individual programme production capabilities.

The population coverage of National Network programme service by medium wave signal is about 48% and the total population coverage including short wave service is about 68%, at the end of 1983.

The National station at Jakarta, which is the key station of the national network, is supplying the national network programme to all stations in the country with news and information programmes for the entire people of the country by means of Palapa communication satellite and by use of high power short wave transmitters at Cimanggis transmitting station. The National station at Jakarta is broadcast the following programmes daily in the medium wave, short wave and VHF-FM.

National programme service : about 18 hours  
Khusus programme service : about 8 hours  
Ibukota programme service : about 19 hours  
Music programme service : about 15 hours

Apart from these domestic services, shortwave broadcasts for overseas listeners are conducted by the national station at Jakarta. This overseas service transmit 11 hours programmes daily in nine languages; English, German, French, Arabic, Malay, Thai, Chinese, Japanese and Indonesian.

(2) The present condition of TVRI's TV broadcasting service.

TVRI came into being 17 years after the start of RRI. It started the regular television service from Jakarta in August, 1962. Later, expansion of the TV network was propelled on the island of Jawa. During the period of the 2nd and 3rd 5-year Plans, facilities of television broadcasting were expanded to the cities in other islands than the island of Jawa.

As of the end of 1983, TV broadcasting facilities in Indonesia were as follows:

1) Transmitting stations

15 kW station	1
10 kW "	16
5 kW "	13
1 kW "	38
Less than 1 kW "	122
Total:	190 stations

2) Programme production facilities:

Production Studios	9 stations (15 rooms)
Colour OB Van	3 stations (7 vans)
Mobile Production Units (MPU)	10 cities (10 units)
Open Air Studio	1 complex

As of the end of 1983, TVRI put on the air seven hours programmes a day from 16 hr. 30 to 23 hr. 30, on weekdays. Additionally, six hours programmes are put on air on Sundays from 8 a.m. to 2 p.m.

Thus, TVRI has been operating about 55 hours, a week in average.

Most of the programmes are prepared and produced in Jakarta and are being relayed to stations in various places of the country by means of the Palapa domestic satellite. Local TV stations which have the facilities for local programme production are televising their own local programmes daily for two to three hours within the framework of the nationwide programme service, thus making effort toward television service meeting local requirements.

As of the end of 1983, population coverage of television broadcasting service is about 63% based on the CCIR standard (See Attached Sheet-2).

(3) Organization & Operation of RRI & TVRI

Both RRI and TVRI are presently placed under the supervision of RTF (Radio, TV, Film) Directorate General, Ministry of Information of the Indonesian government. They are different in setup, however, because of the circumstances of their establishments.

RRI is completely a governmental agency with its budgets for establishment (initial investment in facilities) and operational cost etc. being totally financed by the government budget, while TVRI is a governmental corporation which means that while its investment in facilities is financed by the government budget for national development, operation cost is principally financed both by the revenue of the license fee and the governmental budget.

The number of the staff of RRI and TVRI as at the end of 1983 is 5,140 and 4,286, respectively.

(4) The survey results and its analysed data on the present situation are shown in Annex.

3. The Target to be realized during the Plan Period

This long term construction plan was drawn up for the purpose of achieving the mission ordered by the government as soon as possible by developing the radio and television broadcasting activities harmoniously, efficiently and economically aimed at the target set up as listed below, based on the conditions that both broadcasting organization of radio and television should be integrated completely.

When broadcasting organization trying to expand its radio or TV service area, usually the most effective area for a given amount of investment are selected as a top priority. However, in some case, the construction of transmitting station should be proceeded in the area where

is seemed as the most important place in regardless of the cost-effectiveness.

The criteria of priority order to determine the choice between large and small service areas having the same number of population is to keep high cost effectiveness when constructing transmitting station for RN-I service and for TVN-I service.

The criteria and its achievement rate during the plan period are as follows :

	Population coverage	Achievement rate
<u>For RN-I service</u>		
1st priority order	more than 300,000	100% ( 23 stations)
2nd priority order	more than 100,000	100% ( 61 stations)
3rd priority order	more than 30,000	20% ( 12 stations)
<u>For TVN-I service</u>		
1st priority order	more than 100,000	100% ( 8 stations)
2nd priority order	more than 30,000	100% ( 78 stations)
3rd priority order	more than 10,000	60% (164 stations)

Furthermore, when choosing site from the several proposed areas of the same level of priority order, the area of highest population density should be chosen.

(1) Radio Broadcast

Radio broadcast has been keeping the position of highly important mass communication means due to the ability of prompt reporting, mobility and popularity in spite of the recent development of TV broadcasting. Therefore, continuous efforts should be made to the qualitative and quantitative improvement and expansion of radio broadcasting activities in this long term plan.

- a) RN-I is the general programme to be listened by all of the Indonesian people through 24 hours. To cope with this mission, this programme is composed of National programme, Nusantara programme, Regional-I programme and Regional-II programme in accordance with the objective of each station. The composition ratio of National programme and local programme is 60% and 40%.



The composition ratio of the programme at each station are as shown in the following table ;

Programme composition at each class of station

National Station	Nusantara Station	Regional-I Station	Regional-II Station
National Network Programme 25%	National Network Programme 25%	National Network Programme 25%	National Network Programme 25%
National Programme 40%	Nusantara Network Programme 5%	Nusantara Network Programme 5%	Nusantara Network Programme 5%
	Nusantara Programme 35%	Regional I Network 10%	Regional I Network 10%
		Regional I Programme 25%	Regional II Programme 25%
National Common Programme 35%	National Common Programme 35%	National Common Programme 35%	National Common Programme 35%

\*

\* Note : When high quality programme transmission line is available

The national programmes are put on air by use of medium wave radio signal to be listened stably and clearly without any interference by any of listeners in the country, and accordingly further efforts are to be made to realize the condition of 100% population coverage. Then it will be possible to inform news,

information, report to all of the nation and to promote the people's attitude of positive participation in the national construction project by giving common knowledge on the progress of national development activities. Furthermore, this nationwide programme will become more useful means to strengthen the unity of the nation. Therefore this RN-I programme system is composed of the following components.

News, information and report	25%
Educational programmes	20%
Cultural and entertainment programme	45%
Others	10%

- b) RN-I radio broadcasting programmes at each station is composed of national network programme distributed by Jakarta National Station, Nusantara network programme distributed by Nusantara station to its regional stations in the network, Regional-I network programme distributed by Regional-I station to its network regional stations as listed in the above table.
- c) In parallel with the national programme service, that is RN-I, local programmes such as city service are produced and put on air locally for 6 to 24 hours a day at National station, Nusantara station and Regional-I stations, respectively within the framework of RN-III programme service.
- d) It is recommendable that the emphasis of radio service should be placed on mediumwave broadcast rather than shortwave broadcast to develop more stable listening condition and accordingly expansion effort of mediumwave transmitting facilities should be made to realize 70% population coverage, at least, until the year of 2000. However, the remaining 30% of population can be covered by shortwave broadcasting service, for the time being.
- Short wave broadcasting service is still important means of programme dissemination in the sparsely populated area and for back up system though its broadcasting reliability is not so satisfactory due to the ionospheric propagation. Reinforcement

of short wave broadcasting facilities are planned for improving radio broadcasting service, especially, in many part of the country where service is poor.

The total amount of power output increase may be at minimum 100 kW at the end of plan period and many of antenna system will be improved in the plan period.

The planned locations of the newly constructing station are shown in Attached Sheet-1.

It is decided already to extend broadcasting hour of RN-I programme up to 24 hours and several radio stations has been operating 24 hours continuous service to give more opportunity of listening news and information programmes within their pattern of living activities in each inhabited region of the country. This 24 hour service system will be established before 1994 by completing the distribution of standby MW transmitter to all radio broadcasting stations.

- e) RN-II programme service, which is composed mainly of educational programmes, will be put on air by Nusantara stations at the initial stage and then expand the RN-II service up to 95 provincial or prefectural capital cities until the year of 2000. The construction plan of MW radio transmitter for this service will be proceeded to aim at the realization of 75% population coverage of RN-II service including 10% coverage served by shortwave broadcast.
- f) In addition to the above two systems of AM radio broadcasting, RN-III programme service will be initiated by use of FM broadcasting system to disseminate the more high-fidelity music programmes, the higher cultural programmes including local music and folk stories. At the end of long term construction plan period, about 55% of the nation will be able to listen to this RN-III programmes owing to the new 120 FM transmitting stations which is to be constructed in provincial or prefectural cities and other main local cities in the country.

(2) Television Broadcast

Television broadcasting service has been expanding progressively since the start of regular service in 1962 and now about 60% of the nation including most of the inhabitants in Jawa and Sumatera Islands can enjoy the television broadcast programmes. However, further efforts will be needed to achieve the 100% coverage of TV broadcasting service.

In this long term plan, the construction of 250 low power TV transmitting stations are planned, in consideration of the future expansion of city power distribution network, popularization of TV receiving set and cost effectiveness of investment, and aim at the realization of 70% population coverage. The planned location of the newly constructing stations are shown in Attached Sheet-2.

Though it will be possible to realize 100% population coverage all at once by launching the several number of broadcasting satellites, this new technology of broadcast satellite is still under development and it is needed to study more on the future technological progress of broadcast satellite and its direct receiving set together with the tendency of its market price and to forejudge the availability of Palapa C domestic satellite, which is planned to be launched in around 1990 for the same purpose.

Therefore, it is recommendable to study and re-check on the utilization plan of direct broadcast satellite for the expansion of television broadcasting service area in this country at every beginning of consecutive 5-year plan.

- a) National programme (TVN-I) is the mainstay programme to be watched by all of the nation. TVN-I broadcasting programme at each station are composed of National programme distributed by Jakarta Central Station, Nusantara network programme distributed by key station for Nusantara area to its local station in the network and the locally produced programme. To meet with this requirement, broadcast service of TVN-I programme should be extended to 18 hours a day at the end of this plan period to be able to match the viewing time with the pattern of living activity.

In parallel with TVN-I, local programme service such as Metropolitan service or city service shall be considered within the category of TVN-I or TVN-II programme system by use of time sharing principle until most of the suitable transmission time are filled with the programmes for TVN-I or TVN-II service.

- b) To expand the service area of TVN-I broadcast, 250 new TV relay stations will be constructed in the medium and small sized city or town at the pace of 17 stations per year in average to realize 70% population coverage in consideration of the efficient increase of population coverage and the application of non-attendant operation system. Such low power TV relay station will be composed of TVRO and solar battery operated 10 - 30 watt transmitter which is installed in the standardized prefabricated shelter.
- c) TVN-II programme service is composed of educational programme for school and educational or instructive programme for adult and their life-long self enlightenment.

The target broadcasting hour is set at 17 hours a day in average at the end of the plan period and on-air time is increased gradually in accordance with the progress of the construction of necessary broadcasting facilities for this service.

The service area of TVN-II broadcast will be expanded, starting from the capital city and then to provincial or prefectural capital cities, aim at the realization of 55% population coverage at the end of the plan period.

In this long term plan, 110 new transmitting stations will be constructed in conjunction with the availability of existing TVN-I transmitting facilities.

#### 4. The integration of radio and TV organizations

RRI and TVRI, which had been operated as the independent organizations, established a radio and TV training centre (MMTC) at Yogyakarta as a first stage of the integration of RRI and TVRI. And continuously, as the second stage of the integration, the RTF Engineering Centre at the Directorate General of RTF, the Ministry of Information has been constituted.

This Engineering Centre is constituted by the sections pertaining to the plan on the technical facilities, the plan on the broadcasting house establishment, the maintenance centre and the technical development, etc., and it is intended to integrate the technical administration in the three Directorate of RRI, TVRI and Film.

By making thus, consolidation of the step by step basis towards the overall integration of organizations has been conducted systematically. The followings are the effects which will be drawn from the managerial and economical improvement resulting by the organizational integration.

- (1) Streamlining of the investment to the construction
- (2) Common use of the staff for radio and TV programme production
- (3) Common use of the broadcasting facilities and the maintenance service
- (4) Rationalization and making efficient by the common gathering of the programme and news materials.
- (5) Others

The integration should be proceeded step by step basis from the most easily realizable part of organizational activities by year 2,000 as shown in attached sheet-3.

5. Broadcasting programme

(1) Radio broadcasting programme

Radio broadcasting is being utilized as the means to convey the report issued by the government throughout the vast Republic of Indonesia and permeate the education to the whole nation.

In order to make this more substantial, a plan for the qualitative and quantitative progress of the programme was made on the basis of the predicted economical and social development.

Radio broadcasting will be programmed by three national programme systems of RN-I, RN-II and RN-III.

National-I Broadcast (RN-I)	General programmes
National-II Broadcast (RN-II)	Educational and Cultural programmes
National-III Broadcast (RN-III)	Music, ethnic culture and entertainment programmes

- 1) RN-I Broadcast intend to disseminate news and governmental informations to the whole nation living in the country efficiently and instantly. Accordingly, this broadcast is to be extended to 24 hours continuous service and a part of radio stations have already been operating 24 hours continuously. Since it is not so easy to switch all stations into 24 hours service system all at once in view of the arrangement of the facilities, this plan will be proceeded step by step basis before the end of the 5th 5-year plan as shown in Attached Sheet-4, and also coverage area by medium wave service will be expanded as shown in Attached Sheet-5.

The composition ratio of RN-I programmes will be as follows;

News, information and official report	25%
Educational programme	20%
Cultural and entertainment programme	45%
Others	10%

RN-I programmes are composed of nationwide common programmes which is distributed nationally by the National station, regional or local network programmes which is

distributed by the Nusantara station or Regional-I station respectively and purely local programmes for local listeners within the service area of each local station.

The composition ratio of Nationwide programmes and local programmes will be 60% against 40% when the nationwide high quality programme transmission network is completed.

- 2) RN-II broadcast intend mainly to disseminate educational and cultural programmes and 18 hours on-air time is planned as a final target.

The composition ratio of RN-II programmes will be as follows;

Educational programmes for school	44%
Programme for adult	33%
Cultural and instructive programme	17%
Others	6%

The educational programmes for school are designed in accordance with the curriculum and broadcast properly to be directly used at class room lesson but the programmes can be repeatedly used at each school by recording such programmes selectively and play it back time to time, when it is necessary.

Accordingly, RN-II programmes are arranged so as to send school programme in daytime and programmes for adult in the morning and evening and therefore repeated transmission is not planned.

The final target of broadcasting hour and coverage are shown in Attached Sheet-4 and 5 respectively.

- 3) RN-III broadcast intend to disseminate mainly stereophonic music programmes other than news and the programming are arranged with music programmes (mainly popular music which is widely enjoyed by Indonesian people) and drama, reading, local music and folk language stories, etc. to promote the culture of sentiments of the nation. The rate of expansion of the broadcasting time and coverage are planned as shown in Attached Sheet-4, 5 and according to this plan the enlargement of programme production facilities and the arrangement of the transmission network for stereophonic FM programmes will be carried out.



(2) TV broadcasting programme

Since television broadcast is the most powerful mass communication means, it can be positively used for improvement of nation's ability.

Television broadcast in Indonesia is carrying out by use of the following two programme systems;

National-I broadcast (TVN-I)	General programmes
National-II broadcast (TVN-II)	Educational and cultural programmes

- 1) TVN-I broadcast carry out the comprehensive TV programme service and it will be improved quantitatively as well as qualitatively to reach the final target of 18 hours a day. To realize the above, programming is arranged with programmes containing good picture and sound to be able to fully develop the actual feature of television broadcast and to give full satisfaction to viewers by improving programme production facilities in and out of TV studio.

At the same time, news programme is also enriched by reinforcing news centre with improved news gathering and treatment equipment and by actively collecting news materials from overseas and realize really correct and fast news service for the TV viewers.

The composition ratio of TVN-I programme is as follows;

News, information and official report	28%
Educational, sports and religious programme	23%
Cultural and entertainment programme	47%
Others	2%

The expansion plan of broadcasting hours and coverage are shown in Attached Sheet-6 and 7 respectively.

Furthermore, regional TV broadcasting service is also to be improved in quality by remodelling programme production facilities in the regional TV station and by reinforcing programme transmission network as well as the enlargement of service area.

The outline of the programme production and broadcasting network for the regional services are as shown in Attached Sheet-8.

As for the time shift broadcasting service for the viewers in the different local standard time zone, second transmission with 2 hours time difference will be carried out by chartering another Palapa transponder.

- 2) In recent years, TV broadcast is utilized as the effective means of education in many countries of the world. The government of Indonesia also is promoting the policy of making an effort to educate people by TV broadcasting, therefore, the construction of the TVN-II network will be one of the most urgent project in the long term development plan period.

The programme composition ratio of TVN-II broadcast at the final target is as follows;

Educational programme for school	47%
Educational programme for adult	38%
Cultural and instructive programme for housewife	15%

At the initial stage, TVN-II broadcasting service is limited in the following area as the nature of experimental broadcast in consultation with the organization in charge of education.

- a) Jakarta, Ujung Pandang and its suburbs, Medan and Surabaya
- b) Yogyakarta, Palembang, Denpasar
- c) Balikpapan, Manado

The final target of broadcasting hour is set about 17 hours a day, but the broadcasting hour is set about 12 hours a day at the initial stage and this is gradually increased until accomplish the final target of 17 hours a day.

Progress of broadcasting hour and coverage are shown in Attached Sheet-6 and 7 respectively.

The TVN-II broadcast for school is planned as direct utilization in the class room in principle, it is considered possible to record on magnetic tape because cost of VTR is going down and video recording becomes more simple and handy in the near future. Accordingly, retransmission of TVN-II programme for time difference service is not planned.

## 6. Broadcasting facilities

This construction plan of broadcasting facilities was made to achieve the completion of integrated development of radio and television aimed at the year of 2000 based on the complete integration of both organizations of radio and television broadcasting and in view of the increase of the license fee resulting from the popularization of radio and television in the future.

### (1) Programme production and transmission facilities

Large expansion of the facilities will be needed in order to develop sufficient effect of the broadcasting by five media in total, namely three in radio and two in TV and to increase the broadcasting hour and to grade up the programme quality according to the programme plan. Especially, concerning to the common use of radio and TV production studio, investigation was made in the light of the integration of both organizations of radio and TV. Since it is forecast that programmes should be produced increasingly not only at studio but also outside of the station, in accordance with the plan of multiplication of programmes, the arrangement of the equipment suitable to each needs will also be considered.

The necessary studio occupation time (that is, from the setting up of stage set to withdraw of it) for producing one complete programme will depend on the time length, contents and scale of each programme. Generally speaking, the occupation time will be prolonged if production team try to produce more perfect programme and accordingly spend more time for rehearsal and stage setting up.

The necessary number of studio to be built in this plan period were decided based on the following operating conditions.

Kind of programme	Studio occupation time
radio (monaural)	3 X H
radio (stereophonic)	4 X H
TV (normal)	6 X H

H = time length of  
the programme

Operating day = 6 days a week  
Maintenance = one day per week

OB Van are usually used for the production work carried out outside of studio such as sports programme. In case of outside production, it will take more time for the preparatory work such as moving OB van to the site, arrange and setting up of cameras, lighting equipment and microphone, arrange of camera and microphone cables and so on.

These will be the reason of reducing efficiency of programme production at outside of studio. The number of OB Van to be distributed to each station were decided in consideration of special conditions in outside production as above mentioned.

In this long term plan, the distribution of small size MPU Van with high mobility and transportable production unit (EFP) are planned to enhance the atmosphere of the site of programme production in consideration of the needs in each local station.

The construction plan of programme production facilities are shown in Attached Sheet-9 & 10.

A completely concentrated arrangement system will be adopted to the production and the transmission facilities in Jakarta for the purpose of the improvement of the operational efficiency, and this will make qualitative administration of the broadcasting programme easy. And at the same time, the plan intending to reduce human operational error by adopting the automatic operation system is made.

The model of this system is shown as Attached Sheet-11.

The news centre is planned to be arranged in each building of RRI and TVRI during the 4th 5-year plan period, but further improved plan will be made after the completion of the new

building used commonly for radio and TV in order to establish a unified newscasting system so as to realize the more cooperative newscast operation by radio and TV programme staff and technical staff by arranging various peripheral equipment around the news studio.

Hereafter, it is forecast that the necessity of the prompt broadcast of overseas news programme will be increased, therefore, the terminal equipment for receiving relayed signal from INTELSAT system as well as the radio monitoring station for collecting the radio news programmes from the radio broadcasting stations in abroad are planned to build in the long-term plan period.

(2) Programme transmission network

It seems that utilization of the communication satellite Palapa is the best in order to diffuse the broadcasting service throughout Indonesia. At PERUMTEL though expansion plan is being promoted on the terrestrial microwave link and the submarine cable, etc., the preparation of the transmission line which is for exclusive use for the transmission of radio and TV programmes throughout Indonesia including the islands area and remote area will not be expected by 2000.

Therefore, the plan was made so as to develop the comprehensive programme transmission network including up-stream transmission line by use of Palapa relay network mainly in consideration of the progress of terrestrial transmission network as mentioned above for the purpose of conducting countermeasure for time difference service, smoothly. Both of satellite and terrestrial programme transmission lines should be properly used regionally or nationally based on time to time basis.

Though, 3.4 kHz narrow band lines are used at present for radio programme transmission, these lines will be improved to 7 kHz wideband lines, and furthermore, transmission lines for block broadcasting service of Nusantara programme and up-stream transmission line to be used for sending programme materials from regional stations to Jakarta will be prepared progressively.

As for the TV programme transmission, 3 transponders of Palapa will be used for TVN-I, TVN-II programme and TVN-I time shift transmission and additional 2 transponders will be used for block broadcast service at each Nusantara area and for up-stream transmission of programme material from regional station to Jakarta.

A model of time sharing operation of Palapa transponder for regional service of TVN-I broadcast is as shown in Attached Sheet-12.

By making a trial estimation of the lease of terrestrial line and Palapa in Sulawesi island, the lease cost of terrestrial line is slightly higher than that of Palapa as shown in Attached Sheet 13, therefore, usage of Palapa is advantageous for TV programme transmission.

(3) Transmitting facilities

In order to expand the service area of each medium, new installation of the transmitting facilities will be conducted. And at the same time, renewal of the superannuated equipment is also planned to maintain the stable service.

And as for the transmitting facilities which will be constructed newly within this plan period, it is planned to promote active use of the unmanned operation system by equipping the high reliable transmitting system, since these new station do not need high power output and they will be constructed in the area where the infrastructure is not enough arranged.

1) Radio transmitting facilities

Concerning to the medium wave transmitting facilities for the RN-I broadcast, the replacement of the superannuated equipment and the arrangement of the standby transmitter will be positively installed in order to establish the 24-hour broadcasting service system. Moreover, a construction plan of the new transmitting station at a pace of 5 - 7 stations a year will be proceeded to expand the service area by medium wave broadcast.

For the area such as isolated islands where the infrastructure is not well developed, radio broadcasting service will be improved

by reinforcing shortwave transmitting facilities including remodelling of transmitting antenna system as well as replacement of superannuated SW transmitters.

The outline of the above expansion and improvement plan is shown in Attached Sheet-14

The medium wave transmitting facilities for the RN-II broadcast service also will be set firstly at each Nusantara station, and continuously expanded to the regional stations and built at all of the present 49 stations by the end of the 5th 5-year plan, and furthermore, expand to 95 stations in total by the year 2000. (see Attached Sheet-14, 15)

By those facilities, the population coverage of the RN-I medium wave broadcasting service will be 70%, and that of the RN-II broadcasting service will be 65% and if add the coverage by short wave to this, it will be achieved 100% and 75%, respectively.

However, since shortwave radio service is not so stable in general, shortwave transmitter will be gradually replaced by mediumwave transmitter in accordance with the progress of infrastructure in the area of transmitting station.

Concerning to the RN-III broadcast, the new construction will be progressed at the pace of 7 - 9 stations a year and the population coverage of FM broadcasting service will be able to reach up to 55% by constructing 120 stations in total by the year of 2000. Incidentally, the location of the FM transmitting station was decided as the same place of that of the TV transmitting station when it is realizable in order to reduce the construction cost by commonly use the same building, antenna tower and power supply system.

The transition of the transmission facilities until 2,000 is shown as Attached Sheet-15.

## 2) TV transmitting facilities

For the TVN-I broadcast service, the construction of low power TV transmitting station at the pace of about 17stations annually will be proceeded in order to expand the service area to reach 70% population coverage in 2000.

Along with these construction plan, the renewal of superannuated TV transmitter in the existing station and the additional installation of standby transmitter in the existing station where is no standby transmitter to develop the more stable TV broadcasting service.

When replacing superannuated Band-I transmitter, Band-III or UHF transmitter in Band-IV will be installed in place of Band-I transmitter to eliminate harmful interference which is frequently caused by extraordinary propagation phenomena in Band-I frequency range.

Concerning to the TVN-II broadcast service, which is to be started during the plan period, the construction plan of transmitting facilities for this service will start from Ujung Pandang and its vicinities, Medan, Surabaya, Yogyakarta, Palembang, Denpasar, Balikpapan and Manado and then progressively expand to other major cities aiming at 55% population coverage at the end of this plan period.

The outline of the construction plan is shown in Attached Sheet-14.

The TVN-II transmitters are planned to install in the same transmitting house of TVN-I transmitter and also the common use of transmitting antenna system and tower are planned as many as possible to save the construction cost.

In the long-term plan, the expansion of the service area was intended by using the transmission facilities of the terrestrial system, however, at the end of the long-term plan period when the population coverage will reach about 70% since the cost effectiveness of the newly constructed station will decrease gradually, it is forecast that the introduction of the satellite broadcasting system will be needed to raise the coverage effectively. Concerning to the time of that introduction, it seems that the decision should be made considering various surrounding condition and situation such as operating condition of the existing transmitting station and the estimation of diffusion of the receiving equipment for the satellite broadcasting and the launching plan of Palapa C, etc. will be appropriate.



However, it is recommended to check again on such conditions as mentioned above in around 1995 when it is expected that the overall cost for the direct broadcast system including receiving facilities will become comparable with the overall cost for the terrestrial system of similar function owing to the cost down of launching satellite and decreasing of market price of DBS receiving set due to the popularization in the developed countries.

The transition of the transmission facilities until 2000 is shown as Attached Sheet-16.

7. Arrangement of the staff and its training

In this long-term plan, it will be needed to recruit the number of staff to cover the increased volume of work owing to the increase in the broadcasting time and resulting increase in the amount of programme production, the expansion of the production facilities, the expansion of the transmission facilities for enlarging the service area and new establishment of the receiving service section, etc.

Accordingly, the plan was made so as to promote the countermeasure for streamlining of staff management such as the integration of radio and TV organizations, the unmanned operation of the transmitting station, the positive adoption of automatic control system and the effective job rotation and so on. The surplus staff thus gained can be rearranged to the sections where the more number of staff are needed.

At present, it is not so easy to estimate precisely the number of the staff in 2000, namely 15 years from now, because of the change in the broadcasting format, programme production system, the progress of broadcasting technology and the change in the social situations. However, the result of the trial calculation of necessary number of additional staff in consideration of the foreseeable increasing factors in conjunction with the long term plan is shown below.

- 1) The programme production and related staff  
..... 890 persons
- 2) The staff related to the transmission facilities  
..... 560 persons
- 3) The staff related to the administration  
(in the 4th 5-year plan period only) ..... 17 persons

Concerning to the expected increase of the general administration staff in relation to 1) and 2) and the new establishment of the section of the reception service, it seems that they will be sufficiently covered by the surplus staff brought by the integration of organizations and the streamlining, etc. after the 5th 5-year plan.

As for the training of the staff, training of the newly recruited staff, middle class and high class training, special training, training for the administration staff, etc. should be carried out systematically, and at the same time, on-the-job training (OJT) at each work place should be strengthened and promoted. And the needed training in response to the job rotation of the personnel arisen from the integration of radio and TV organizations should also be made.

#### 8. Reception Service

The section which carries out the work relating to the reception service so as to make viewer and listener receive the broadcasting programmes satisfactorily should be established. At this section, the following jobs are to be carried out together with the supplying of data for the construction plan of the new station to the RTF Engineering Centre.

- 1) Survey of the reception condition in the service area and guidance and advising for listeners and viewers about good reception technique.
- 2) The processing of the demands and questions of the viewer and listener to the broadcasting, survey on the trends of the viewer and listener, conducting public relation and making the public relation leaflet.
- 3) Promotion of the registration of receiving set, prevention of the non-payment of the license fee and the data on viewer and listener.
- 4) Instruction about the repairing technique to the retailers or dealers of radio and TV set in the local city.

By doing those, the sense of reliance and the feeling of kinship of viewer and listener to the broadcasting will be increased and the increase of income from the license fee can be expected.

9. Estimation of Revenue and Operation cost and Investment Plan

The above data are shown in Attached Sheet - 17 & 18.

10. Expected results of the long-term plan and its social benefits

The republic of Indonesia has been intending to develop the basic industries and the relevant modern production industries starting from the development of industries for agriculture and, furthermore, to realize the modernized and highly industrialized nation supported by the stable economical background until the year of 2000 along with the 6 consecutive 5-year development plans.

It is observed that the final target of the national development plan is, after all, to develop the human ability which is contributive to the national development by conducting the development of human resources. Therefore, the national broadcasting organization have to cooperate and contribute to the promotion of this national development plan by deploying the overall abilities which is derived from the radio and television broadcasting activities.

It is expected that the following improvement can be materialized by executing the various items proposed in this long-term integrated development plan of broadcasting activities.

- a) Enlargement of broadcasting service area -- the broadcast signal will be disseminated to all over the country and all of the nation will be able to receive radio and television broadcast in good receiving condition.
- b) Extension of broadcasting hour -- the most up-to-date news and information can be heard by the listeners at any time and it will be possible to receive the most favorite programme chosen in accordance with the living pattern of each listener.
- c) Production of multifarious programmes -- 3 radio programme systems and 2 TV programme systems are effectively programmed to meet with a variety of demands which is asked for the broadcasting service by the listeners and viewers.

- d) Qualitative improvement of programme -- FM broadcast service in radio broadcast and full colourization of TV programmes in TV broadcast will be realized to be able to fully respond to the demands of listeners and viewers for the better broadcasting service.
- e) Improvement in the reception service -- to realize the more close communication between broadcaster and receiver to reflect the opinions of receiver into the programming and to make broadcasting service more useful to the development of Indonesian human resources.

If this long-term plan progress smoothly and various plans are executed, the following results can be expected.

(1) Improvement of the broadcasting service

The broadcasting hours and the population coverage will be remarkably enlarged as follows by the expansion of the broadcasting facilities, and then the nation will be able to choose and receive 5 media at any place of the country.

	broadcasting time	coverage population
RN-I programme system	24 hours	100% (MW:70%,SW:30%)
RN-II	18 "	75% (MW:65%,SW:10%)
RN-III	18 "	55%
TVN-I	18 "	70%
TVN-II	17 "	55%

Moreover, programmes will be advanced qualitatively and made satisfy the demand for the variety of programme and at the same time, the regional programmes within each region will be enriched, therefore, the broadcasting service more fit in the inhabitants of the region will be realized. And moreover, the programmes which are peculiar to the certain local area will be broadcast nationally, therefore, this will help the cultural exchange between regions.

Owing to those, it will be able to make viewer and listener keep a sense of reliance and kinship to the broadcasting and enhance the effect of the broadcasting.

(2) Social benefits

The following contributions can be expected owing to the nationwide development of broadcasting service.

- a) The standard language which is to be used commonly by the multi-racial population of Indonesia can be diffused all over the country.
- b) The school education can be improved owing to the grading up of teacher's ability and the supplement of insufficient educational facilities and teachers.
- c) Every level of the nation can be accessed to the opportunity of self-study on the technology in their professional field depending on each ability through the systematic broadcast of educational programme.
- d) Enhancement of the nation's sentiment through the broadcast of sound entertainment programmes.
- e) Promotion of the people's participation in the national development project by reporting the accurate information on the trends of national development plan.
- f) Promotion of the nation's sense of unity by enhancing the communication between the people living in the different region where living circumstances, manners and customs are different.

As a result of nationwide development of radio and TV broadcasting service, every people of the country can equally enjoy the benefits of broadcast and, accordingly, it is estimated that the number of radio and TV receiving set in use will be zoomed up to the order of 46,000,000, and 18,900,000, respectively.

To meet with the needs of such large amount of receiving set, the production activity of radio and TV receiving set in the domestic electronics industry will also be stimulated and in conjunction with the popularization of the radio and TV receiving set, the annual income from the license fee will also increase up to the order of 400 billion Rp as shown in Attached Sheet-8.

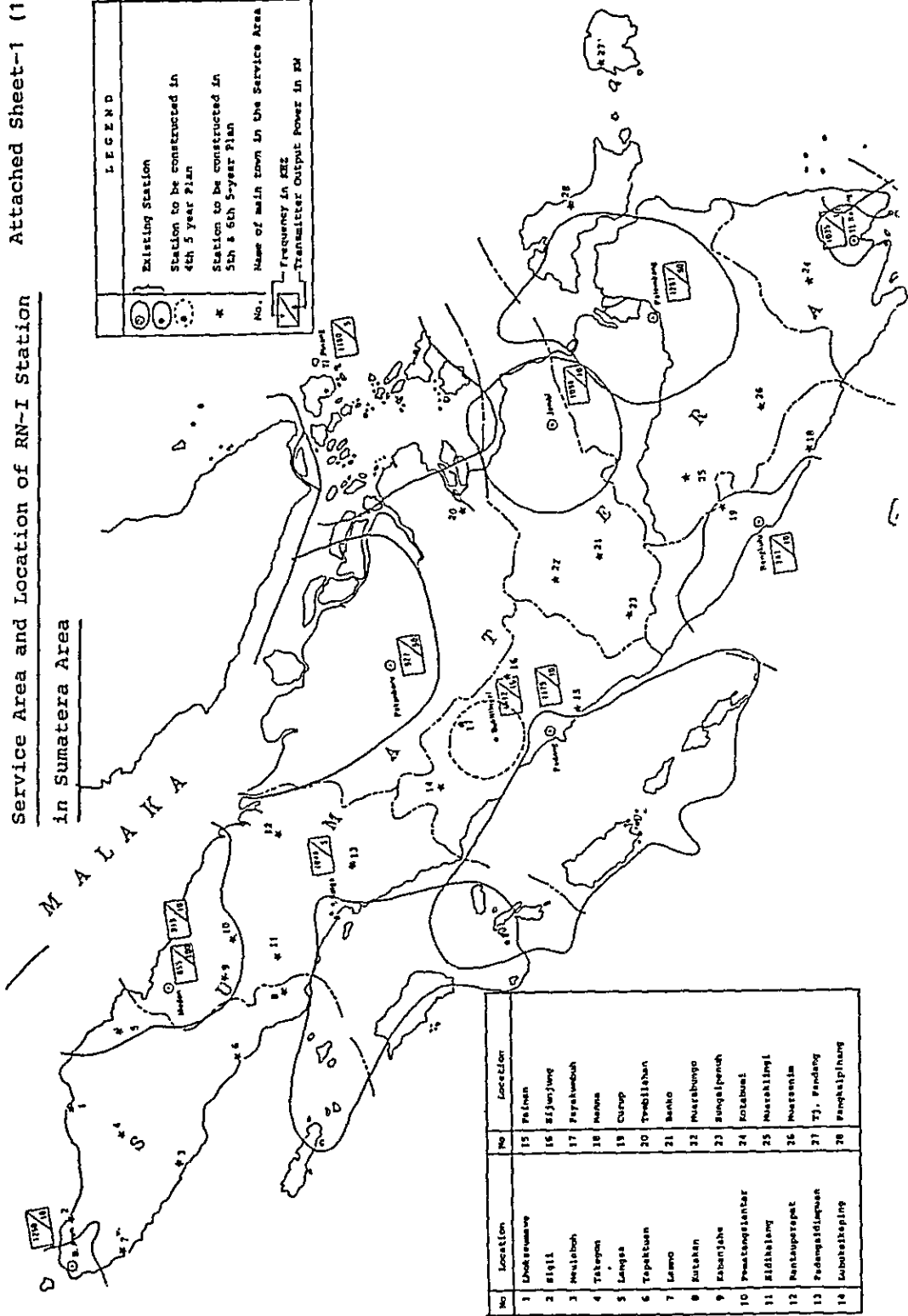
This amount of income may be more than enough for the operation of broadcasting organization on a self-paying basis and the surplus can be allotted to the investment for enlargement of the broadcasting facilities.

In the republic of Indonesia such as composed of multi-racial population and holding a large territories, it is substantially necessary to continue further effort to improve and develop the broadcasting activities.

At the end of this long-term integrated development plan, though the nationwide diffusion of RN-I programme service will be completed for the time being, it is needed to continue the effort of transfer of shortwave transmitting facilities to mediumwave transmitting facilities in order to realize the more stable radio broadcasting service. In conclusion, the sound development of radio and TV broadcast service will offer the great contribution and benefits to every level of the people in the country as the common treasure of the nation.

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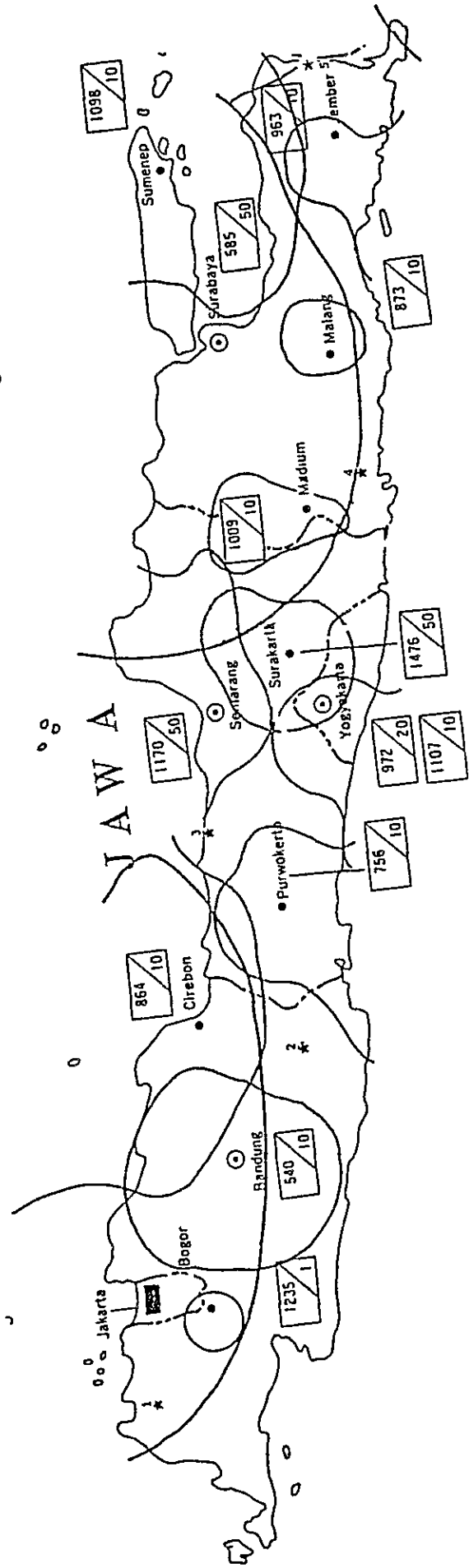
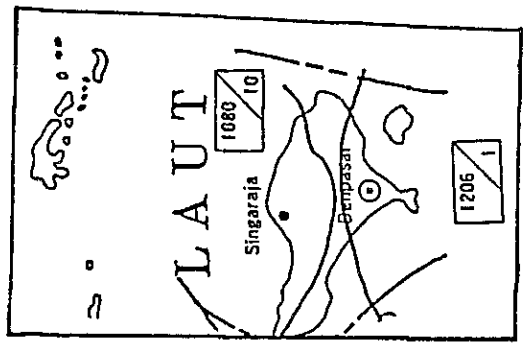
Service Area and Location of RN-I Station  
in Sumatera Area



Service Area and Location of RN-I  
Station in Jawa Area

No	Location	LEGEND
1	Serang	Existing Station
2	Tasikmalaya	Station to be constructed in 4th 5 year Plan
3	Pekalongan	Station to be constructed in 5th & 6th 5-year Plan
4	Tulungagung	Name of main town in the Service Area
5	Banyuwangi	Frequency in MHz Transmitter Output Power In KW

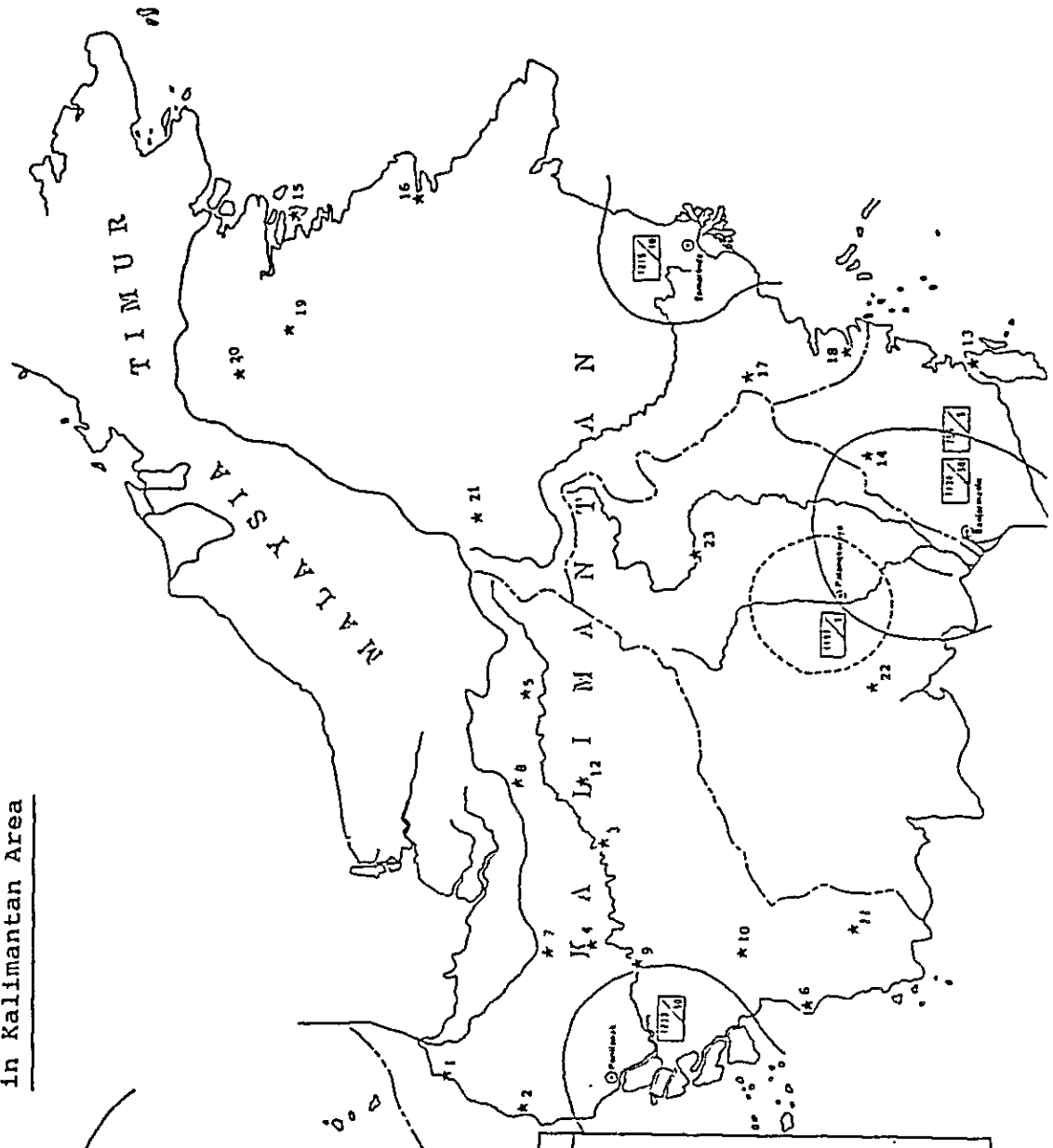
Attached Sheet-1 (2)





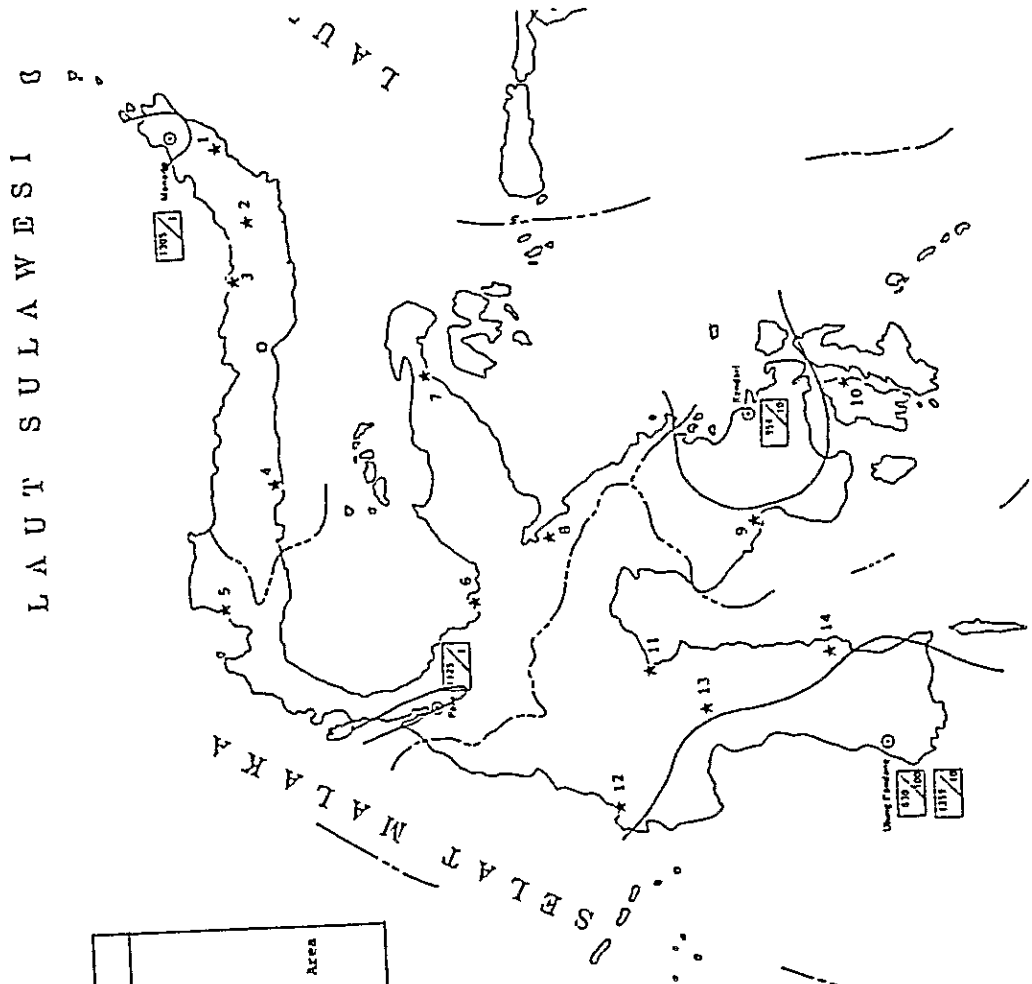
Service Area and Location of RN-I Station  
in Kalimantan Area

Attached Sheet-1 (3)



LEGEND			
	Existing Station		
	Station to be constructed in 4th 5 year Plan		
	Station to be constructed in 5th & 6th 5-year Plan		
*	Name of main town in the Service Area		
No.	Frequency in KHZ		
	Transmitter Output Power in KW		
No	Location	No	Location
1	Liku	13	Kotabaru
2	Singkawang	14	Anuntai
3	Sintang	15	Trakan
4	Kedukul	16	Tj. Redeb
5	Putusbau	17	Huntsiwen
6	Ketapang	18	Tanahgoyot
7	Kembayan	19	Gongsalak
8	Nanghantuk	20	Longberang
9	Heliau	21	Kubumeseai
10	Auckuning	22	Sampit
11	Mazeu	23	Kualakurun
12	Masilato		

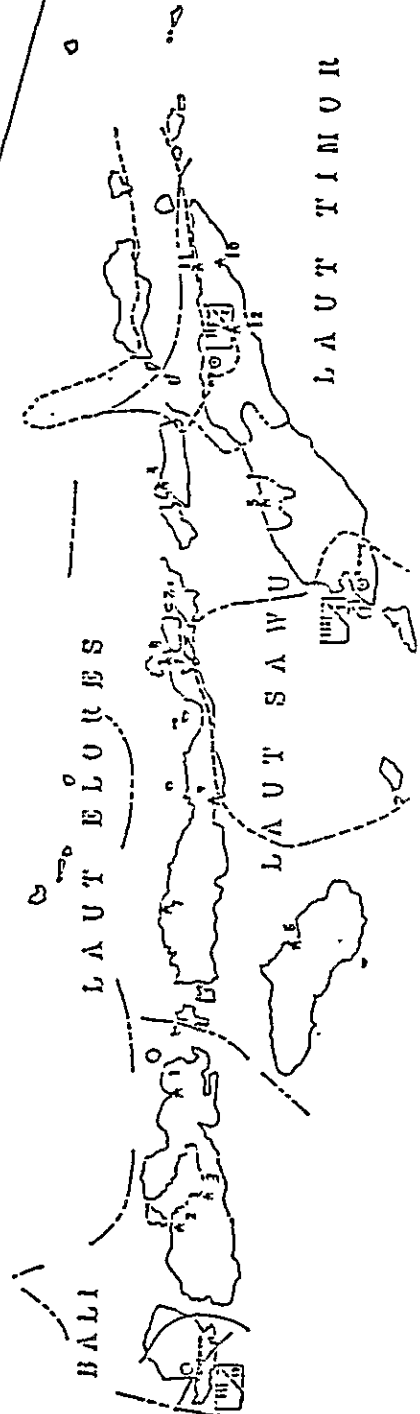
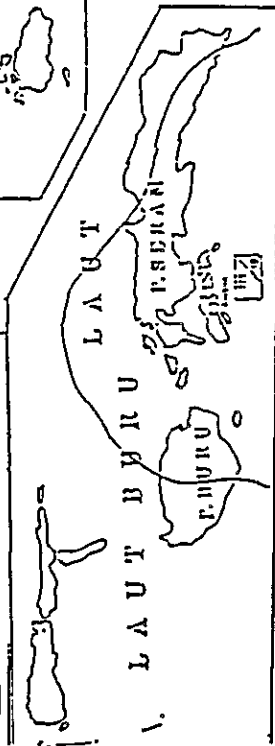
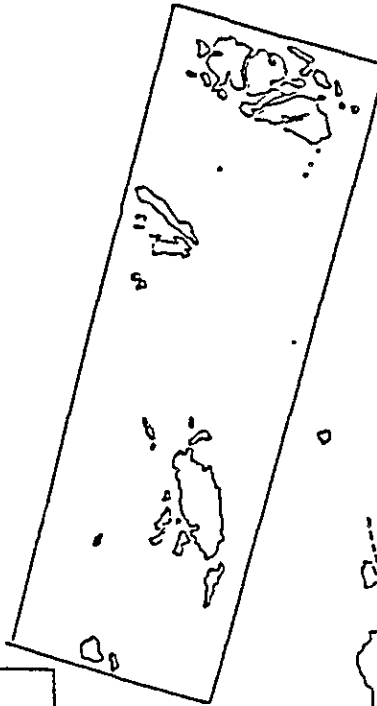
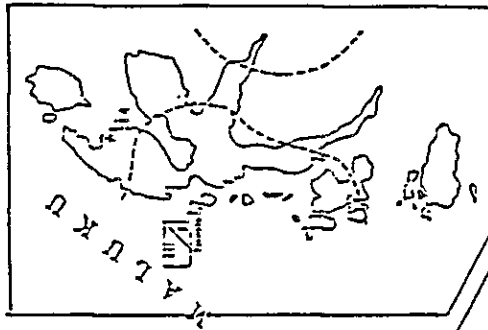
Service Area and Location of RN-I  
Station in Sulawesi Area



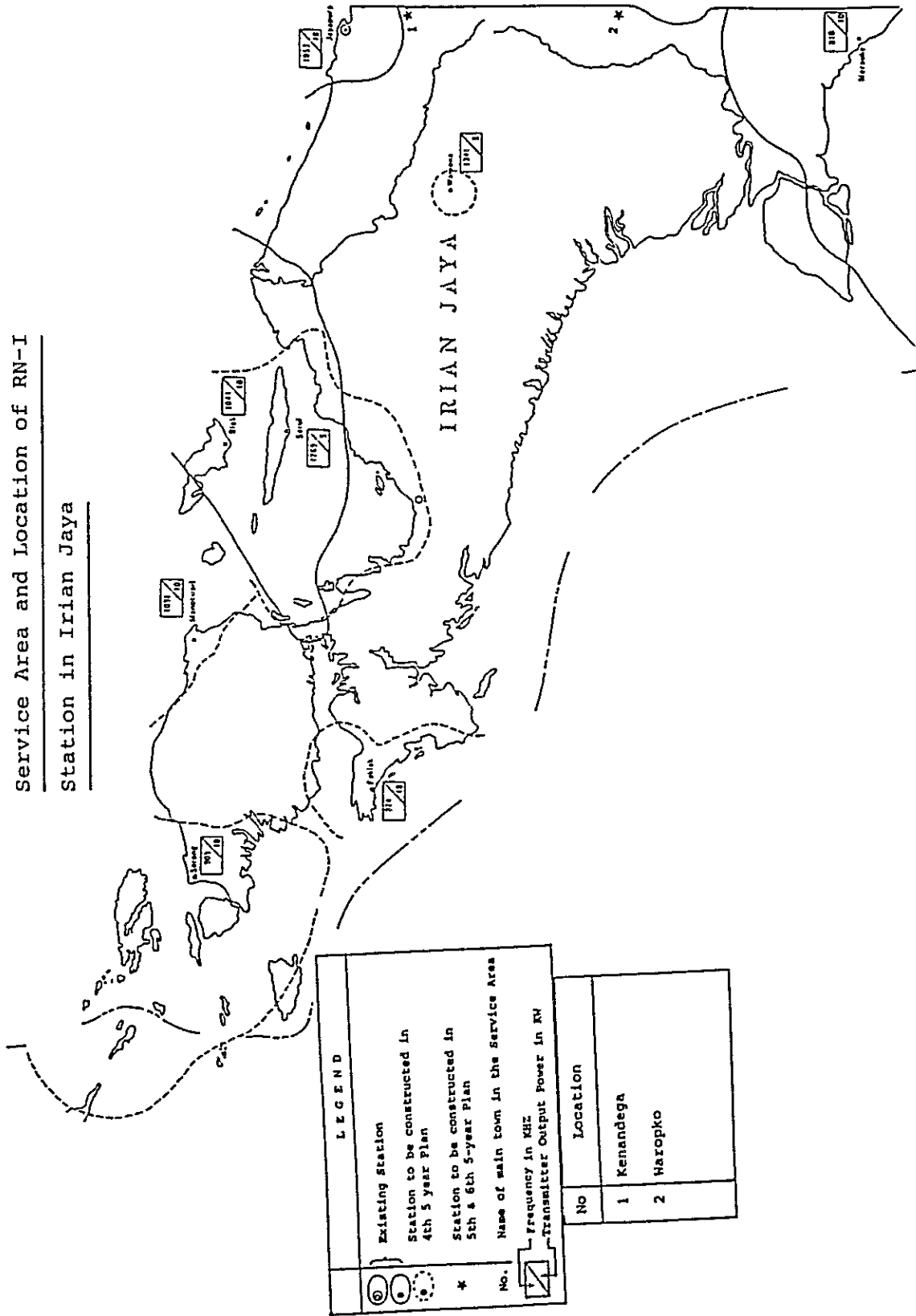
LEGEND	
	Existing Station
	Station to be constructed in 4th 5 year Plan
	Station to be constructed in 5th & 6th 5-year Plan
*	Name of main town in the Service Area
	Frequency in KHZ
	Transmitter Output Power in KW
No.	Location
1	Tombatu
2	Kotamumbagu
3	Jj. Binta
4	Mazisa
5	Tolitoli
6	Poso
7	Luwuk
8	Tompira
9	Kolaka
10	Raha
11	Palopo
12	Hamuju
13	Enrekang
14	Matanpone

**Service Area & Location of RN-I Station in  
Rusa Tenggara, Maluku & Timor Timur Area.**

No	Location	LEGEND
1	Silea	Existing Station
2	Sumba Besar	Station to be constructed in 4th 5 year Plan
3	Ampung	Station to be constructed in 5th & 6th 5-year plan
4	Kalibohi	*
5	Oktual	No.
6	Malngapu	Transmitter Output Tower in PW
7	Reo	
8	Lasatuba	
9	Endeh	
10	Vikeke	
11	Seuban	
12	Esse	
13	Tual	
14	Tobelolo	



Service Area and Location of RN-I  
Station in Irian Jaya

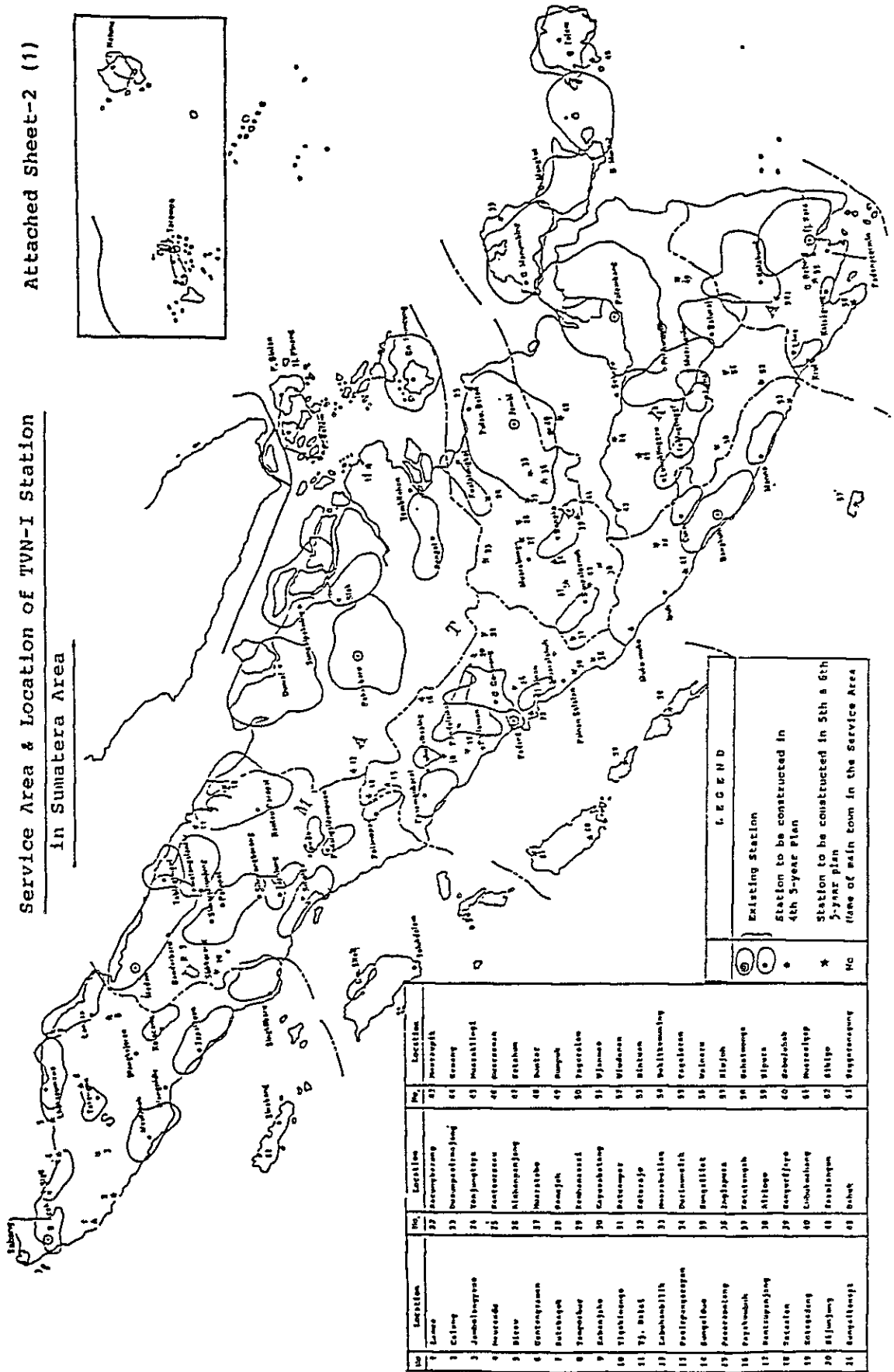


LEGEND	
	Existing Station
	Station to be constructed in 4th 5 year Plan
	Station to be constructed in 5th & 6th 5-year Plan
*	Name of main town in the Service Area
No.	Frequency in MHz
	Transmitter Output Power in KW

No	Location
1	Kenandega
2	Haropko

Service Area & Location of TVN-I Station  
in Sumatera Area

Attached Sheet-2 (1)



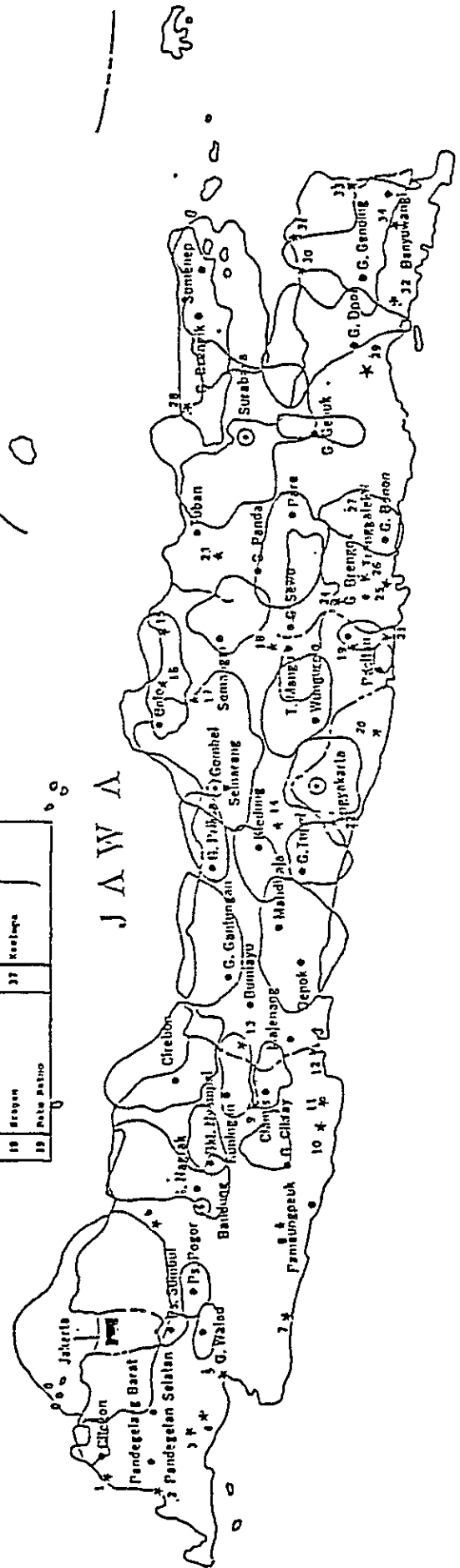
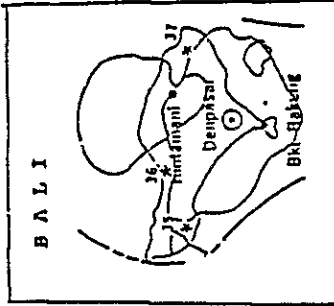
No.	Location	No.	Location	No.	Location
1	Calang	32	Meureut	41	Meureut
2	Jemberong	33	Banjar	42	Tebing Tinggi
3	Merak	34	Belitang	43	Belitang
4	Merak	35	Belitang	44	Belitang
5	Merak	36	Belitang	45	Belitang
6	Merak	37	Belitang	46	Belitang
7	Merak	38	Belitang	47	Belitang
8	Merak	39	Belitang	48	Belitang
9	Merak	40	Belitang	49	Belitang
10	Merak	41	Belitang	50	Belitang
11	Merak	42	Belitang	51	Belitang
12	Merak	43	Belitang	52	Belitang
13	Merak	44	Belitang	53	Belitang
14	Merak	45	Belitang	54	Belitang
15	Merak	46	Belitang	55	Belitang
16	Merak	47	Belitang	56	Belitang
17	Merak	48	Belitang	57	Belitang
18	Merak	49	Belitang	58	Belitang
19	Merak	50	Belitang	59	Belitang
20	Merak	51	Belitang	60	Belitang
21	Merak	52	Belitang	61	Belitang
22	Merak	53	Belitang	62	Belitang
23	Merak	54	Belitang	63	Belitang
24	Merak	55	Belitang	64	Belitang
25	Merak	56	Belitang	65	Belitang
26	Merak	57	Belitang	66	Belitang
27	Merak	58	Belitang	67	Belitang
28	Merak	59	Belitang	68	Belitang
29	Merak	60	Belitang	69	Belitang
30	Merak	61	Belitang	70	Belitang
31	Merak	62	Belitang	71	Belitang
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37	Merak	68	Belitang	77	Belitang
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40	Merak	71	Belitang	80	Belitang
41	Merak	72	Belitang	81	Belitang
42	Merak	73	Belitang	82	Belitang
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45	Merak	76	Belitang	85	Belitang
46	Merak	77	Belitang	86	Belitang
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49	Merak	80	Belitang	89	Belitang
50	Merak	81	Belitang	90	Belitang
51	Merak	82	Belitang	91	Belitang
52	Merak	83	Belitang	92	Belitang
53	Merak	84	Belitang	93	Belitang
54	Merak	85	Belitang	94	Belitang
55	Merak	86	Belitang	95	Belitang
56	Merak	87	Belitang	96	Belitang
57	Merak	88	Belitang	97	Belitang
58	Merak	89	Belitang	98	Belitang
59	Merak	90	Belitang	99	Belitang
60	Merak	91	Belitang	100	Belitang

Service Area and Location of TVN-I Station  
in Jawa Area

No.	Location	No.	Location
1	Anyar	30	Nonsaib
2	Pegajene	31	Glilente
3	Banjarsari	32	Saka
4	Cibeo	33	Bonjorejo
5	Palabuanbaru	34	Ponorogo Timur
6	Pareharta	35	Tenggunung
7	Blimbing Basang	36	Telungrejo Selatan
8	Bongkarejo	37	Kempoko
9	Panemburan	38	Arabaya
10	Kecampungan	39	Kamajang
11	Cikemas	40	Berak
12	Pangandaran	41	Blitar Timur
13	Saleh	42	Ambulo
14	Hergeleng	43	Pangpung
15	Bembayun	44	Santolo
16	Wadiljoko	45	Jagers
17	Nuwanda	46	Pengastolan
18	Brayan	47	Kertapa
19	Pala Bahur		

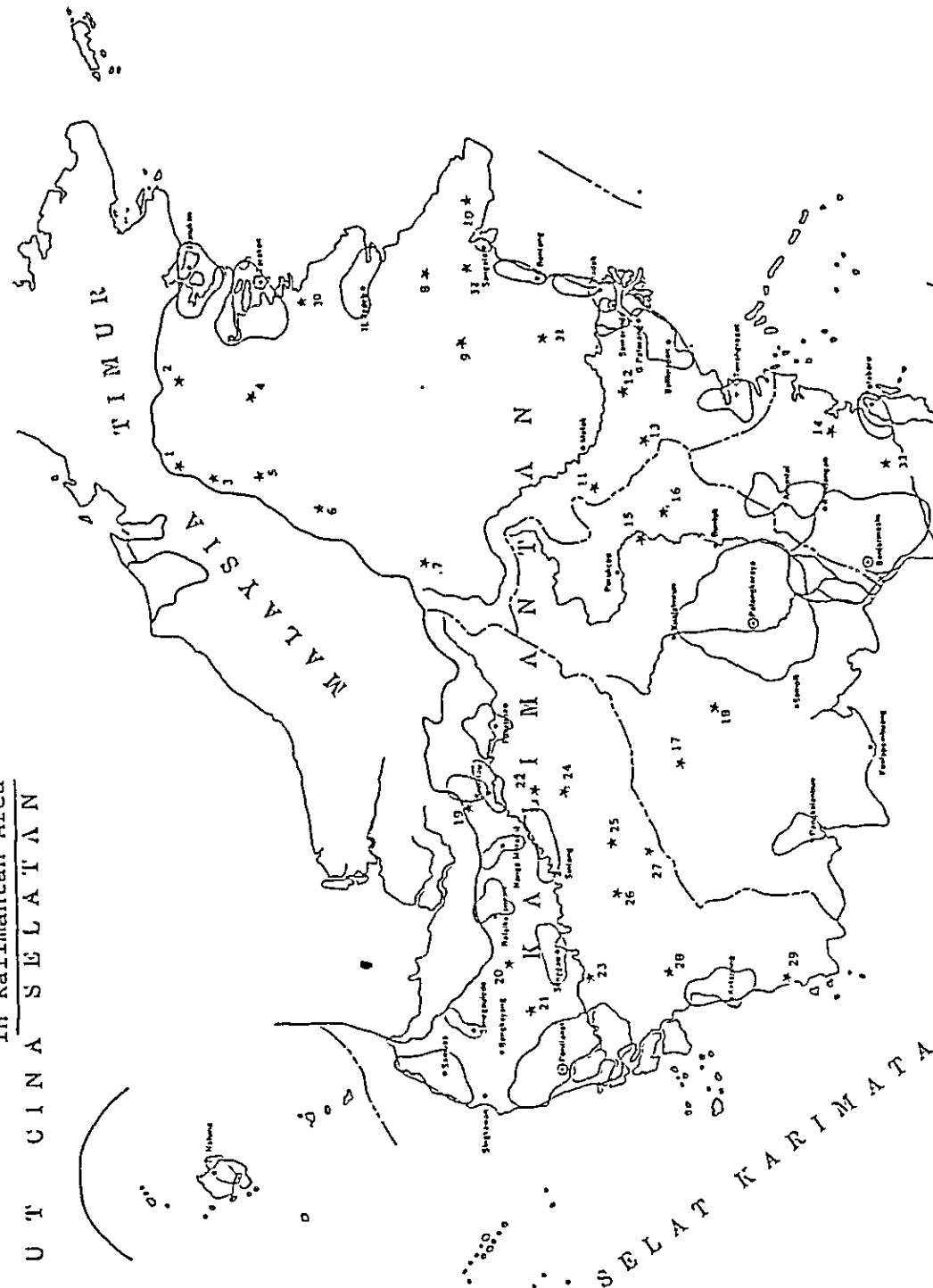
**LEGEND**

Existing Station  
Station to be constructed in 4th 5-year plan  
Station to be constructed in 5th & 6th 5-year plan  
Name of main town in the Service Area



Service Area and Location of TVN-I Station

in Kalimantan Area  
MALAYSIA  
TIMOR  
LAUT  
CINA  
SELATAN



LEGEND	
(●)	Existing Station
(○)	Station to be constructed in 4th 5-year Plan
(*)	Station to be constructed in 5th & 6th 5-year plan
No.	Name of main town in the Service Area

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31.

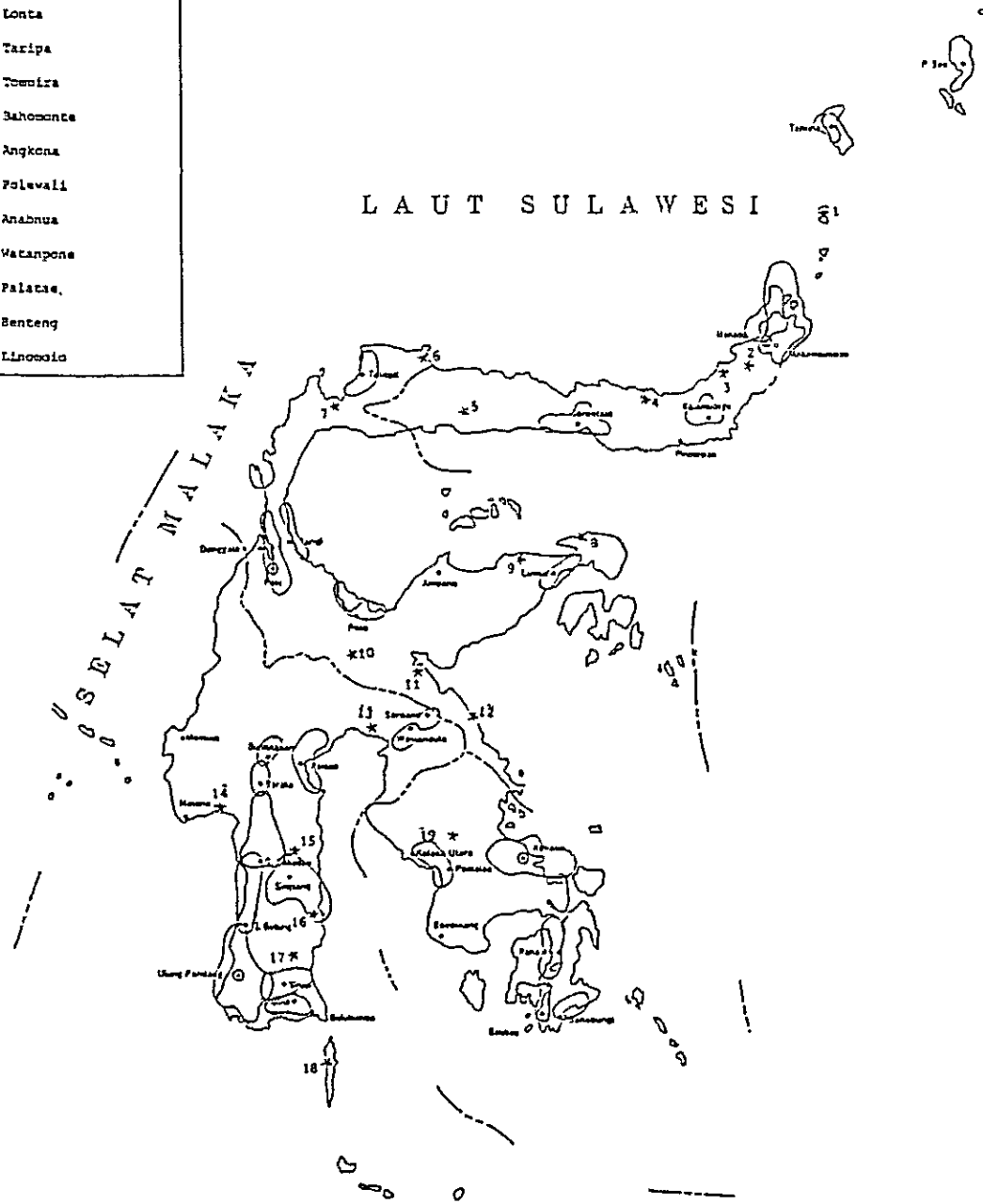
| No. | Location   | No. | Location      |
|-----|------------|-----|---------------|
| 1   | Beriven    | 18  | Kualakayan    |
| 2   | Tujung     | 19  | Mangahdanghan |
| 3   | Pujung     | 20  | Kembayan      |
| 4   | Gongsalak  | 21  | Ngabany       |
| 5   | Kubany     | 22  | Manghatempual |
| 6   | Kapan      | 23  | Hellau        |
| 7   | Kubessal   | 24  | Mangahdanghan |
| 8   | Musamayang | 25  | Mangaplinoch  |
| 9   | Misrahaku  | 26  | Pemuar        |
| 10  | Ruku       | 27  | Manga Sayan   |
| 11  | Sambuh     | 28  | Aurkuning     |
| 12  | Suet       | 29  | Pandawangan   |
| 13  | Muntalen   | 30  | Tj. Sator     |
| 14  | Limbungan  | 31  | Kiempo        |
| 15  | Masestemeh | 32  | Kaseltau      |
| 16  | Ketapang   | 33  | Satul         |
| 17  | Tamalung   |     |               |

Service Area and Location of TVN-I

Attached Sheet-2 (4)

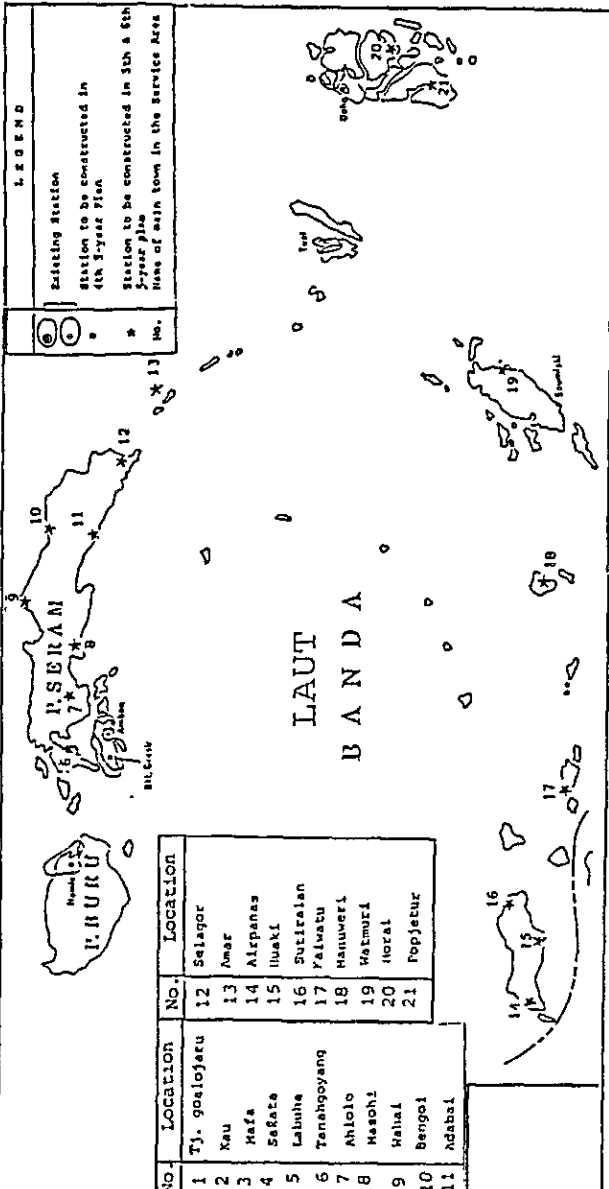
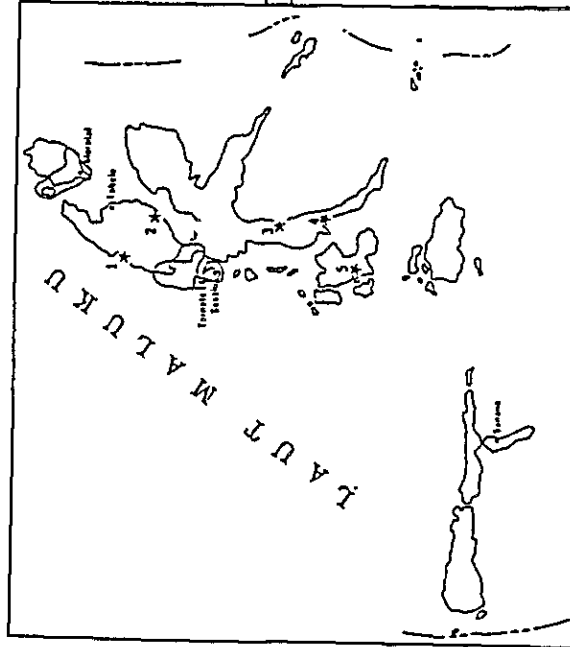
Station in Sulawesi Area

| No | Location     | LEGEND |   |
|----|--------------|--------|---|
| 1  | Ondona       | ⊙      | Existing Station                                      |
| 2  | Kawangkoan   | ⊙      | Station to be constructed in<br>4th 5-year Plan       |
| 3  | Kuelembual   | *      |   |
| 4  | Hintaunalama | *      | Station to be constructed in 5th & 6th<br>5-year plan |
| 5  | Taludic      | *      |   |
| 6  | Leok         | No.    | Name of main town in the Service Area                 |
| 7  | Tinaboyan    |        |   |
| 8  | Samako       |        |   |
| 9  | Lonta        |        |   |
| 10 | Taripa       |        |   |
| 11 | Tombira      |        |   |
| 12 | Sahomonta    |        |   |
| 13 | Angkona      |        |   |
| 14 | Polewali     |        |   |
| 15 | Anabnua      |        |   |
| 16 | Watanpone    |        |   |
| 17 | Palatae      |        |   |
| 18 | Benteng      |        |   |
| 19 | Linoocia     |        |   |





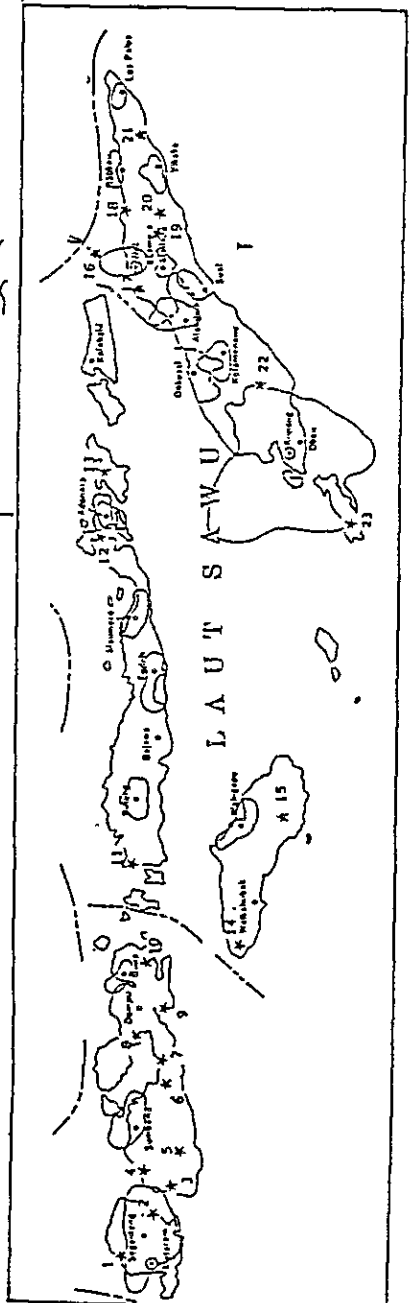
Service Area & Location of TVN-I Station  
in Nusa Tenggara, Maluku & Timor Timur Area



LEGEND

|     |  |
|-----|--|
| (6) | Existing Station                                   |
| (C) | Station to be constructed in 4th 5-year Plan       |
| *   | Station to be constructed in 3rd & 6th 5-year plan |
| +   | Head of main town in the Service Area              |

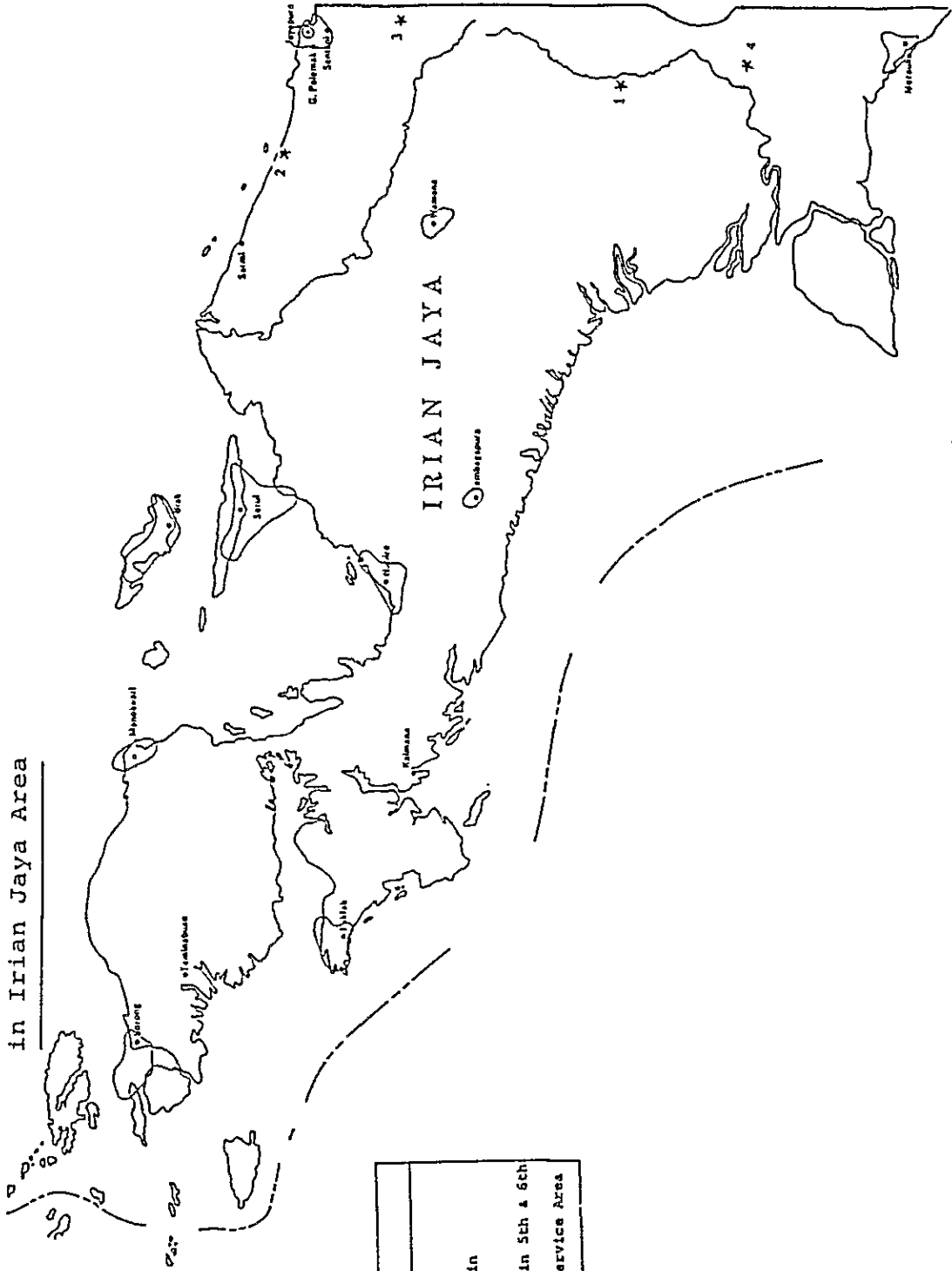
| No. | Location      | No. | Location  |
|-----|---------------|-----|-----------|
| 1   | Tj. gosioferu | 12  | Selagor   |
| 2   | Kau           | 13  | Amar      |
| 3   | Mafa          | 14  | Airpanas  |
| 4   | Sagata        | 15  | Iluaki    |
| 5   | Labuha        | 16  | Sutiralan |
| 6   | Tonahopyang   | 17  | Palmatu   |
| 7   | Ahilo         | 18  | Manuwel   |
| 8   | Masohi        | 19  | WaEmuri   |
| 9   | Wahai         | 20  | Ioral     |
| 10  | Bengol        | 21  | Popletur  |
| 11  | Adabai        |     |           |



| No. | Location  | No. | Location        |
|-----|-----------|-----|-----------------|
| 1   | Kentony   | 13  | Iledhevu        |
| 2   | Kotarsja  | 14  | Rasa            |
| 3   | Endeh     | 15  | O. Malupatawung |
| 4   | Marintach | 16  | Maubela         |
| 5   | Koppa     | 17  | Liklisa         |
| 6   | Pisampang | 18  | Manatuta        |
| 7   | Ampang    | 19  | Alnaro          |
| 8   | Dorohempo | 20  | Sane            |
| 9   | Rasabih   | 21  | Ustoharboe      |
| 10  | Mobe      | 22  | Sos             |
| 11  | Nggotang  | 23  | Bualangga       |
| 12  | Larantuke |     |                 |

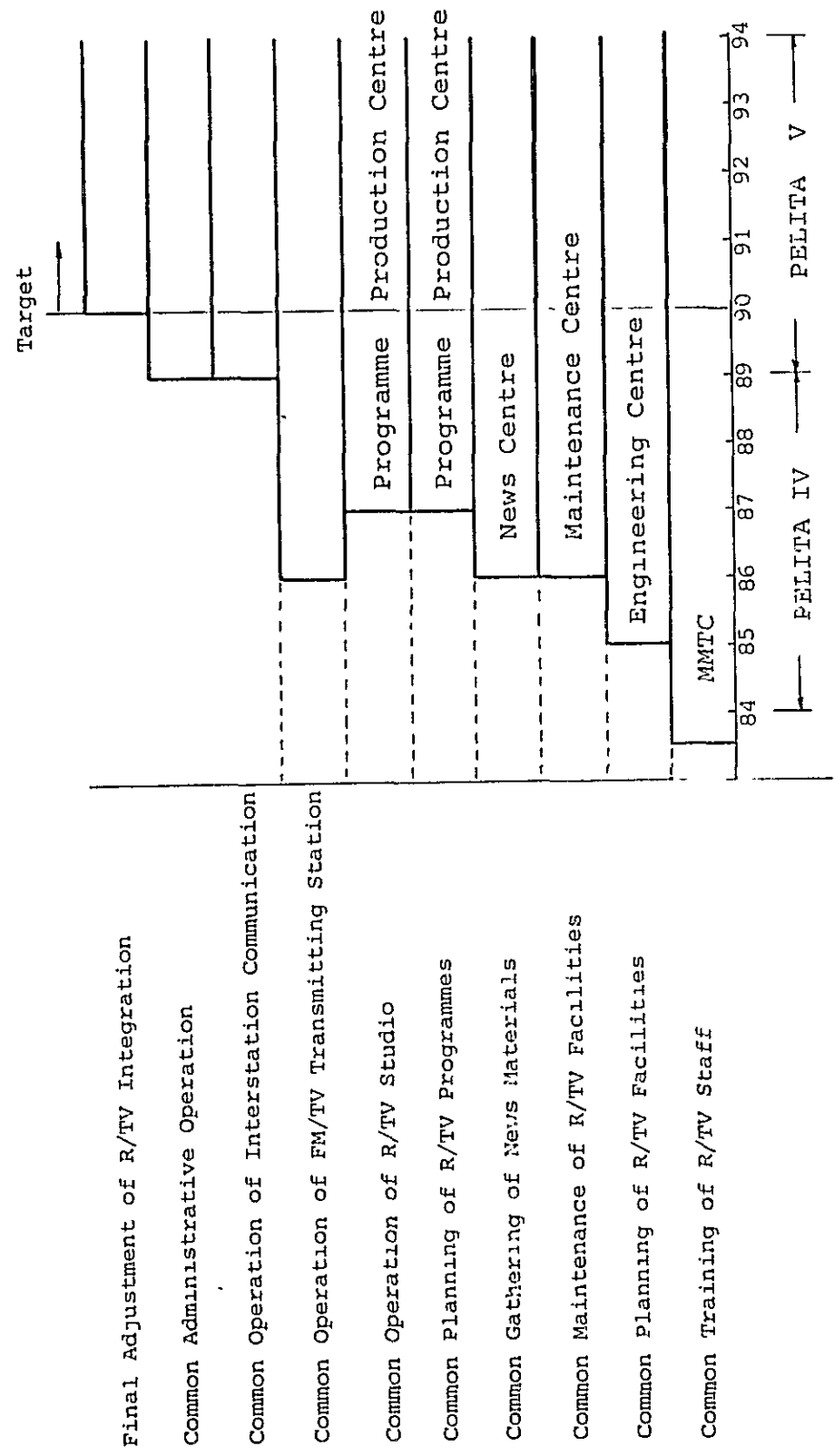
Service Area and Location of TVN-I Station

in Irian Jaya Area

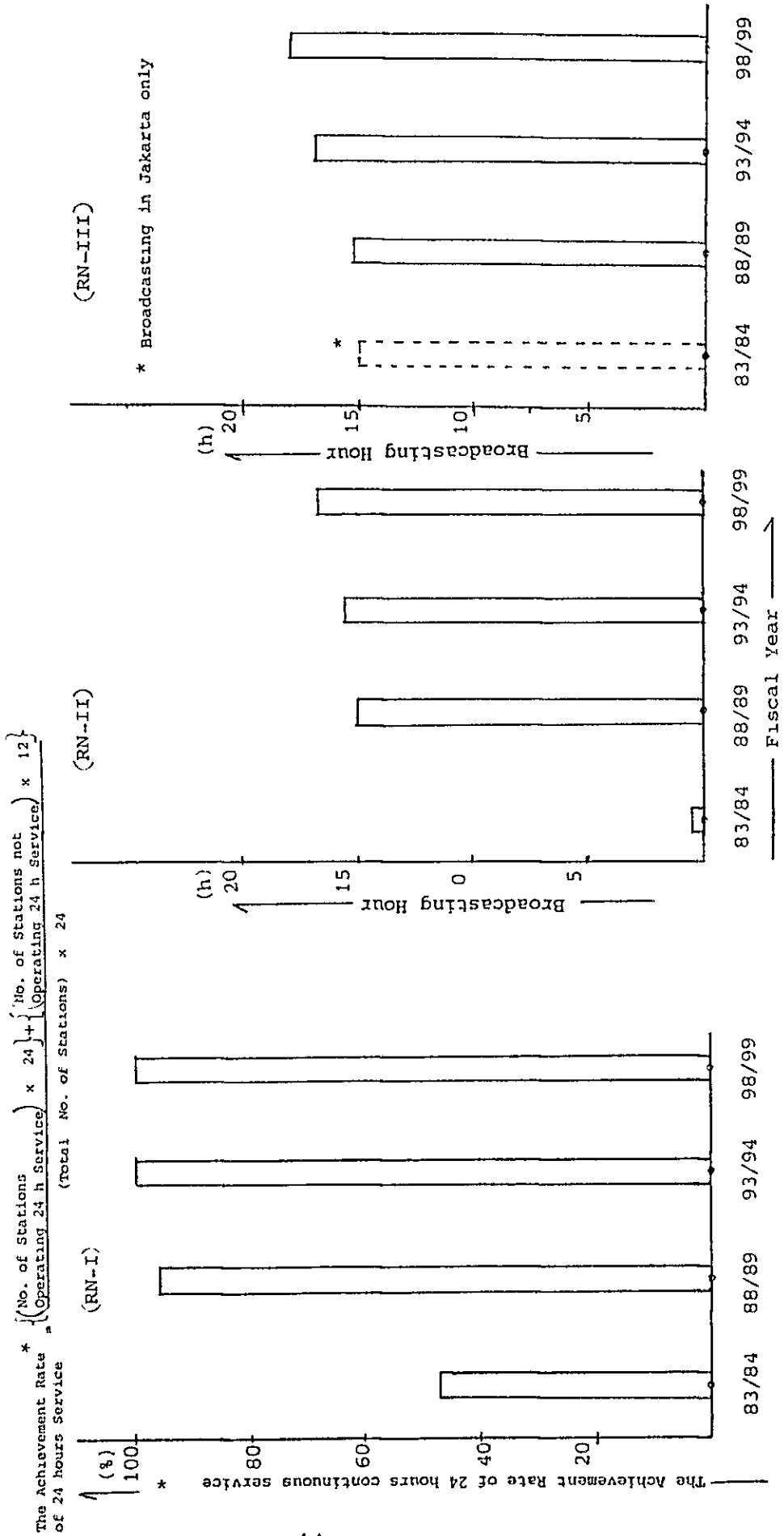


| LEGEND |  |
|--------|--|
| (⊙)    | Existing Station                                   |
| (●)    | Station to be constructed in 4th 5-year Plan       |
| *      | Station to be constructed in 5th & 6th 5-year plan |
| No.    | Name of main town in the Service Area              |
| No     | Location   |
| 1      | Tanamera   |
| 2      | Armopa   |
| 3      | Kenadega   |
| 4      | Semuting   |

A Model of R/TV Integration

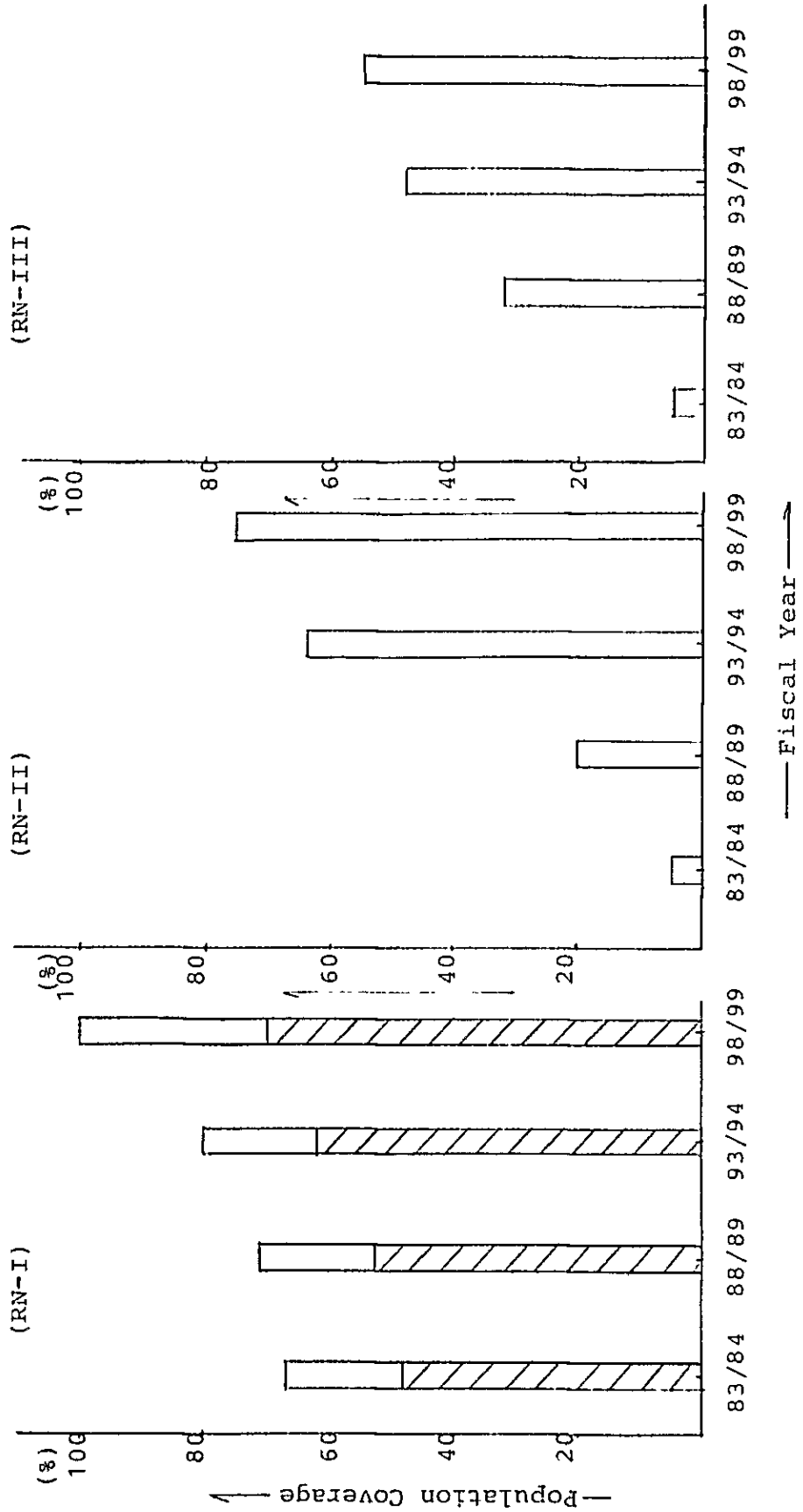


Improvement of the Radio Broadcasting Service

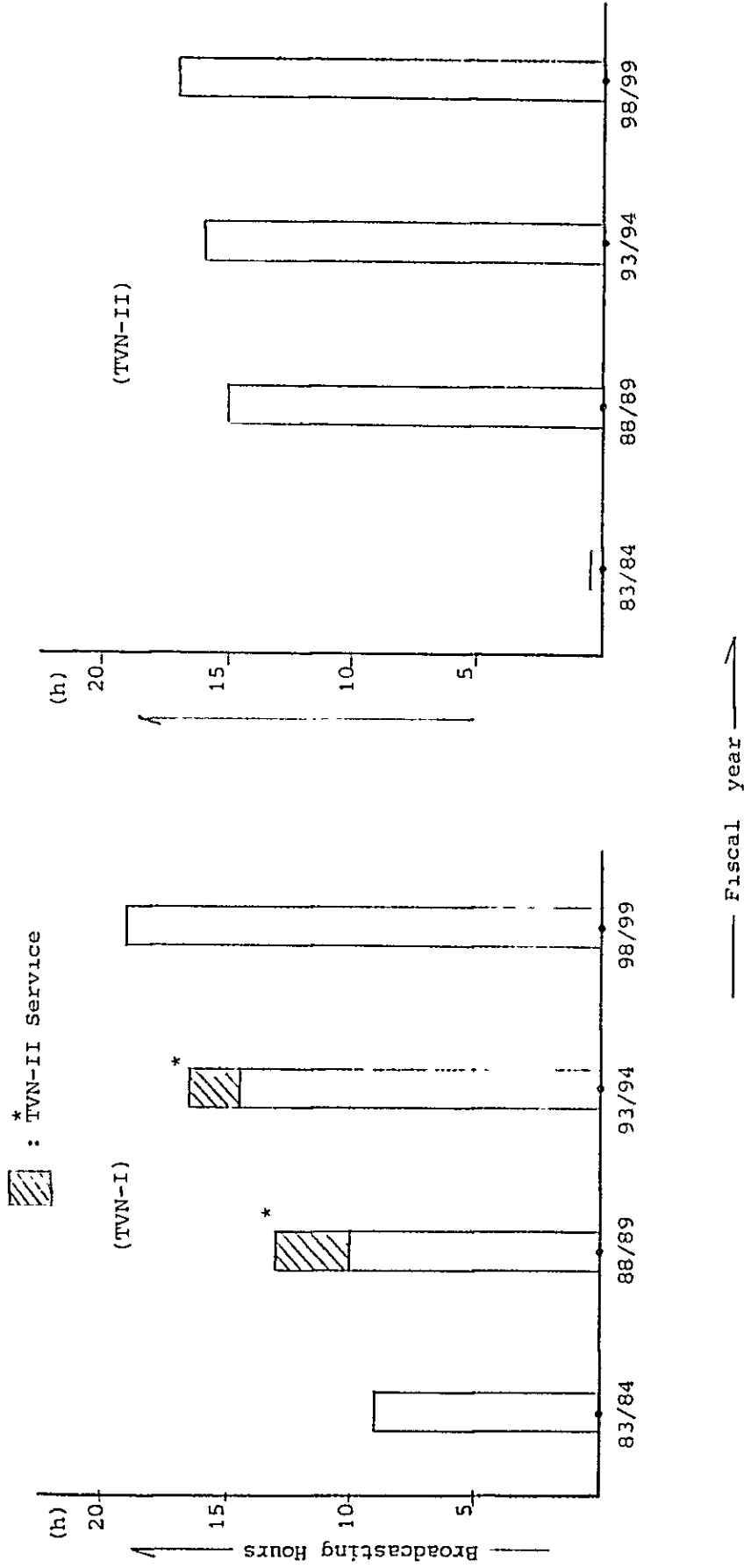


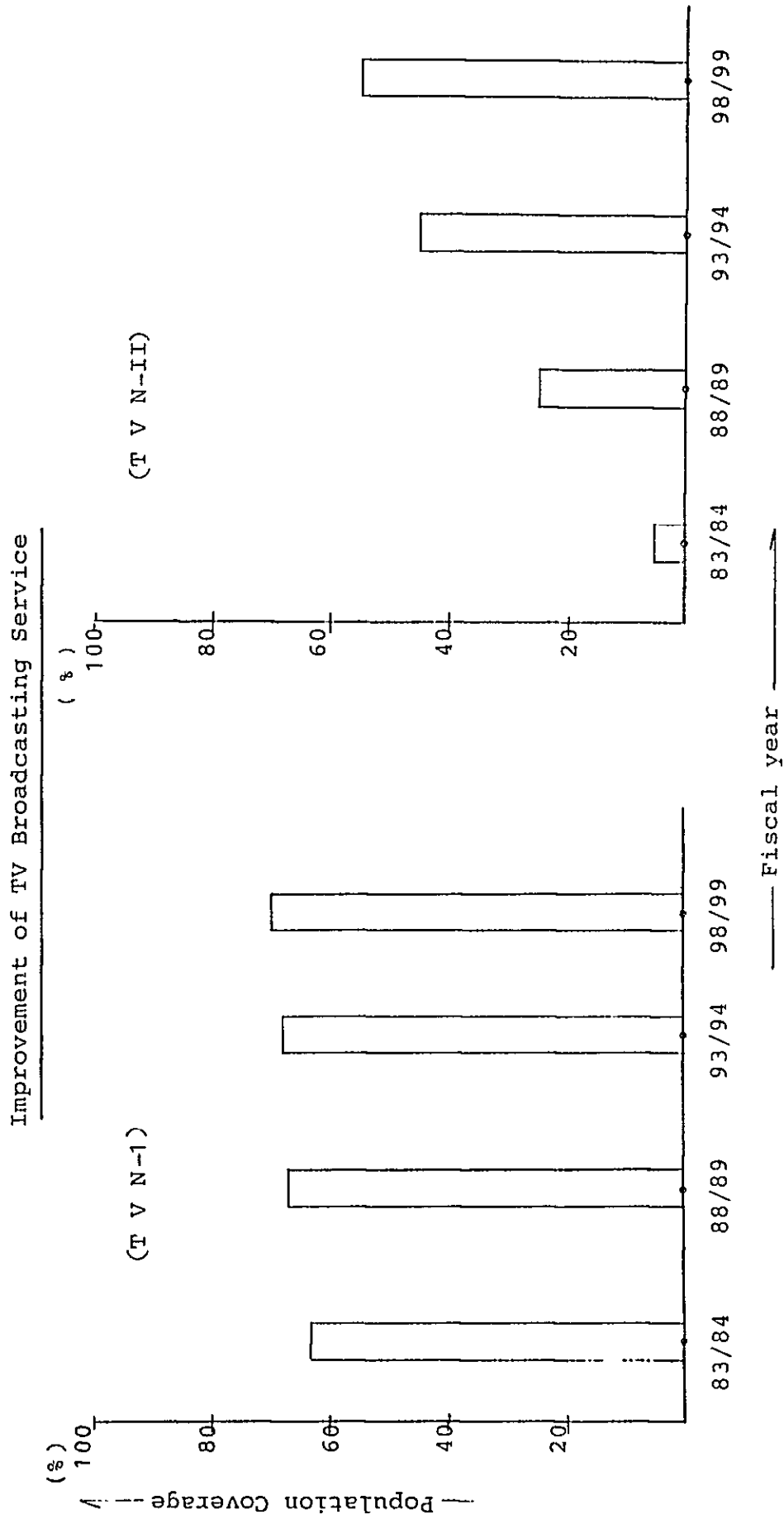
Improvement of the Radio Broadcasting Service Attached Sheet-5

▨ : Medium Wave  
 □ : Short Wave



Improvement of TV Broadcasting Service





TVN-I Programme Production and Broadcasting Network

Attached Sheet-8

| Service Area                            | Performance for Key Programme | Performance for Sub-key Programme | M P U (Mobile Production Unit)                                | OB Van                          |
|---|-------------------------------|-----------------------------------|---|---------------------------------|
| Regional Service for Nusantara I Area   | Medan                         | Palembang                         | Aceh, Sumatera Barat Riau, Jambi Bengkulu Lampung             | Sumatera Utara Sumatera Selatan |
| Regional Service for Nusantara II Area  | Surabaya                      | Yogyakarta Denpasar               | Jawa Barat Jawa Tengah  | Jawa Timur Bali                 |
| Regional Service for Nusantara III Area | Balikpapan * (Samarinda)      | Banjarmasin **                    | Kalimantan Barat Kalimantan Tengah Kalimantan Selatan         | Kalimantan Utara                |
| Regional Service for Nusantara IV Area  | Ujung Pandang                 | Manado                            | Sulawesi Tengah Sulawesi Tenggara N.T.T., N.T.B., Timor Timur | Sulawesi Utara Sulawesi Selatan |
| Regional Service for Nusantara V Area   | Jayapura **                   | Ambon **                          |   | Irian Jaya Maluku               |

Note:

\* In future, Balikpapan will be moved to Samarinda and Balikpapan will have a programme production function only.

\*\* In future, Banjarmasin, Jayapura and Ambon will have a programme production and Broadcasting facilities.



Number of Radio Studio in Each Station

| Station          | End of the 4th 5-year Plan |                 | End of the Long Term Plan |                 |
|------------------|----------------------------|-----------------|---------------------------|-----------------|
|                  | Stereo-<br>phonic          | Mono-<br>phonic | Stereo-<br>phonic         | Mono-<br>phonic |
| Jakarta          | 5                          | 6               | 8                         | 15              |
| Nusantara ( 5)   | 12                         | 12              | 15                        | 15              |
| Regional I (26)  | 52                         | 52              | 52                        | 52              |
| Regional II (17) | 17                         | 30              | 17                        | 34              |
| Sarang*          |                            |                 | 1                         | 2               |
| Total            | 86                         | 100             | 93                        | 118             |

\*Planned Station

Note: Number of stations is shown in the brackets.

Number of Colour TV Production Studio

| Station         | End of the 4th 5-year Plan | End of the Long-term Plan |
|-----------------|----------------------------|---------------------------|
| Jakarta         | 8                          | 15                        |
| Medan*          | 1                          | 2                         |
| Palembang**     | 1                          | 2                         |
| Surabaya*       | 1                          | 2                         |
| Yogyakarta**    | 1                          | 2                         |
| Denpasar**      | 1                          | 2                         |
| Samarinda*      | 0                          | 2                         |
| BaliKpapan**    | 1                          | 2                         |
| Banjarmasin**   | 0                          | 2                         |
| Ujung Pandang*  | 1                          | 2                         |
| Manado**        | 1                          | 2                         |
| Jayapura*       | 0                          | 2                         |
| Ambon**         | 0                          | 2                         |
| Regional-I (21) | 0                          | 20                        |
| Total           | 16                         | 59                        |

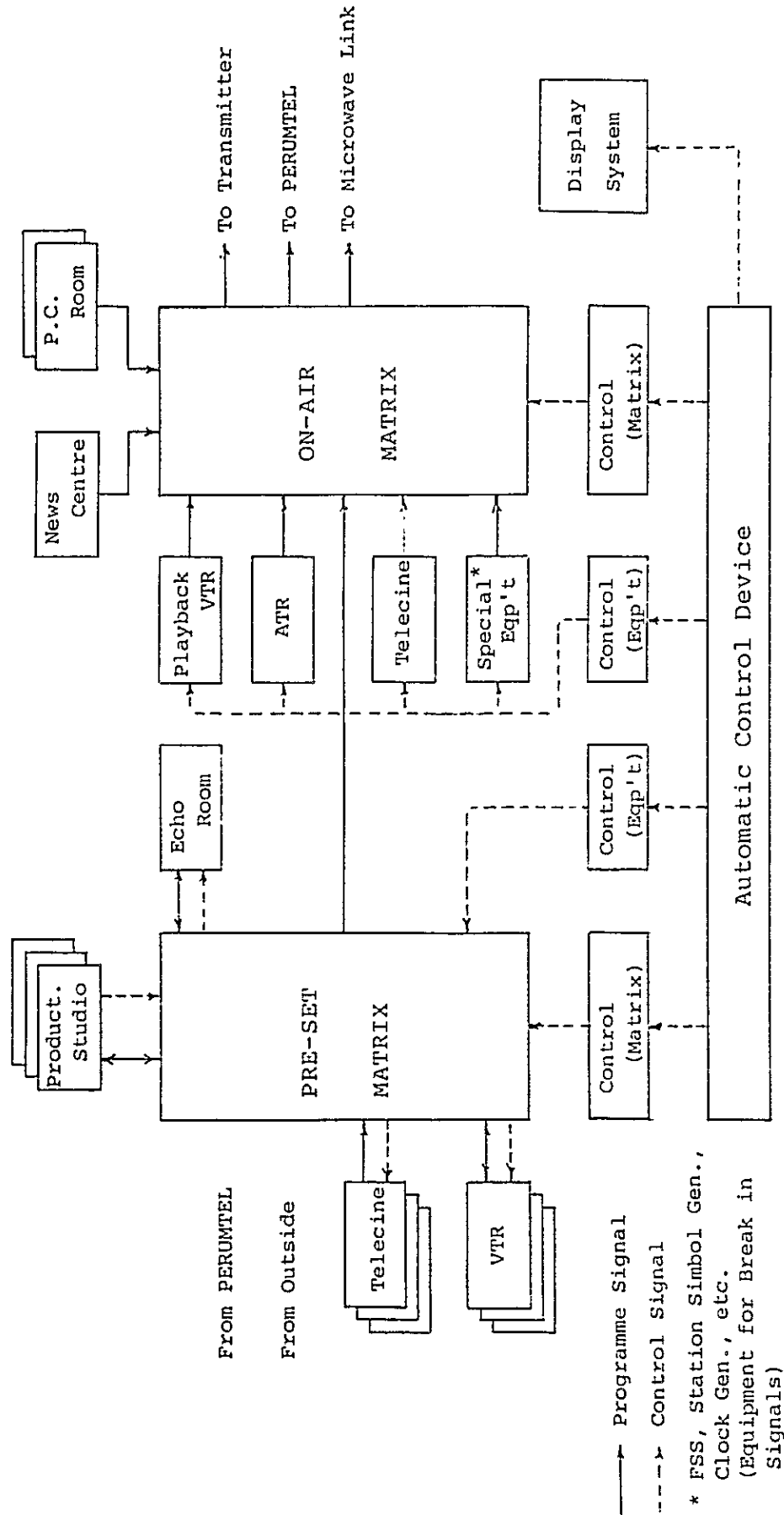
Note; \* Key Station in the Nusantara area

\*\* Sub-key station in the Nusantara area  
Number of stations is in the brackets.

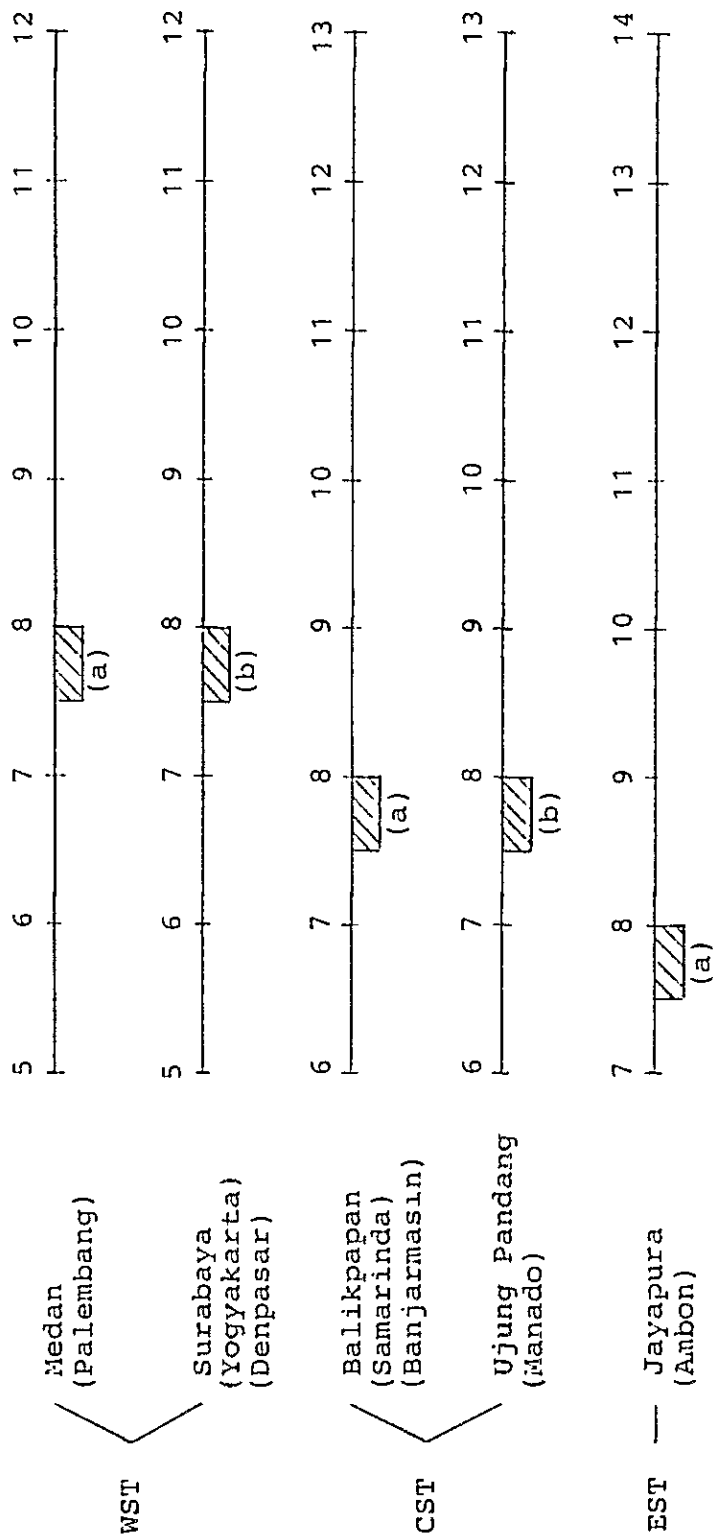
Number of Outside Production Facility


| Station       | OB Van    | MPU       | EFP       | ENG       |
|---------------|-----------|-----------|-----------|-----------|
| Jakarta       | 4         | 3         | 5         | 16        |
| Medan         | 1         | 1         | 1         | 3         |
| Palembang     | 1         | 1         | 1         | 3         |
| Regional-I    |           | 7         |           | 7         |
| Regional-II   |           |           | 2         | 2         |
| Surabaya      | 1         | 1         | 1         | 3         |
| Yogyakarta    | 1         | 1         | 1         | 3         |
| Denpasar      | 1         |           | 1         | 3         |
| Regional-I    |           | 3         |           | 3         |
| Regional-II   |           |           | 7         | 9         |
| Samarinda     | 1         | 1         | 1         | 2         |
| Balikpapan    | 1         | 1         | 1         | 1         |
| Banjarmasin   | 1         | 1         | 1         | 2         |
| Regional-I    |           | 2         |           | 2         |
| Ujung pandang | 1         | 1         | 1         | 3         |
| Manado        | 1         | 1         | 1         | 3         |
| Regional-I    |           | 5         |           | 5         |
| Regional-II   |           |           | 1         | 1         |
| Jayapura      |           | 1         | 2         | 2         |
| Ambon         |           | 1         | 2         | 2         |
| Regional-I    |           |           | 3         | 2         |
| Regional-II   |           |           | 1         | 6         |
| <b>Total</b>  | <b>13</b> | <b>31</b> | <b>31</b> | <b>83</b> |

A Model of Concentrated Control System for Jakarta Station



A Model of Time Sharing Operation of Palapa Transponder for TVN-I Regional Service



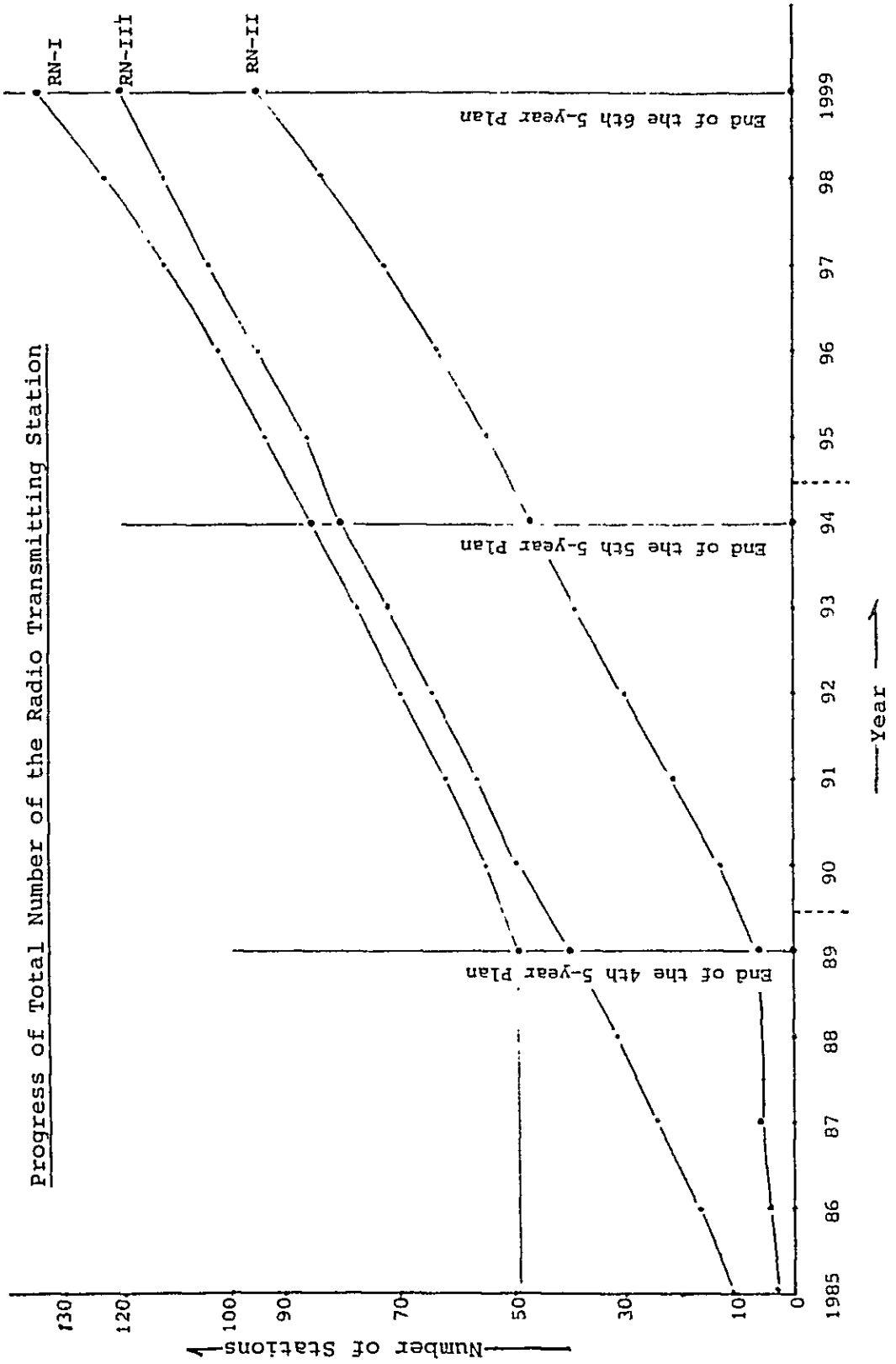
Note:  Regional Service for each Nusantara Area Transponder (a) is used for Regional Service for Nusantara V, III and I areas sequentially. Transponder (b) is used for Regional Service for Nusantara IV and II Areas sequentially.

Comparison of Operation Cost for  
Regional TV Programme Distribution

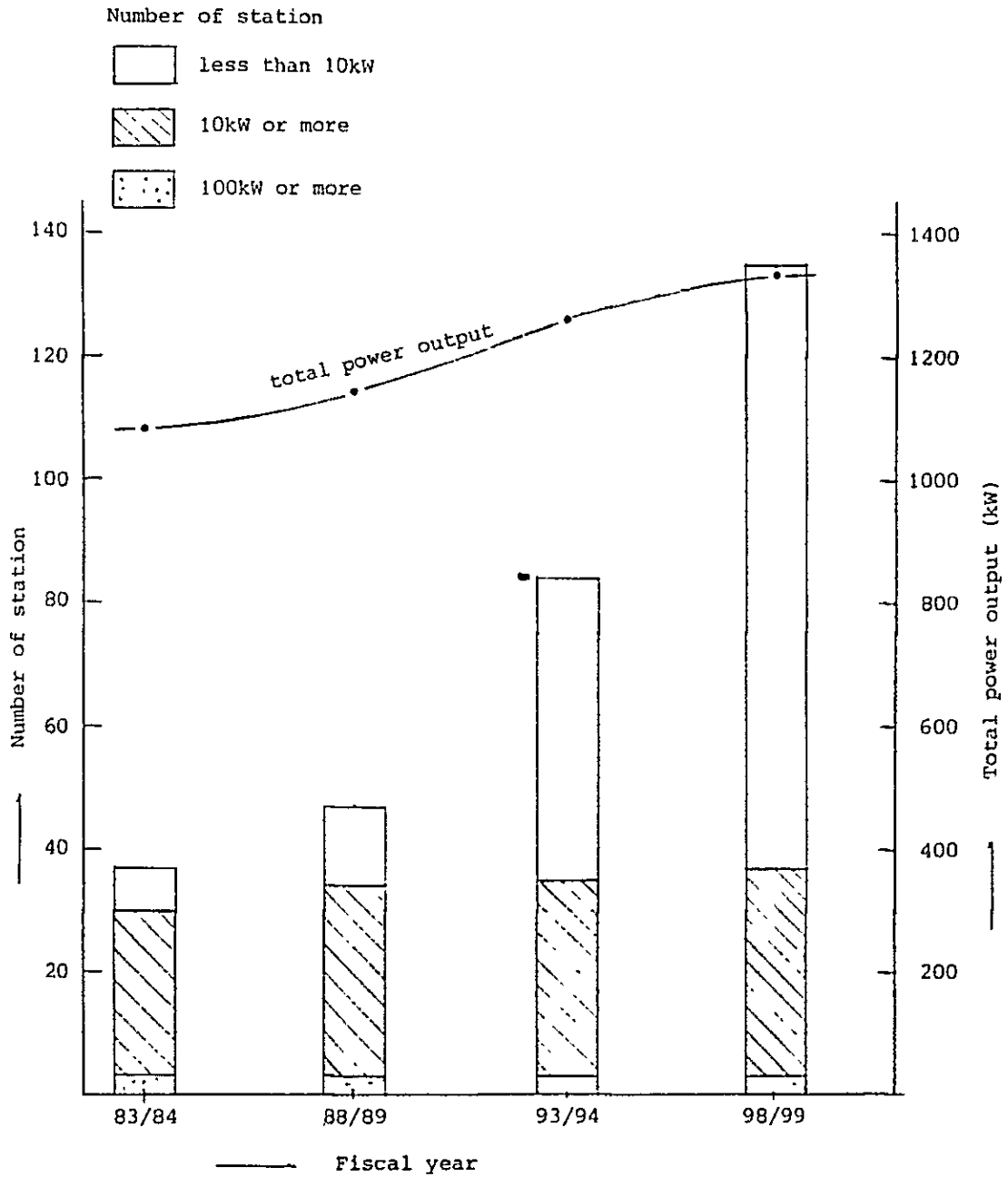
| Palapa System  | Terrestrial Microwave Link  |
|--|---|
| 1. Up Link Terminal Equipment<br>462,000 \$/year   | 1. Terrestrial Microwave Link<br>Total Span 2260km  |
| 2. Lease of Palapa Transponder<br>(3 hours / day)<br>100,000 \$/year                     | Lease of the above Link<br>for 3 hours per day<br>310,000\$/year  |
| 3. Microwave Link between<br>Earth Station and TV Station<br>8,400\$ x 8 = 67,200\$/year | 2. Microwave Link between<br>Microwave Terminal and TV Station<br>8,400\$ x 23 = 193,200\$/year   |
| 4. Down Link Terminal Equipment<br>1,850\$ x 7 = 12,950\$/year                           | 3. Total Operation Cost<br><u>503,200\$/year</u>  |
| 5. Total Operation Cost<br><u>492,150\$/year</u>   | Note:<br>4 TV Stations located in isolated<br>island cannot connect with micro-<br>wave terminal station by means of<br>Microwave Link. |

Improvement Plan of the Transmitting Station (1984-1999)

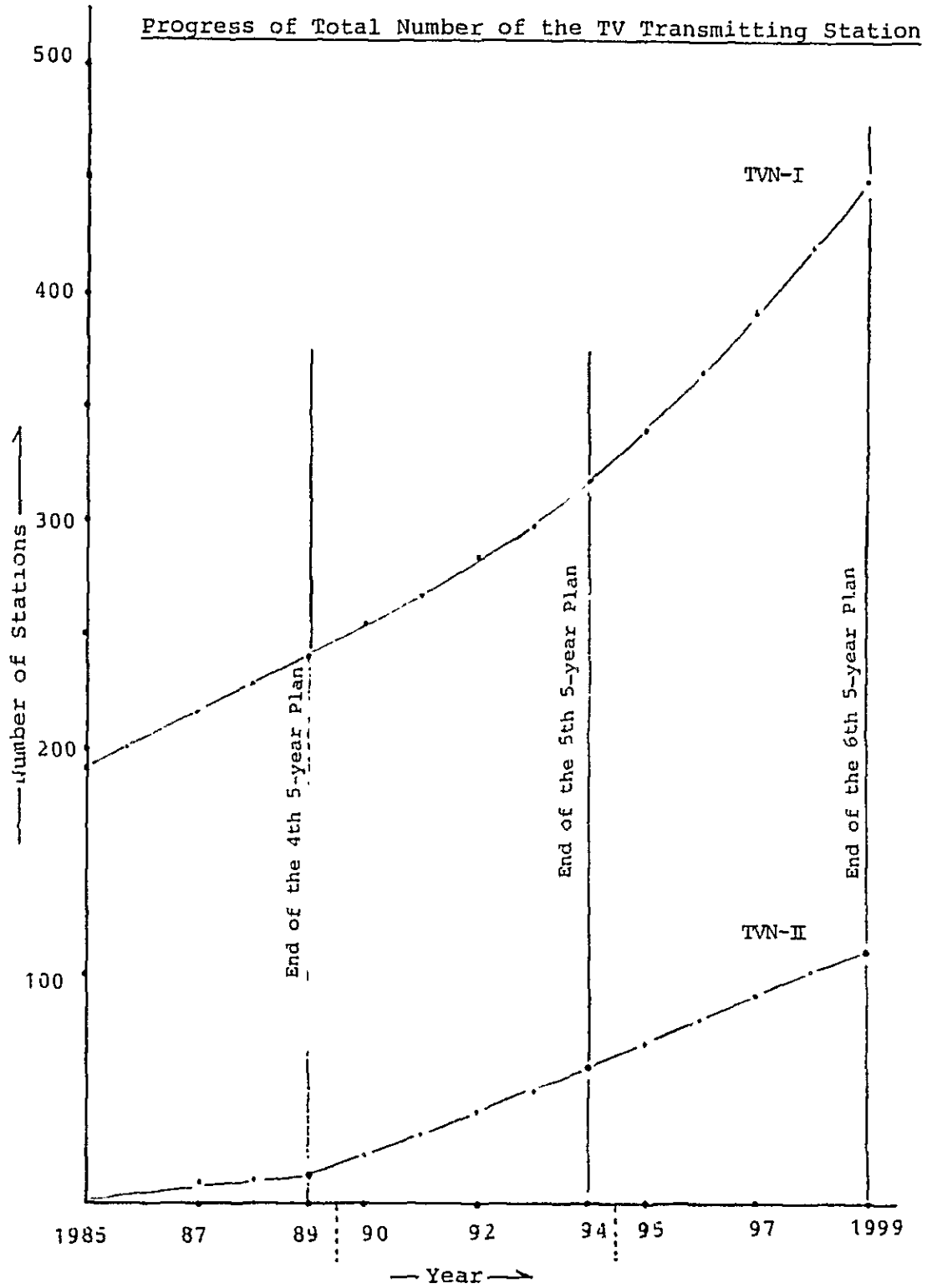
| R/TV | Item          | 84/85  | 85/86 | 86/87 | 87/88 | 88/89 | 89/90 | 90/91 | 91/92 | 92/93 | 93/94 | 94/95 | 95/96 | 96/97 | 97/98 | 98/99 | Remarks                       |                                     |           |
|------|---------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|-------------------------------------|-----------|
| R    | RR-I          |  |       |       |       | 47*1  |       |       |       |       |       |       |       |       |       |       |                               |                                     |           |
|      | Renew         |  |       |       |       |       | 1     | 3     | 2     | 2     | 3     | 4     | 6     | 4     | 6     | 5     |                               |                                     |           |
|      | Newly Install | 4  | 1     | 2     | 2     | 1     | 2     |       |       |       |       |       |       |       |       |       | 38 (Medium Wave Station only) |                                     |           |
|      | Construction  |  |       |       |       |       | 6     | 7     | 8     | 7     | 7     | 9     | 9     | 9     | 11    | 13    |                               | 86 + 49*1 (Station only)            |           |
|      | RR- II        |  |       |       |       | 6*1   |       |       |       |       |       |       |       |       |       |       |                               |                                     |           |
|      | Newly Install | 2  | 1     | 2     |       |       | 7     | 8     | 9     | 8     | 9     | 8     | 8     | 9     | 11    | 12    |                               | 89 + 6*1 (Medium Wave Station only) |           |
|      | RR- I, RR- II |  |       |       |       | 146*2 |       |       |       |       |       |       |       |       |       |       |                               | 95                                  |           |
|      | Short Wave    |  |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                               |                                     |           |
|      | Discard       |  |       |       |       |       | 10    | 4     | 3     | 8     | 18    | 11    | 11    | 6     | 5     | 4     | 7                             |                                     | 76*3      |
|      | Renew         | 5  | 5     | 5     | 4     | 4     | 8     | 8     | 5     | 5     | 4     | 5     | 5     | 3     | 2     | 2     | 0                             |                                     | 65*3      |
| T    | RR- III       |  |       |       |       | 40*1  |       |       |       |       |       |       |       |       |       |       |                               |                                     |           |
|      | Newly Install | 10   | 6     | 7     | 7     | 9     | 10    | 7     | 7     | 8     | 8     | 7     | 9     | 8     | 8     | 8     |                               | 80 + 40*1                           |           |
|      | TUN-I         |  |       |       |       | 240*1 |       |       |       |       |       |       |       |       |       |       |                               | 120                                 |           |
|      | Renew         |  |       |       |       |       | 8     | 6     | 8     | 8     | 9     | 7     | 5     | 5     | 4     | 5     |                               |                                     | 65        |
|      | Standby       |  |       |       |       |       | 2     | 2     | 2     | 2     | 2     | 4     | 3     | 3     | 4     | 4     |                               |                                     | 28        |
|      | Construction  | 12   | 9     | 10    | 10    | 9     | 14    | 14    | 15    | 16    | 19    | 23    | 25    | 27    | 28    | 29    |                               |                                     | 450       |
|      | TVN- II       |  |       |       |       | 11*1  |       |       |       |       |       |       |       |       |       |       |                               |                                     |           |
|      | Newly Install |  |       | 8     | 1     | 1     | 9     | 10    | 10    | 8     | 11    | 11    | 10    | 11    | 11    | 8     |                               |                                     | 99 + 11*1 |
|      | Remarks       | *1 Transmitting stations in 1989 *2 Number of the transmitters in 1989 *3 Number of the transmitters in 1999 |       |       |       |       |       |       |       |       |       |       |       |       |       |       |                               |                                     |           |



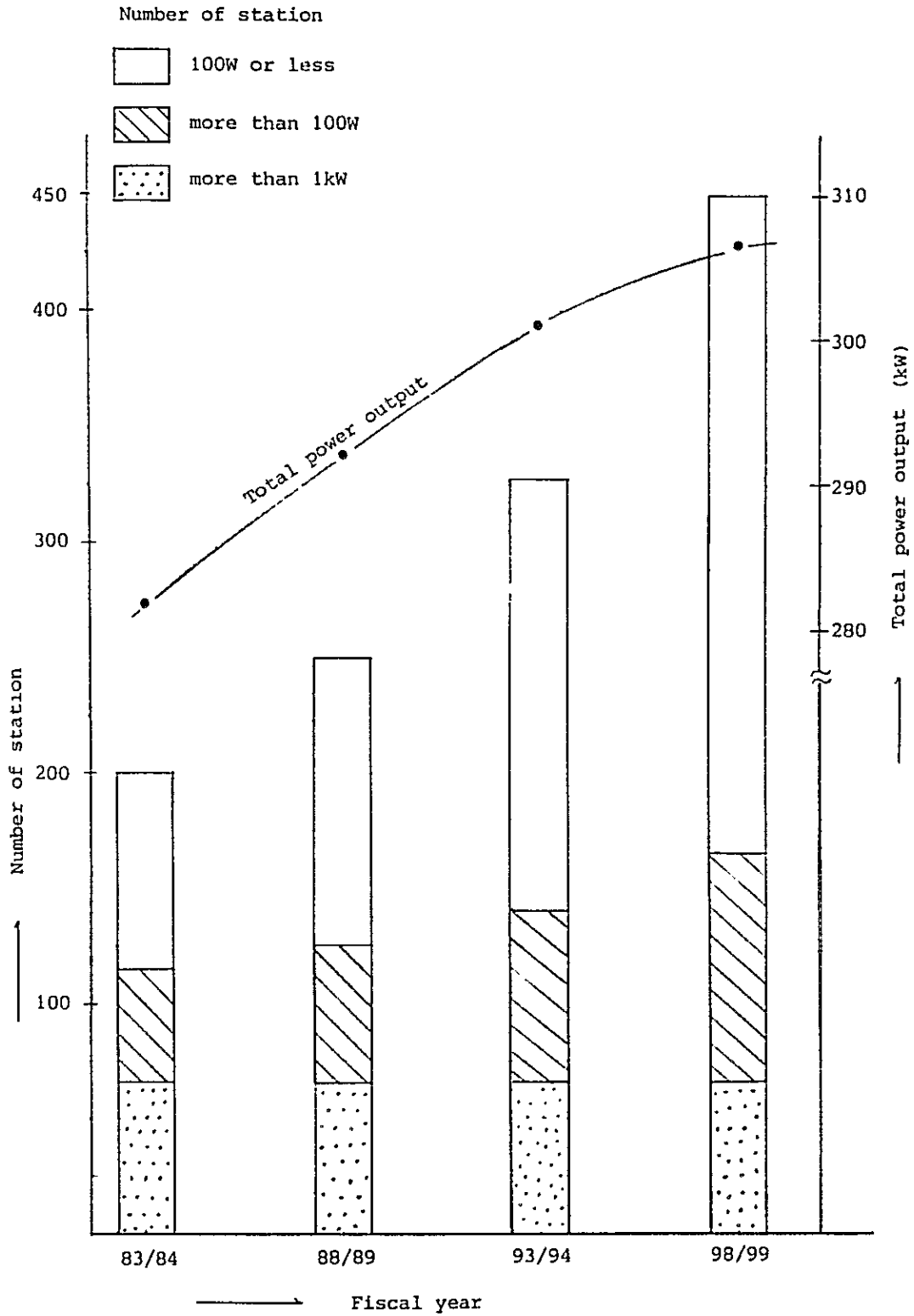
Progress of RN-I MW Network



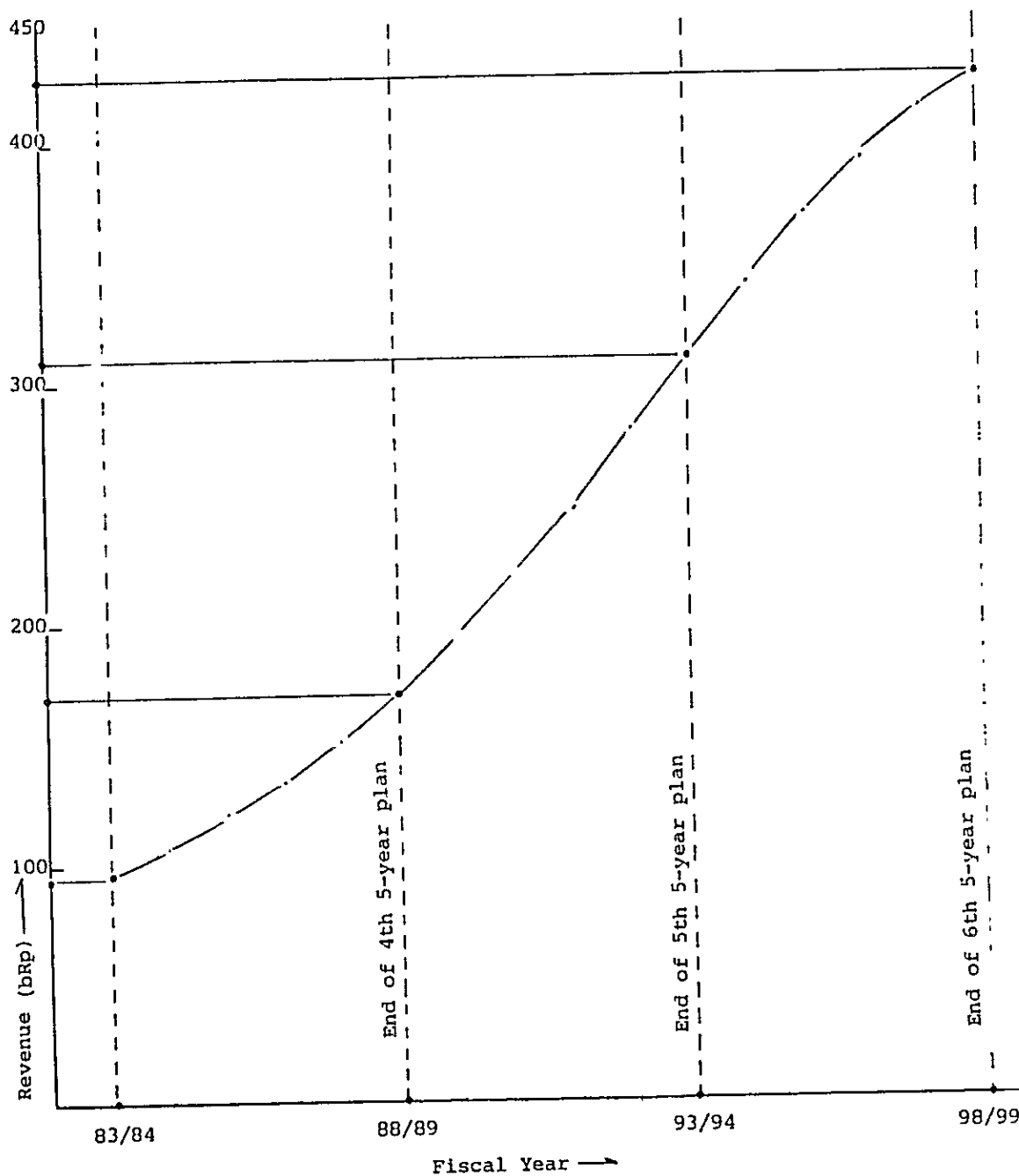




Progress of TVN-I Network

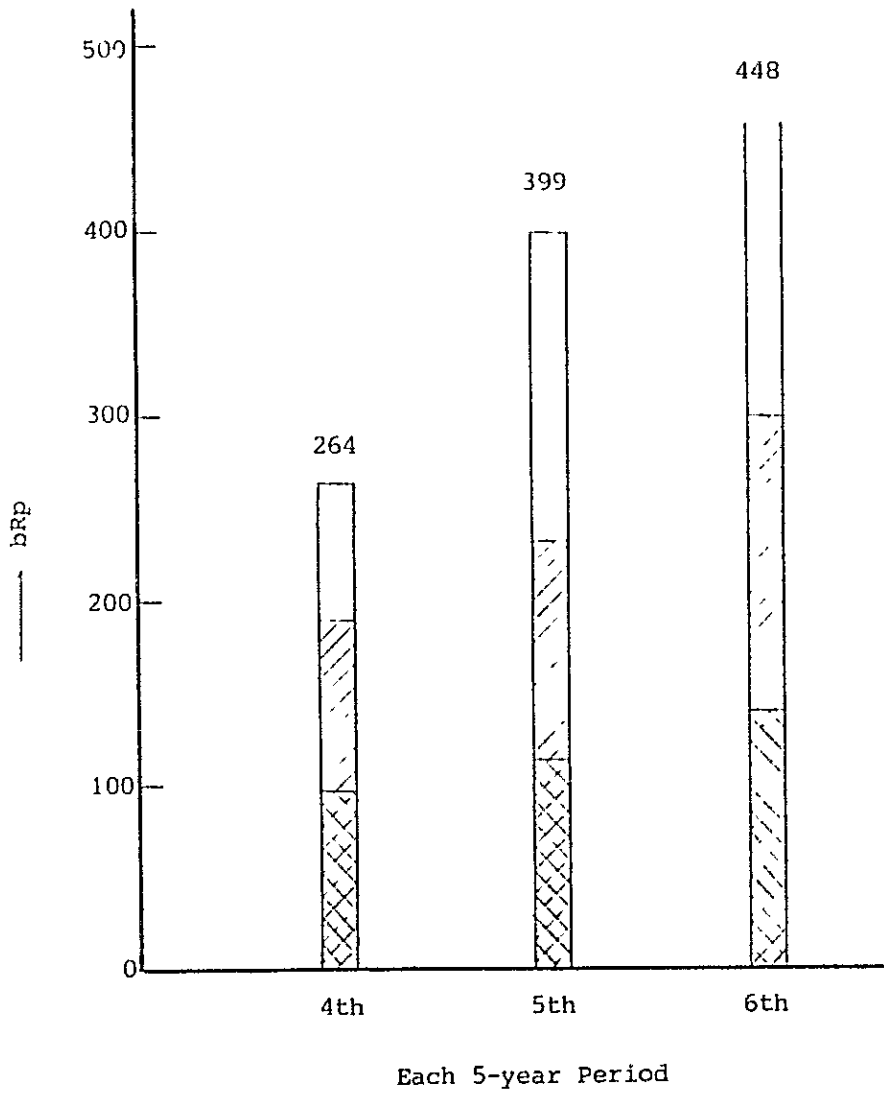


Growth of Revenue



Investment for Long-term Plan

Transmitting Facility  
Studio Facility  
Others

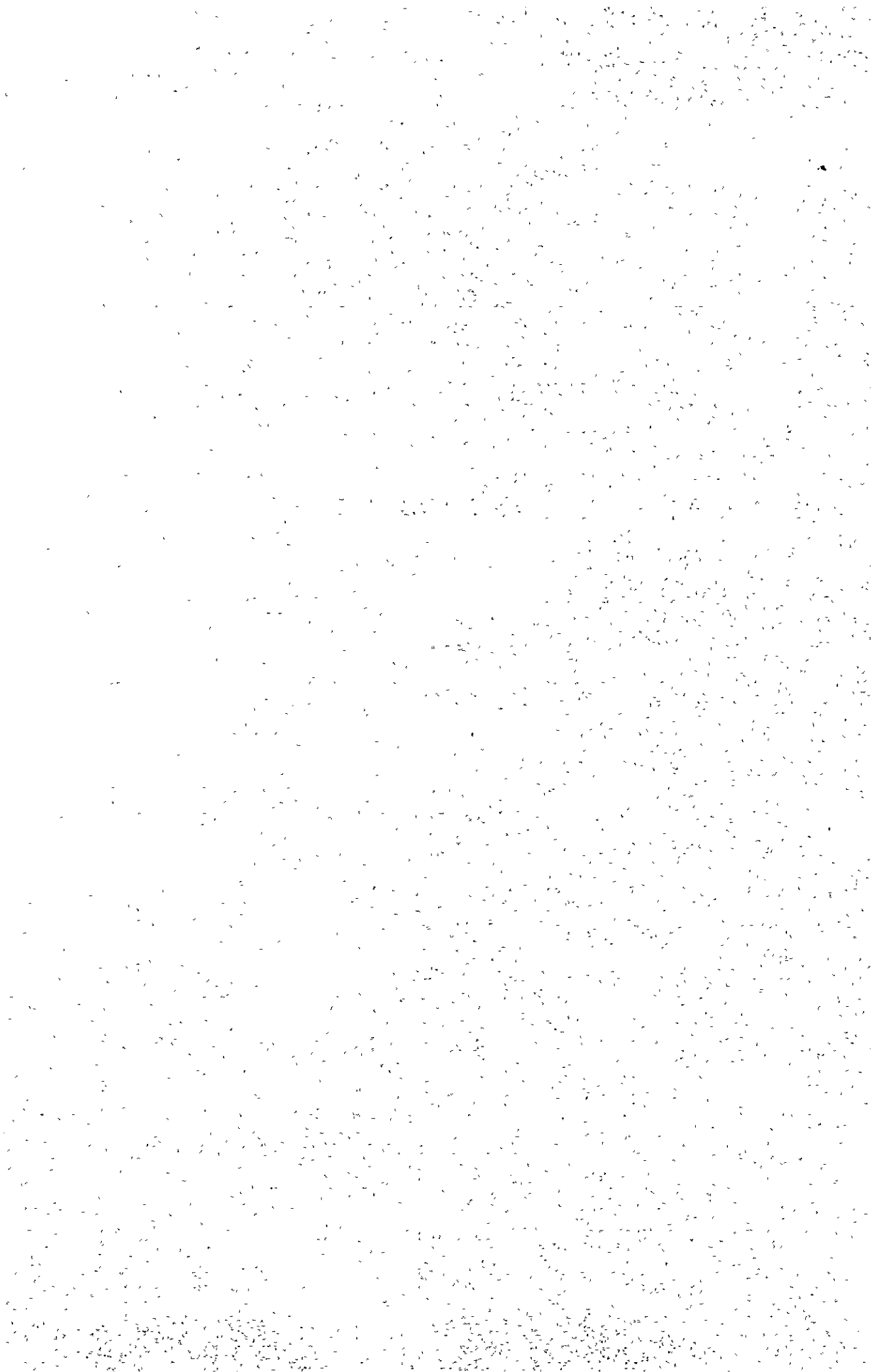


CALCULATION OF CONSTRUCTION & OPERATION COST BASED ON THE EXPECTED REVENUES

| PELITA                  | IV    |       |        |        |        |       |       |        | Pelita<br>IV<br>Total | V       | VI      | TOTAL |
|-------------------------|-------|-------|--------|--------|--------|-------|-------|--------|-----------------------|---------|---------|-------|
|                         | 84/85 | 85/86 | 86/87  | 87/88  | 88/89  | 89/90 | 94/95 | 98/99  |                       |         |         |       |
| FISCAL YEAR             |       |       |        |        |        |       |       |        | 89/90                 | 94/95   | 98/99   |       |
| REVENUES                | 81.83 | 96.93 | 109.15 | 124.93 | 144.56 |       |       |        |                       |         |         |       |
| REVENUES (5 year total) |       |       |        |        |        |       |       | 557.4  | 1128.77               | 2082.46 | 3768.63 |       |
| CONSTRUCTION COST       | 36.95 | 43.45 | 71.50  | 61.80  | 50.30  |       |       | 264.00 | 399.00                | 448.00  | 1111.0  |       |
| OPERATION COST (Total)  | 75.20 | 78.20 | 81.20  | 85.90  | 85.90  |       |       | 406.40 | 576.70                | 928.50  | 1911.60 |       |
| TOTAL EXPENDITURE       |       |       |        |        |        |       |       | 670.40 | 975.70                | 1376.50 | 3022.6  |       |
| NET REVENUES            |       |       |        |        |        |       |       | (-)    | (+)                   | (+)     | (+)     |       |
|                         |       |       |        |        |        |       |       | 113.0  | 153.07                | 705.96  | 746.03  |       |



## PART I INTRODUCTION





## PART I INTRODUCTION

The government of the Republic of Indonesia earlier drew up a 25-year long-term development plan after having established its basic idea of achieving an integrated development of radio and television broadcasting services throughout the country. And the government, on the basis of such a development plan, has been pushing ahead the construction of radio and television facilities.

Incidentally, as the year 1984 corresponds to the first year of the 4th 5-year plan as well as the first year of 15 years period out of the 25-year long-term development plan which was established in 1975.

On this occasion, it would be valuable to review the result of construction effort proceeded in the past 10 years and to look over the basic ideas set up at the starting time of 25 year development plan.

On the other hand, as the result of rapid expansion being made in broadcasting activities, there has been some delay in the establishment of a system to ensure efficient operation and maintenance of the broadcasting facilities, and the stagnancy has also begun to be apparent in the work replacing the superannuated equipment.

At the request of the Government of the Republic of Indonesia, the Government of Japan, as a part of its overseas technical cooperation programmes, decided to assist the Indonesian Government on the execution of the Integrated Development plan of Radio and Television Broadcasts. Accordingly, the Japan International Cooperation Agency (JICA) has conducted a series of detailed surveys on the status keeping close connection with the relating organizations of the Republic of Indonesia within the fiscal years 1983/84 and 1984/85. Together with analyzing the survey results, JICA has repeatedly talked over and investigate about renovation of the broadcasting facilities and the development plan considering the most recent progress of broadcasting techniques with persons concerned on the part of Indonesia.

As a result, JICA conducted a Survey on the long-range Development plan and a Feasibility Study on the plans which are to be carried out within the period of the 4th 5-year plan. And JICA firstly made and presented a Report on the Feasibility Study.

And successively, JICA has now drawn up this Report on the long-term Development plan.



CHAPTER 1 OBJECTIVES AND SUMMARY  
OF THE SURVEYS



## CHAPTER 1 Objectives and Summary of the Surveys

### 1-1 Objectives of the Surveys

The objectives of this study are to prepare the study report on the long-range plans and the feasibility study report on some part of the entire long-range plans which are needed to be carried out urgently. Said long-range plans shall include the integration of the most essential activities of broadcasting in the field of programming, news service and engineering as follows:

#### Programming

The integration should apply among others to :

- programme planning
- programmes for special groups
- religious programmes
- sports programmes
- entertainment programmes
- traditional cultural performances

#### News service

The integration should apply among others to :

- sources of news
- coverage of domestic and foreign news
- news editing

#### Engineering

The integration should apply among others to :

- engineering planning
- maintenance
- facilities and other engineering aspects

The final target is integration of organization of Radio and TV, and the integrated development of radio and television broadcasting service in the entire country of the Republic of Indonesia will be carried out on a step by step basis.

## 1-2 Subjects and Scope of the Surveys

Concerning to the basic items of the surveys are shown as "Scope of Work" (Annex-I) which was agreed on between the Government of the Republic of Indonesia and Japan International Cooperation Agency.

The 1st survey, which was made regarding the current conditions of broadcasting facilities, was conducted for throughout the Republic of Indonesia.

The 2nd survey, in which the broadcasting signals were measured and analyzed, was conducted in the islands of Jawa and Sumatera using field survey van to make measurement in the areas where construction of the TVN-II transmitting stations and TVN-I relay stations are planned.

The results of the field surveys are shown in Annex-II.

CHAPTER 2 PRINCIPLE AND DETAIL OF THE  
SURVEY  
LIST OF THE SURVEY TEAM MEMBERS  
ININERARY OF THE SURVEY





## CHAPTER 2 Principle and Detail of the Survey. List of the Survey Team Members. Itinerary of the Survey.

### 2-1 Principle of the Survey

For carrying out the work of the surveys both for the long-range plan and the 4th 5-year plan, next basic guidelines were observed.

- (1) *Utmost efforts will be made to fully grasp the basic ideas and the background on the long-range plan, which the Republic of Indonesia intends to achieve, by exchanging mutual opinions thoroughly so that this feasibility study may be carried out in such a way as to fully respond to the needs and desire of the Indonesian side.*
- (2) In order to encourage cooperative work, the frequent joint Indonesian-Japanese study meeting shall be held at each stage of the study to review and examine the results of the studies made so that the Indonesian side may be kept informed fully and accurately of the progress and results of the study.

### 2-2 Details of the survey

At the request of the Government of the Republic of Indonesia, the Government of Japan decided to conduct surveys on the Integrated Development plan of Radio and Television Broadcasts of their country. Then the Japan International Cooperation Agency despatched 6-men preliminary survey team led by Mr. Yoshiaki Imaizumi, Deputy Director, Broadcast Division, Radio Regulatory Bureau, Ministry of Posts and Telecommunications from April 3rd to 14th, 1983.

The survey team, during its stay in Indonesia, discussed the Scope of Work with the officials concerned of the Government of the Republic of Indonesia and, at the same time, conducted on-the-spot surveys. Thus the survey team could gather various data and materials needed for the full scale studies to come.

On the basis of the results gained by the preliminary survey mentioned above, the first survey team headed by Mr. Yojiro Inoue, Deputy Director, International Cooperation Division, Minister's Secretariat, Ministry of Posts and Telecommunications, was sent to Indonesia from July 23rd, 1983. The survey team explained to and made an arrangement with the Indonesian Government officials concerned about an Inception Report Consisting mainly of the contents of the survey work and plans proposed. Then after doing this, the survey team conducted a survey on the current conditions of broadcasting facilities until September 20th, 1983 and submitted a Progress Report to the Indonesian Government officials concerned.

After returning to Japan, M. Inoue's team analyzed and studied the data and materials brought back from Indonesia as well as the results of the surveys it had conducted on the broadcasting facilities, and drew up its Interim Report.

Further, the second team, led by Mr. Hiroaki Sogabe, Technical Adviser for International cooperation, International Cooperation Division, Minister's Secretariat, Ministry of Posts and Telecommunications, was despatched to Indonesia from December 18, 1983. And after consulting with the Government officials concerned about the Interim Report, the team conducted a series of surveys and measurement on the radiation signal of radio and TV stations at various parts of the country until February 15th, 1984.

After the return of Mr. Sogabe's team to Japan, a series of studies and analysis were made on the data and materials obtained from the preliminary surveys, 1st and 2nd field surveys. Thus, a draft Final Report of the Feasibility Study of the short-term plan was drawn up.

As a next step, from Mar. 12th to 21st, 1984 a team headed by Mr. Hiroaki Sogabe, Technical Adviser for international cooperation, International Cooperation Division, Minister's Secretariat, Ministry of Posts and Telecommunications, talked together and made an arrangement finally with the Indonesian officials concerned. And on the basis of the results from those discussions more detailed revision was made on the draft Final Report. Thus the Report of the Feasibility Study on the 4th 5-year plan was completed in July, 1984.

In the next of above-mentioned report, this Report, which is now being presented, on the long-term plan having its goal in 2000 has been drawn up.

As a next step, from Nov. 15th to 27th, 1984 a team headed by Mr. Akio Mizukoshi, Technical Adviser for International Cooperation Division, Telecommunications Bureau, Ministry of Posts and Telecommunications, talked together and made an arrangement finally with the Indonesian officials concerned. The propositions concerned to the rational programming for the sound development and the effective operation of the future Indonesian broadcasting enterprise, the economical composition of the programme transmission network, enforcement of TV broadcasting met for the human life (time difference broadcasting) and economical usage plan of Palapa transponder for the transmission of regional programme by the time sharing operation applying the local time difference were completely understood by Indonesian side.

At the results of the explanation and discussion, Indonesian side set a high value on this report as the circumstances in Indonesia are reflected in and the report is greatly contribute for the development of Indonesian broadcasting enterprise. Then this report was completely comprehended in the outline by Indonesian officials concerned.

After returning to Japan, several amendment and additional explanation were taken in, the Study Report on the Long-term Plan was completed in December 1984.

## 2-3 List of the Japanese Survey Team Member

### The 1st Survey

- |                                    |   |
|------------------------------------|---|
| (1) Yojiro INOUE (Team Leader)     | Ministry of Posts and Telecommunications                    |
| (2) Masayuki HIRATA                | Japan Broadcasting Corporation (NHK)                        |
| (3) Tsutomu KIMURA (Survey Leader) | All Japan Radio & Television Engineering Services Co., Ltd. |
| (4) Shigeo HORI                    | All Japan Radio & Television Engineering Services Co., Ltd  |
| (5) Jiro OHNO                      | All Japan Radio & Television Engineering Services Co., Ltd. |

- |                               |   |
|-------------------------------|---|
| (6) Masami DOUCHI             | All Japan Radio &<br>Television Engineering<br>Services Co., Ltd. |
| (7) Morio KANEKO              | All Japan Radio &<br>Television Engineering<br>Services Co., Ltd. |
| (8) Koichiro SO (Coordinator) | Japan International<br>Cooperation Agency<br>(JICA)               |

The 2nd survey

- |                               |   |
|-------------------------------|---|
| (1) Hiroaki SOGABE (Leader)   | Ministry of Posts and<br>Telecommunications                       |
| (2) Eimi UMEDA                | Ministry of Posts and<br>Telecommunications                       |
| (3) Shinichiro UDA            | Japan Broadcasting<br>Corporation (NHK)                           |
| (4) Masayuki HIRATA           | Japan Broadcasting<br>Corporation (NHK)                           |
| (5) Fumio NISHIMURA           | All Japan Radio &<br>Television Engineering<br>Services Co., Ltd. |
| (6) Shigeo HORI               | All Japan Radio &<br>Television Engineering<br>Services Co., Ltd. |
| (7) Satoru YAMANAKA           | All Japan Radio &<br>Television Engineering<br>Services Co., Ltd. |
| (8) Kunio KUGE                | All Japan Radio &<br>Television Engineering<br>Services Co., Ltd. |
| (9) Koichiro SO (Coordinator) | Japan International<br>Cooperation Agency<br>(JICA)               |

Explanation of the Feasibility Study Report

- |                    |   |
|--------------------|---|
| (1) Hiroaki SOGABE | Ministry of Posts and<br>Telecommunications |
|--------------------|---|

- |                     |   |
|---------------------|---|
| (2) Masayuki HIRATA | Japan Broadcasting Corporation (NHK)                        |
| (3) Tsutomu KIMURA  | All Japan Radio & Television Engineering Services Co., Ltd. |
| (4) Shigeo HORI     | All Japan Radio & Television Engineering Services Co., Ltd. |
| (5) Morio KANEKO    | All Japan Radio & Television Engineering Services Co., Ltd. |
| (6) Mikio SOUMA     | All Japan Radio & Television Engineering Services Co., Ltd. |
| (7) Koichiro SO     | The Japan International Cooperation Agency (JICA)           |

Explanation of the Study Report on the Long-term Plan

- |                                  |   |
|----------------------------------|---|
| (1) Akio Mizukoshi (Team Reader) | Ministry of Posts and Telecommunications                    |
| (2) Masayuki HIRATA              | Japan Broadcasting Corporation (NHK)                        |
| (3) Tsutomu KIMURA               | All Japan Radio & Television Engineering Services Co., Ltd. |
| (4) Shigeo HORI                  | All Japan Radio & Television Engineering Services Co., Ltd. |
| (5) Manabu YANAGISAWA            | All Japan Radio & Television Engineering Services Co., Ltd. |
| (6) Koichiro SO                  | The Japan International Cooperation Agency (JICA)           |

2-4 List of the Indonesian Team Member

- |                             |   |
|-----------------------------|---|
| (1) Mr. Ir. B. SEMBIRING    | Secretary of the Directorate General of Radio, Television and Film    |
| (2) Mr. Ir. M. ARIFIN       | Director of Television  |
| (3) Mr. Ir. ISKANDAR ARFAN  | Director of Radio   |
| (4) Mr. ANWAR SIREGAR       | RRI Jakarta Station Manager   |
| (5) Mr. Drs. WILLY KARAMOY  | Head of Programme TVRI  |
| (6) Mr. TANTRAWAN           | Head of Programme RRI   |
| (7) Mr. Ir. NURHADI SUBROTO | Head of Engineering Development TVRI                                  |
| (8) Mr. Ir. SUKARNO         | Head of Engineering Development RRI                                   |
| (9) Mr. Ir. DEWABRATA       | Head of Engineering Facilities TVRI                                   |
| (10) Mr. Ir. SUMARTONO      | Inspector of Development DEPPEN                                       |
| (11) Mr. SOETOJO            | Senior Staff of the Directorate General of Radio, Television and Film |
| (12) Mr. HOETOJO HOERIP     | Head of TVRI Training Centre  |
| (13) Mr. Drs. SUWARDI HASAN | Head of RRI Training Centre   |
| (14) Mr. Drs. SUPO SUNARDI  | Head of Programme & Report RTF  |
| (15) Mr. Ir. SUBARDJO       | Head of Technology & Information DEPPEN R.T                           |
| (16) Mr. Ir. ISHAK          | Staff of the Head of Engineering Development, RRI                     |

2-5 Itinerary of the Survey

Itinerary of the Survey are shown as Annex-3.





CHAPTER 3 OUTLINE OF THE PRESENT SITUATIONS  
AND THE LONG-TERM DEVELOPMENT PLAN



## CHAPTER 3 Outline of the Present Situations and the Long-term Development Plan

### 3-1 Present Situations of Radio and TV Broadcasts

#### 3-1-1 Present Situations of Radio Broadcast

##### (1) Broadcasting facilities of RRI (Radio Republik Indonesia)

RRI was started in September, 1945 and already 38 years have passed. During this period, RRI constructed newly 44 transmitting facilities including one 300 kW medium wave transmitting station and three 100 kW stations etc. and radio network of RRI markedly expanded.

Moreover, RRI has constructed newly or expanded buildings or studio facilities for the National station, Nusantara Stations and regional stations according to the 1st, 2nd and 3rd National Development 5-year plan starting 1969. Thus RRI arranged the radio broadcasting facilities in the main cities throughout Indonesia. As a result, RRI has finished most of adjustment at its owning facilities of 49 stations in total including Jakarta National Station, 5 Nusantara Stations, 26 regional I stations in main cities (including cities with provincial office) and 17 regional II stations as of the end of 1983, and it is carrying out radio broadcasting nationally through this network made up by 49 stations.

##### (2) Broadcasting of RRI

Through these broadcasting facilities, each station broadcasts 16 - 18 hours of national programmes (RN-I) a day in average by medium wave and short wave broadcast.

Furthermore, besides above-mentioned basic broadcasting service (RN-I Programme), each regional station put on air locally programmes for urban area several hours a day (according to its programme production ability, broadcasting time varies from 6 -15 hours) to its outskirts.

On the other hand, Jakarta National Station, as a key stations, supplies national news and information programmes as a part of

RN-I Programmes through Palapa satellite relay circuit to regional stations throughout the nation. And besides, it carries out following broadcasts by medium wave, short wave or FM.

|                                |                    |
|--------------------------------|--------------------|
| Nationwide RN-I                | about 18h/day      |
| Nationwide RN-II               | about 8h/day       |
| Local serve urban programmes   | about 19h/day      |
| Local service music programmes | about 15h/day (FM) |

Moreover, it carries out international broadcasting 11 hours totally a day by 9 languages including English, German, French, Arabic, Malay, Thai, Chinese, Japanese and Indonesian.

(3) Stations other than RRI

In Indonesia, besides RRI operated stations, non-commercial radio stations operated by regional governmental agencies or universities etc. and commercial radio stations operated by advertising revenue are broadcasting throughout Indonesia.

Numbers of non-RRI station as of the end of 1983 are:

|  |     |
|--|-----|
| Commercial station   | 401 |
| Non-commercial station<br>(university operated station etc.) | 13  |
| Station operated by regional government                      | 160 |
| Total  | 574 |

Output powers of those station are limited less than 500 W and broadcasting programmes are produced in accordance with the programme standard established by Ministry of Information. And besides, it is obliged to relay all of the news and governmental public informations broadcast by RRI.

3-1-2 Present situations of TV Broadcast

(1) Broadcasting facilities of TVRI (Televisi Republik Indonesia)

TVRI was established 17 years later than that of RRI and commenced its regular broadcasting service from Aug. 1962 at Jakarta.

Then TVRI successively proceeded expansion of TV network mainly in Jawa Island, and besides, it also proceeded enlargement of TV broadcasting facilities at each region other than Jawa Island during the period of the 2nd and 3rd 5-year plan. Moreover, recently domestic production of low power TV transmitters makes progress and as a result, these domestically produced TV transmitters are utilized widely for construction of TV relay stations in remote areas.

A summary of TV broadcasting facilities as at the end of 1983 is as follows:

- 1) Transmitting facilities
 

|                        |     |
|------------------------|-----|
| 15 kW station          | 1   |
| 10 kW station          | 16  |
| 5 kW station           | 13  |
| 1 kW station           | 38  |
| station less than 1 kW | 122 |
| Total                  | 190 |
  
- 2) TV programme production facilities
 

|                              |                       |
|------------------------------|-----------------------|
| Studio                       | 9 stations (15 rooms) |
| Colour OB Van                | 4 stations ( 8 vans)  |
| Mobile Production Unit (MPU) | 10 cities (10 units)  |
| Open Air Studio              | 1 complex             |

(2) Broadcasting Programmes of TVRI

TVRI broadcasts 7 hours on weekday from 16:30 to 23:00 and on Sunday it broadcasts 13 hours adding other more 6 hours from 8:00 to 14:00. Its total broadcast time is about 55 hours a week.

Most of these programmes are planned and produced in Jakarta and mainly relayed via Palapa domestic satellite to each station throughout the nation. But regional TV stations which own local programme production facilities produce about 2 to 3 hours regional programmes produced at their own station and assign it within the frame work of nationally relayed programmes to each station to make effort to realize the TV broadcast which has close relation to their regions.

However, as broadcasting service area where the people can watch those regional programmes is rather limited within the area where the TV programme transmission line (including

off-air relay) for relaying regional programmes is available, most other TV stations are relaying and broadcasting the nationwide programmes sent from Jakarta.

As a tentative step until the completion of TV programme transmission network, TVRI is conducting on-the-spot production and recording of the programmes which are peculiar to the certain area by use of mobile programme production unit (MPU) and relaying nationally as the programmes produced in Jakarta in which above-mentioned locally produced programmes are used as programme materials. By doing so, TVRI is introducing life styles which are proper to the certain area to other areas through TV broadcast and thus, TVRI attempts to urge mutual understandings of regional inhabitants.

MPUs are already arranged at 9 important stations which have no TV studio, namely, Banda Aceh, Padang, Bandung, Semarang, Pontianak, Banjarmasin, Ambon, Jayapura and Kupang. Those stations are producing TV programmes which are closely related to each area.

### 3-1-3 Organizations and Operations of RRI and TVRI

RRI and TVRI, at present, are under control of the RTF (Radio, TV and Film) Bureau, Ministry of Information. However, those two organizations are different from each other when considered on the standpoint of the process of establishment.

Namely, RRI is completely a government agency on the one hand, and therefore all of its operation cost is financed by governmental budget. But on the other, organizational form of TVRI is a governmental corporation. And its investment to facilities is financed by governmental development budget, but its operation cost is, as a rule, financed by TV license fee. However, at present, as license fee is not enough to cover the operation cost of TVRI, partly it is dependent on governmental regular budget.

Accordingly, for the purpose of obtaining comprehensive effect by unification of both bodies, as a matter of course firstly it is needed to unite both broadcasting organizations into one. And as for the unification, both broadcasting organizations already have come to an agreement fundamentally.

At present, numbers of staff at RRI and TVRI are 5,140 and 4,286 each and the composition by kind of job is as follows:

|                  | RRI          |               | TVRI         |               |
|------------------|--------------|---------------|--------------|---------------|
| programme        | 1,582        |               | 807          |               |
| (including news) | <u>704</u>   | 44.5%         | <u>382</u>   | 27.7%         |
|                  | 2,286        |               | 1,189        |               |
| engineering      | 1,513        | 29.4%         | 1,893        | 44.2%         |
| administration   | 1,341        | 26.1%         | 1,204        | 28.1%         |
| <b>Total</b>     | <b>5,140</b> | <b>100.0%</b> | <b>4,286</b> | <b>100.0%</b> |

The operation cost (excluding construction cost) in fiscal year 1982/83 was about 11 billion Rp for RRI and about 220 billion Rp for TVRI.

### 3-2 Development Plan of RRI and TVRI

As mentioned above, undertaking of radio and TV broadcasting in the Republic of Indonesia came to a stage where carrying out of the nationwide broadcasting is possible after overcoming various difficult conditions. However, for the realization of broadcasting activities which cope with the nation's expects further improvement both of quality and quantity of the broadcasting is necessary. For this purpose, the Integrated Development plan of Radio and Television was established as a part of long-term National Development plan and efforts are made towards the completion of that plan.

### 3-3 The Integrated Development Plan of Radio and Television

#### 3-3-1 Long-term Plan and the 4th 5-year Plan

Followings are the missions imposed on Indonesian broadcasting organizations to accomplish the goal "to carry out development of men of ability who are the motive power for the development of the Indonesian nation through broadcasting" making the present situations of radio and TV broadcasts as a starting point.

- (1) To bring up sound Indonesians through radio and TV broadcasting.
- (2) To activate people's mutual communication and to attempt to promote people's constructive activities.
- (3) To attempt to encourage and expand the national culture and public entertainment through radio and TV broadcasting.
- (4) To press people to participate in the construction of the country through radio and TV broadcasting and, at the same time, to present chances to whole people to be able to enjoy the results brought by the development.
- (5) In view of the situation that 80% of Indonesian people are living in the agricultural regions, to attempt to utilize broadcasting effectively as means of education for those people.
- (6) To contribute to international friendly relations through broadcasting.

Fundamental plans were brought together and 25-year long-rang Development plan was made in relation to how radio and TV broadcasting should be developed from now on in order to perform these concrete missions the purpose of which is to educate Indonesian people and to support construction of nation more effectively and functionally by using of radio and TV broadcasting. And in accordance with the plan, construction has been carried out.



However, there has been some delay in allotment of staff, establishment of technical operation system and maintenance system due to the rapid expansion of facilities and broadcasting activities. And for this reason, stagnancy has also begun to be apparent in the replacing of the superannuated equipment and in the recovery of damaged equipment.

Therefore, it is decided that, at the end of the 3rd 5-year plan period detailed survey of present situations of radio and TV broadcasting activities was planned and on the basis of the results brought by that survey, the 5-year plan of the Integrated Development of radio and TV broadcasting was to be made with a starting point in 1984 which corresponds to the starting time of the 4th 5-year plan. This 5-year Integrated Development plan is to be taken over by the 5th and the 6th 5-year plans successively and as 15-year plan until the end of this century, more efforts are to be made aiming to develop broadcasting activities toward the ideal ones.

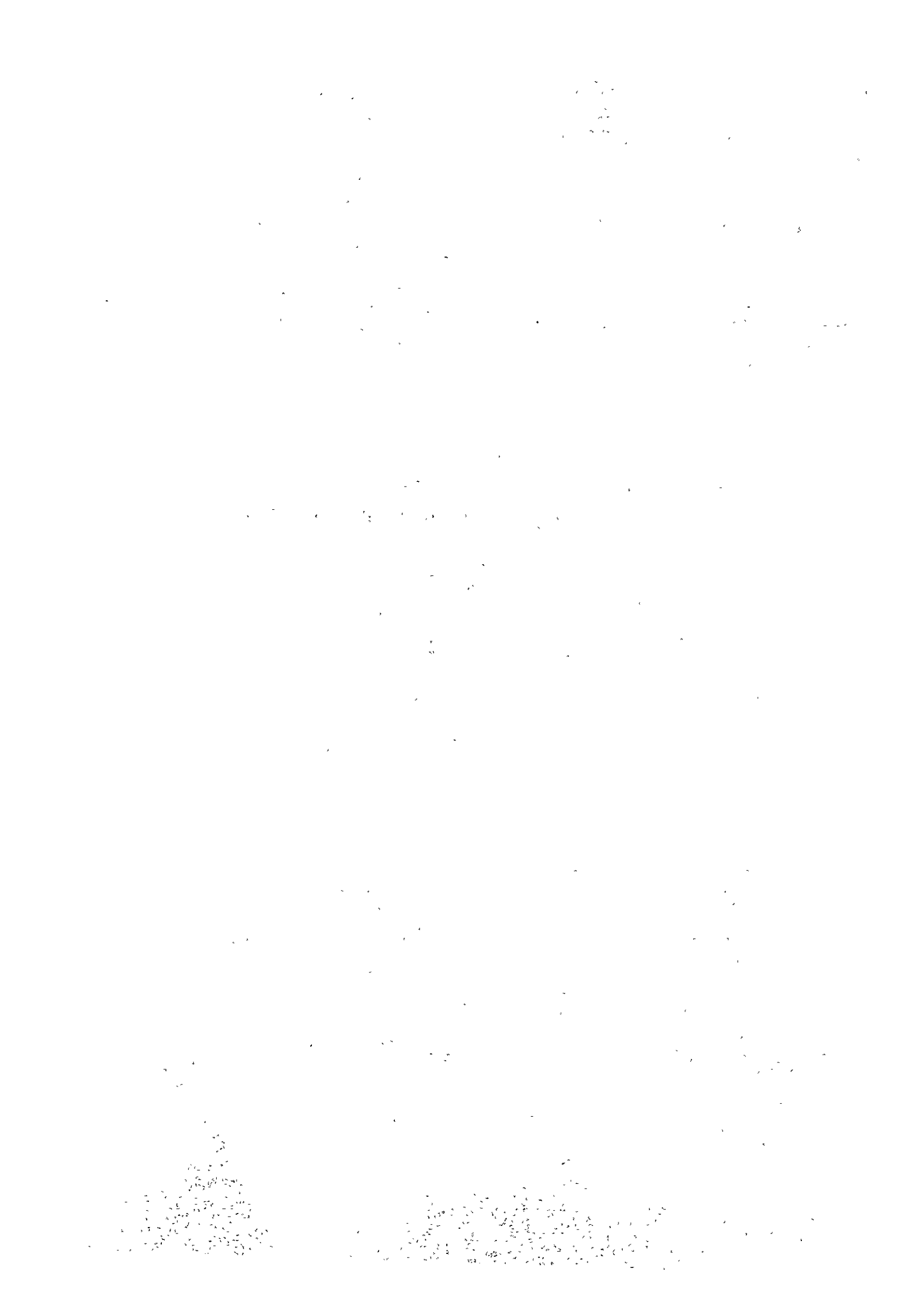
Accordingly, the Report on the Feasibility Study was presented arranging the realizable plans relating 3 short-term plans stated below which are to be carried out during the period of the 4th 5-year plan which corresponds to the 1st period of the 15-year plan.

- (1) Development plan of programme production facilities and transmitting facilities for the nationwide radio and TV programme services and the establishment plan of radio and TV programme transmission network.
- (2) Construction plan of TVN-II network.
- (3) Establishment plan of the integrated maintenance system and the construction of maintenance centres.

This report which is being presented here states about fundamental methods up to what degree broadcasting activities should be developed by 2000.



PART II THE NATIONAL DEVELOPMENT  
PLAN AND THE BROADCASTING



CHAPTER 1 THE NATIONAL DEVELOPMENT PLAN AND THE  
LONG-TERM PLAN FOR THE INTEGRATED DEVELOPMENT  
OF RADIO AND TELEVISION BROADCAST

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to support informed decision-making.

## PART II THE NATIONAL DEVELOPMENT PLAN AND THE BROADCASTING

### CHAPTER I The National Development Plan and the Long-term Plan for the Integrated Development of Radio and Television Broadcast

#### 1-1 The Objectives and its Final Goal of the National Development

The Government of Indonesia has been proceeding in the National Development Plan along with the national basic policies such as Unity of the Multiracial nation, Establishment of a law-governed country based on the democracy, equity and harmony of material and spiritual life and so on to aim at the realization of modernized nation based on the sound economical development until the year of 2000.

The Government set up the national development plan extending from the 1st (1969/70 - 1973/74) to 6th 5-year plan as shown below.

- (1) The 1st 5-year development plan (1969/70 - 1973/74)  
Development mainly in agricultural field
- (2) The 2nd 5-year development plan (1974/75 - 1978/79)  
Harmonious development of the whole field of agriculture
- (3) The 3rd 5-year development plan (1979/80 - 1983/84)  
Expansion of industry supporting agriculture
- (4) The 4th 5-year development plan (1984/85 - 1988/89)  
The first step to the development of basic construction
- (5) The 5th 5-year development plan (1989/90 - 1993/94)  
A leap to the development of modern industry
- (6) The 6th 5-year development plan (1994/95 - 1998/99)  
Realization of the harmoniously developed and modernized country based on the self-effort of economical advancement.

## 1-2 A Role of Broadcast in the National Development Plan

The Republic of Indonesia has made remarkable development by endeavouring the development effort during the past 3 consecutive 5-year development plan. On the other hand, new projects to be executed also come into existence as a result of the past development. Accordingly it is necessary to revise the long-term development plan time to time in accordance with the extent of progress to keep the balance between the factors of economy, comprehensiveness and harmony.

The final target of the national development plan is, after all, to bring the Indonesian people up to the human as mentioned below, under the recognition that the development of Indonesian human resources, which is motiveforce of the national development, is the most important point for the smooth and steady progress of the plan.

- a. men who seek the better tomorrow
- b. men having self-confidence of capability of the improvement of their life
- c. men having ability to improve their lot by their effort
- d. men who put on democracy and keep governing law

Under the circumstances as mentioned above, it becomes necessary to use national broadcasting organization, which can play the major role in the development of human resources, more positively as an important means for supporting the progress of the national development plan. Then, the Government of Indonesia imposed on the national broadcasting organization an important responsibility and duty to lead and support in the promotion of national development plan according to the mission listed below.

- a) To bring up wholesome nation of Indonesia through radio and television broadcast.
- b) To activate mutual communication between the people through radio and television broadcast and strive toward popularization and promotion of constructive activities of the people.
- c) To strive to popularize and develop the indigenous culture and arts through radio and television broadcast.



- d) While urging the people to participate in the national construction project through radio and television broadcast and to provide the entire people with the opportunity to share the fruitful results of the development.
- e) In view of the situation that 80% of the Indonesian people live in rural area, to promote the active utility of broadcasting service as a means of education and self-enlightenment.
- f) To contribute toward international friendship through broadcasting activities.

In response to the above mission, RTF mapped out in 1975 a basic plan of the development of radio and television broadcasting activities over a long term of 25 years as a part of governmental long term plan of national development plan in consideration of how to display the integrated influence of radio and television broadcast to the people of Indonesia and how to effectively and manoeuverably develop the actual broadcasting activities for promoting education for the nation and nation's participation to the national construction project.

The established goal of 25-year plan aimed at the year of 2000 which was made in 1975 are as follows:

- (1) Radio broadcasting
  - Shift of short wave broadcasting to medium wave broadcasting.
  - Achievement of 100% population coverage
  - Establishment of 3-channel nation wide radio network
    - General network (RN-I), MF/AM
    - Educational network (RN-II), MF/AM
    - Special network (RN-III), VHF/FM
  - Broadcasting time
    - General network-24 hours a day
    - Educational network-18 hours a day
    - Special network-18 hours a day
  - Others
    - International broadcasting by short wave: world service 24 hours a day

(2) TV broadcasting

- Use both of VHF and UHF band
- Achievement of 100% population coverage
- Establishment of 3-channel network of colourcast in total including 2-channel national broadcasting and 1-channel local broadcasting
  - General network (TVN-I)
  - Educational network (TVN-II)
  - Special network (TVN-III)
- Broadcasting time
  - General network 18 hours a day
  - Educational network 18 hours a day
  - Special network 18 hours a day

Note: general TV broadcasting will be a system in which include countermeasure for the time difference

(3) Others

- Achievement of qualitative improvement of radio and TV programmes
- Establishment of a system of programme exchange with ASEAN countries, Asian countries and each country in the world
- Establishment of the integration of radio and TV organizations

1-3 Necessity of the Integrated Development Plan of Radio and TV Broadcasting

The mission and goal of broadcast in the Republic of Indonesia is as already stated in 1-2 in this chapter. The background why this goal should be reached is as follows. Namely, the Republic of Indonesia has a vast territory and is a multi-racial country with many local languages, that is to say, the number of island is about 13,000 and its area is 1,900,000 square km, and its territory extends 5,000 km from the east to the west and 2,000 km from the south to the north, and the number of race is over 300, and that of the local language is over 200, and population is about 140,000,000.

Under those condition, one state and one language is national proposition of the Republic of Indonesia since the Indonesian Youth Assembly of Promotion of Independence on October 28th, 1928 (at present, instituted as the Youth's Oath Day).

Relating to the standardization of the language, broadcasting has contributed greatly in the past. As a result, at present, among young generation, the degree of diffusion of Indonesian language is greatly advanced. At school, much hours are applied to the lesson of Indonesian language compared to other lessons. However, the improvement of the shortage in educational institute and teacher is one of the goal of improvement to be realized by government. But the main reason why the degree of diffusion of education by school institutions can not be advanced rapidly is that not only the gross national product is low but also it is difficult to achieve to arrange educational institution, educational materials and teacher with high quality in every corner of the vast territory within short period, and this is not only the case with Indonesia but the case with other countries. For the diffusion of education and the permeating of the idea of national development under such condition there is no effective means but the putting broadcasting media to practical use. By that reason, there is the needs to wrestle with the expansion of radio and TV network earnestly.



CHAPTER 2 PRECONDITION OF THE MAKING AND SUMMARY  
OF THE INTEGRATED LONG TERM DEVELOPMENT  
PLAN OF RADIO AND TV BROADCASTING



## CHAPTER 2 PRECONDITION OF THE PLAN MAKING AND SUMMARY OF THE INTEGRATED LONG-TERM DEVELOPMENT PLAN OF RADIO AND TV BROADCASTING

### 2-1 Precondition of the plan making

In making this plan, following preconditions were established

- (1) Based, in principle, on the conditions and goal established by the government of Indonesia aimed at the year of 2000, which are stated in Chapter 1, 1-2 of this Part.
- (2) Construction plan was made on the basis of prediction of number of set in use, namely prediction of income from license fee.
- (3) Consideration of transition of GNP in the future.
- (4) Consideration of the expected improvement of the ability of engineering staff in the Ministry of Information.
- (5) As programme transmission network, PERUMTEL line will be exclusively used on the lease basis.
- (6) As for the staff plan, the training capacity of MMTC should be taken into consideration and the result of this staff plan should be reflected to the construction plan.
- (7) All plan will be considered based on the integrated organization of radio and TV broadcast
- (8) The future advancement of electronics technology and industry should be taken into consideration to all plan
- (9) Other possible forecast of the future will be made and those will be taken into consideration to making plan.

## 2-2 Outline of the plan

This long-term plan was worked out based on the results of the following many-sided studies.

- a) on the possibility of materialization of the plan which is set up by the Government of Indonesia aiming at the year of 2000.
- b) on the data collected in the twice consecutive field survey carried out in 1983/1984.
- c) on the forecast of the future political, economical and social development in Indonesia.

This long-term integrated development plan of radio and TV broadcasting which is being stated here is so diverged in many items and, at the same time, each items are so mutually related that, the phase which is difficult to understand is emerging. However, in this report, summarizing was made so as to be understood easily as much as possible. Here the outline of the plan is shown as follows:

- (1) To execute economical station operation most effectively and efficiently, there are two cases, that is to say, the case to integrate the organizations into one is preferable and, on the contrary, case to separate is preferable. And relating to the case of RRI and TVRI those two ways were compared and investigated and as a result, since it was sure that the merit of the integration will be larger, therefore the plan was made so as to promote the unification of the two organizations.

There will be many problems to be solved to integrate two organizations which has been operating separately for many years. Accordingly, in this plan, immediate unification plan was avoided but the plan of step by step integration in 5 years, namely, until 1990 was adopted.

The integration in the 1st stage and the 2nd stage were already finished by materializing the plan of MMTC and RTF Engineering Centre. Accordingly, the 1st step in this plan is started at the integration of the 3rd stage. As the 3rd stage, the plan was made as to begin with adding TV programme production function to radio production studio in provincial capital city where no TV studio is available and then executing gradually the unification of local radio and TV programme production activity and



starting of local TV broadcasting service. Thus the saving of construction budget and the staff will be possible, therefore, the completion of local TV broadcasting will be achieved earlier.

Concerning to the programming plan and network plan, which the Government of Indonesia plan to realize, that is the realization of 100% coverage in the 6 different programme network will be difficult in the light of the geographical condition in Indonesia and availability of programme transmission lines.

On the other hand, even when considering the positive use of broadcast satellite system, there are many problems to be solved before put it into practical use because 12 GHz and 14 GHz frequency band allotted to direct broadcast satellite are expected to suffer large attenuation by heavy rainfall dominated in Indonesia and 9 beams of down link will be needed to cover all of the vast territory of the country.

In case of the use of communication satellite such as Palapa C, the construction cost of receiving set is still expensive and this hinder the popularization of personal reception.

However, since further progress of satellite engineering will be certain fact, investigation is desired to find out the best way, time to time at each time when re-consideration is necessary along with the change of situation. At any rate, the utilization of satellite should be repeatedly studied from now on in recognizing the geographical peculiarity of Indonesia.

In this plan, regardless of the programme transmission network considered that the goal of coverage and broadcasting time will be realizable within the range shown below.

| Medium     | Broadcast Time | Coverage |
|------------|----------------|----------|
| RN - I     | 24 hours       | 100%     |
| RN - II    | 18 hours       | 75%      |
| RN - III   | 18 hours       | 55%      |
| TVN - I    | 18 hours       | 70%      |
| TVN - II   | 17 hours       | 55%      |
| TVN - III* | -              | -        |

\* TVN-III will be investigated separately according to the method of satellite utilization.

- (3) As the result of construction effort to be proceeded for materializing the broadcasting services as listed above, the main facilities for each programme network at the end of this 15 year plan period will be as follows.

| Programme | Number of Transmitting Station | Number of Studio Facilities |
|-----------|--------------------------------|-----------------------------|
| RN-I      | 135                            |                             |
| RN-II     | 95                             | 211                         |
| RN-III    | 120                            |                             |
| TVN-I     | 450                            |                             |
| TVN-II    | 110                            | 58                          |

- (4) The necessary number of programme production staff and technical staff for operating the above total number of facilities effectively will be 120% of the present total number of staff.
- (5) It is forecast that the increased operation cost and construction cost will be fully covered by the expected increase of revenue from the increased income of license fee. According to the trial calculation of income of license fee, it is expected to amount 600 in the year of 2000.
- (6) The active guidance and assisting service for the good reception by viewers and listeners in the newly developed service area should be promoted to keep the high percentage of collection of license fee. At the same time, the maintenance of transmitting facilities and programme production facilities should be emphasized to give good broadcasting service to the listeners

and viewers as well as the promotion of research and development to realize the further improvement of broadcasting service by use of advanced technology.

As mentioned above, all of the plan to be executed to materialize the mission imposed on the broadcasting organization are comprehensively arranged in this long term plan for the integrated development of radio and TV broadcast.



## PART III DETAIL OF LONG-TERM PLAN



### PART III    DETAIL OF LONG-TERM PLAN

The broadcasting programmes which are programmed in accordance with the basic policy of broadcasting programmes which were established in order to accomplish the mission imposed on the integrated new broadcasting undertaking as a national broadcasting organization should reflect following national policy.

- (1) To encourage the spirit of service for the nation, and to strengthen national unity and national solidarity and to enhance the sense of responsibility of each class of the nation for the execution of national policy and at the same time, to elevate the Indonesian traditional culture and to bring the disposition of active participation in the national development plan.
- (2) To make effort to form social life and surroundings based on the five principles for the founding of the nation (PANCASILA) and the constitution established in 1945, and to estimate properly and inform publicly to the nation and to estimate properly the national consciousness of whole nation and good feelings as citizens and to inform publicly.

To promote those broadcasting activities, it will be investigated that, following to the 4th 5-year plan, what should be done as the long term plan. But in particular, since the programme plan is an original point, broadcasting plan, plan for broadcasting facilities, plan for programme transmission and plan on the workers required etc. should be made around the programme plan and those should be harmonized mutually.

In this plan which is being made, assuming what mentioned above, the broadcasting programme plan is to be made.





## CHAPTER 1 INTEGRATION OF RADIO AND TV ORGANIZATION

1. The first part of the document is a list of names and titles, including "The Hon. Mr. Justice G. D. C. O'Connell, Chief Justice of the High Court of Justice, Ireland" and "The Hon. Mr. Justice J. F. Maguire, Chief Justice of the High Court of Justice, Ireland".

## CHAPTER 1 INTEGRATION OF RADIO AND TV ORGANIZATION

Both RRI and TVRI are presently placed under the supervision of RTF (Radio, TV, Film) Bureau, Ministry of Information of the Indonesian government. They are different in setup, however, because of the circumstances of their establishments.

RRI is completely a governmental agency with its budgets for establishment (initial investment in facilities) and operational cost etc. being totally financed by the government budget, while TVRI is a governmental corporation which means that while its investment in facilities is financed by the government budget for national development, operation cost is principally financed by the revenue of the license fee.

It is already made clear that the integration of both radio and television organization will be much benefit than separate operation for executing economical and efficient operation of radio and TV Stations. Though the plan made so as to promote the unification of the two organizations, there will be many problems to be solved when integrating two organizations, there will be many problems to be solved when integrating two organizations which has been operating separately for many years.

Accordingly, in this long term plan, immediate unification plan was avoided but step by step basis integration in 5 years, namely until 1990, was adopted.

Along with this basic policy, a common training centre for radio and TV organization, MMTC, was established as a first stage of the integration of RRI and TVRI. And continuously, RTF Engineering Centre at the RTF Directorate General as the second stage of the integration.

This Engineering Centre is constituted by the sections pertaining to the plan on the technical facilities the plan on the broadcasting house establishment, the maintenance centre and the technical development, etc., and it is intended in order to integrate the technical administration in the three Directorate of RRI, TVRI and Film.

By making thus, consolidation of the step by step basis towards the overall integration of organizations has been conducted systematically. The followings are the effects which will be drawn from the managerial and economical improvement resulting by the organizational integration.

(1) Streamlining of the investment to the construction

There are many radio and TV broadcasting equipment which can be used commonly by the organizational integration even though there are facilities which are necessary to be used separately in order to exhibit to the best of their function.

The followings are the examples of the reduced cost by the common use of the facilities.

- a. Common use of the transmitting facilities for FM and TV
- b. Common use of the programme production facilities for radio and TV by adding the lighting facilities to the production studio for the radio programme, if necessary.
- c. Common use of site and building of the broadcasting house and the auditorium when the condition meets the requirement for TV programme production.

(2) Common planning programme for Radio and Television

The planning programme for Radio and Television might be integrated in a common strategy. The content of the programme could be organized in the common theme or topic. The radio and television production staff can work out the material from the same sources. The technical staff can be interchangeable, while the production staff is depend upon the character and the feature of the programme itself.

(3) Common use of the broadcasting facilities and the maintenance service

Since the maintenance service of the radio and TV broadcasting facilities has common business content and many of the repair parts are common, by the comprehensive administration at the Maintenance Centre which is to be established assuming the organizational integration, the business of the maintenance service and the administration of supplying and stock of repair parts, etc. will be streamlined largely, and thus, it will be contributable for the improvement and the progress of the maintenance service.

- (4) Rationalization and making efficient by the common gathering of the programme and news materials.

The range of the covering activities will be able to be more widened and made contributable for the improvement of the programme quality by commonly gathering programme and news materials which up to present has been conducted separately by radio and TV.

- (5) Others

By the integration of both organizations, not only the business of the personnel administration, the finance and the general affairs but also interstation liaison business will be unified and thus, various kind of the indirect business which support the broadcasting activities will be able to be streamlined.

The integration should be proceeded step by step basis from the most easily realizable part of organizational activities within around 5 years as shown in Fig. 1-1. As for the construction of consolidated broadcasting house, it will take longer time until the materialization when considering the life of existing broadcasting house, area and environmental condition of available site, selection of new site for the new building. Therefore, the organizational integration should be preceded and it will be better to follow the construction of common broadcasting house after that.

It will be adequate to execute the integration of broadcasting facilities in relation to the integration of radio and TV broadcasting organization along with the following basic policy.

- (1) When environment condition of common use of existing broadcasting facilities of RRI or TVRI for the purpose of radio broadcast or TV broadcast has been established after the completion of organizational integration, the following items can be freely executed within the extent of no disturbance of either broadcasting activities.
  - a) FM transmitting facilities can be installed in the premised of TV transmitting station and can be made common use of transmitter house, antenna tower and power supply system and so on.

- b) Radio studio in the local radio broadcasting station can be used for the production of simple TV programme by use of OB Van or MPU after additionally installed studio lighting system in the existing radio studio.
  - c) The temporary TV broadcasting facilities can be constructed or installed within the premises or the building of radio broadcasting station to be able to send out local TV programme produced locally by utilizing facilities or premises of local radio broadcasting station in the local city.
- (2) When new construction plan of radio or TV broadcasting house in some local city is proposed, it is necessary to design room layout, number and each size of office rooms, arrangement of technical facilities in consideration of future common use for radio and TV broadcasting activities and actual construction shall start partially in accordance with the urgently necessary portion of the whole plan and then 10 or 15 years later complete the whole building and facilities to be used commonly for radio and TV broadcasting purpose as originally designed based on the long term plan.
- Therefore, common use of broadcasting facilities do not mean the construction of new common facilities regardless of existing facilities are still in a good condition for the purpose of radio or TV broadcasting activities.
- In other words, the integral design of new building or facility for common use should be initiated when either one of existing facilities of radio or TV needs to rehabilitate or rebuild and as mentioned in item (1) will be recommendable as the transient process.
- (3) Though, the building and studio of RRI in Jakarta are already completed and similarly main office building and studio building and peripheral facilities are also near the completion, it will be further needed to expand those buildings and facilities to cope with the increase plan of programme service, extension of broadcasting hours, improvement of broadcasting quality along with the long term plan and furthermore additional office space and accompanied facilities will be needed to meet with the increased number of staff as well as the increased volume of business.

Therefore, it will also be needed to start soon or later the preparation of basic survey, master plan for the integrated complex, selection of the site, arrangement of necessary budget and so on in consultation with the future expansion plan of Jakarta metropolitan area and in consideration of the convenience for the smooth communication between the new complex and the related organizations such as DEPPEN, Ministry of Education and Culture, PERUMTEL, radio and TV transmitting stations and other relevant offices.

Fig. 1-1

A Model of R/TV Integration

