

BASIC DESIGN STUDY  
ON  
THE CONSTRUCTION PROJECT  
OF  
RADIO AND TELEVISION TRAINING CENTRES  
IN  
THE REPUBLIC OF INDONESIA

MARCH 1962

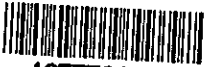
INTERNATIONAL COOPERATION AGENCY





108  
14217 79  
GRB

6607

JICA LIBRARY  
  
1065724[7]

国際協力事業団	
受入 月日 84.9.13	108
	79.7
登録No. 09540	GRB

## P R E F A C E

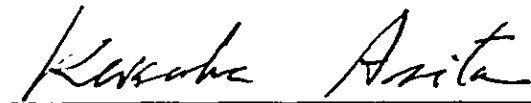
In response to the request of the Government of the Republic of Indonesia, the Japanese Government decided to conduct a survey on Radio and Television Training Centre Project and entrusted the survey to the Japan International Cooperation Agency. The JICA sent to the Republic of Indonesia a survey team headed by Mr. Minoru Ishida from September 13 to October 3, 1981.

The team had discussions with the officials concerned of the Government of the Republic of Indonesia and conducted a field survey (in Jakarta and Yogyakarta area). After the team 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 team.

March, 1982



---

Keisuke Arita  
President  
Japan International  
Cooperation Agency



## CONTENTS

SUMMARY	Page
1. Scale of Training	S- 1
2. Systematizing of Training	S- 2
3. Organization of Training Centre	S- 4
4. Scale of Training Centre	S- 5
5. Construction Schedule	S- 6
6. Recommendations	S- 6
SECTION 1 INTRUCTION	
1-1 Background of Request for Technical and Economic Cooperation	1- 1
1-2 Effects Anticipated from the Present Project	1- 4
1-3 Objectives of the Survey Team	1- 6
1-4 Scope of Survey	1- 7
1-5 Members of Survey Team	1- 7
1-6 Itinerary of Sruvey Team	1- 8
1-7 Execution of the Survey and Preparation of the Report	1-11
SECTION 2 RESULTS OF SURVEY	
2-1 Outline of the "Guidelines" Prepared by the Indonesian Side	2- 1
2-2 Necessity of Work to Augment the Guidelines	2-21
2-3 Outline of Existing Training Centre	2-23
2-4 Training Expenses	2-32
2-5 Results of Questionnaire from Those Engaged in Training in Indonesia	2-35

2-6	Shape and Environmental Condition of the Site	2-45
2-7	Soil Survey	2-48
2-8	Earthquakes	2-49
2-9	Climate	2-49
2-10	Building Construction Prices	2-51
2-11	Prices of Fixtures for Use at Office and Lecture Rooms	2-53
2-12	Laws and Regulations Regarding Building Construction	2-55

### SECTION 3 TRAINING PLAN

3-1	Prerequisites and Scope in Preparing Training Plan	3- 1
3-2	Training Objectives	3- 3
3-3	Goals to Reach	3- 4
3-4	Training Scale	3- 5
3-5	Framework and Curriculum Concept	3- 8
3-6	Number of Trainers	3-21
3-7	Number of Staff	3-24
3-8	Minimum Necessary Quantities of Major Facilities	3-27
3-9	Preliminary Analysis for Detailed Design	3-35

### SECTION 4 BASIC DESIGN OF BUILDING AND FACILITIES

4-1	Scope of Basic Design and Basic Principles	4- 1
4-2	Broadcasting Equipment	4- 5
4-3	Measuring Instruments	4-17
4-4	Architectural Design	4-22



SECTION 5 BASIC DESIGN DIAGRAMS

5-1	Broadcasting Facility System Block Diagram	5- 1
5-2	Site plan	5- 2
5-3	Floor plan	5- 3
5-4	Elevation	5- 5
5-5	Section	5- 7
5-6	Power Supply	5- 8
5-7	Air duct System	5- 9
5-8	Plumbing (Sanitation)	5-10

SECTION 6 IMPLEMENTATION PLAN 6- 1

SECTION 7 PROJECT EVALUATION 7- 1

ANNEXED REFERENCE

Results of Questionnaire

ANNEXED DOCUMENTS

1	Minutes of Discussion	(Feb. 2, 1981)
2	Minutes of Discussion	(Sept. 25, 1981)
3	Minutes of Discussions	(Feb. 12, 1982)



**SUMMARY**



## SUMMARY

### I. Scale of Training

The Government of Indonesia has projected a multimedia Training Centre in Yogyakarta (hereinafter called "Basic Training Centre - Radio, Television and Film" or "BTC - RTF"), which is expected to be the basic training institution for the rising generation required for radio, television and film media in the Republic of Indonesia, and which aims at to train 576 of those staffs every year at the rate of 240, 240 and 96 respectively.

On the basis of the negotiations made so far with the Indonesian side, the Japanese side has progressed with concrete planning of the training system, setting the training scale at 240 TV personnel and 240 radio personnel (480 persons in total) for the period of one year. The period has been made equal to that of the Indonesian request since the Japanese side has determined the appropriateness of the targets and needs of the

Indonesian side.

Because of the difficulty in securing instructors, the Indonesian side considers that it is rather difficult to start full-scale training immediately after commencement of service at the centre and thus plans to gradually expand the training scale in steps to reach the ultimate scale in a few years.

## 2. Systematizing of Training

The Indonesian side does not propose to have single-capability personnel as aimed at in conventional training, but to develop versatile, multi-field personnel with good judgement and capabilities in various fields of service. Based on thorough examination of the Indonesian proposal, the conclusion has been reached that the following training system will be appropriate:

- (1) The entire training period is to be divided into three stages; namely, 1) Comprehensive basic training, 2) Field training, and 3) Professional training.
- (2) In the stage of comprehensive training, basic knowledges and skills for all fields of broadcasting service will be presented to trainees irrespective

of the field of service to be engaged in.

The period of this training will be approximately three months.

- (3) Field training is intended to permit trainees to gain experience in broadcasting service rather than placing them into jobs. The period of this training will be one month. Since the major purpose of this training is to widen trainees' perspectives, it is not necessary to divide trainees into job-oriented groups in preparation for the future.
- (4) The third stage of training is intended for preparation for jobs in which individual trainees will be engaged in future. This training stage can still be divided into two phases. In the first phase trainees will be divided roughly into a group to be engaged in production and a group to be engaged in technical fields. Trainees will learn about a wide range of common knowledge and skills in the individual groups. The period of the first phase will be about two months. In the second or final phase of training, individual trainees should be taught practical capabilities required for assistant operators in the field. The group which has been trained for future activities in broadcasting in the first phase should still be divided into groups of: 1) Program production, 2) Announcing and 3) News reporting.

Likewise, the group to work in the technical field should still be divided into groups of: 1) Program production technique and 2) Transmission technique. In these five groups, training in professional fields will be conducted mainly on a practical training basis in the field. The period of the professional training in the last phase will be four months.

- (5) Clerical personnel will be subject to examination upon completion of comprehensive training and screened personnel will undergo one-month vocational training before being assigned to individual jobs.

A conceptual diagram outlining this training system is shown on page 3-11 in this report.

### 3. Organization of Training Centre

The organization of the training centre should be considered from the functional viewpoint and from the laws and regulations for establishing organizations, and procedures in Indonesia. For the time being, only the functional viewpoint has been considered so that no definite organization will be proposed. However, an estimated organization of the training centre is outlined on pages 3-50 ~ 3-53 in this report for reference.



#### 4. Scale of Training Centre

The construction site of this training centre is to be located in Yogyakarta as follows.

- 1) Longitude: 7°45'00" S
- 2) Latitude: 110°21'30" E
- 3) Altitude: 150 m above sea level

##### (1) Training equipment

The radio and TV broadcasting equipment and measuring instruments which meet the requirements set out in SUMMARY 1 "Schedule of Training" and which are intended for group training are to be used.

##### (2) Buildings

Three types of blocks are to be constructed as follows: a facility building block where training in broadcasting service is to be conducted by using the above-mentioned training equipment installed, a lecture room building block which will meet the requirements of SUMMARY 1 "Scale of Training" and an administration block. The planned building floor area is approximately 5,800 m<sup>2</sup>.

## 5. Construction Schedule

In order to accomplish the construction of the proposed Basic Training Centre Radio-TV, a period of 18 calendar months is required for the construction work, with the expenses to be borne by the Government of Japan. The execution of detailed design and construction works will be carried out in accordance with Japanese Grant Aid System in consideration with the Indonesian regulation, based on the Master Plan prepared by the local consultant. A local consultant will be appointed and financed by Indonesian Government for the purpose of evaluating the aboved mentioned works to ensure that these works are in 'accordance' to the Master Plan.

## 6. Recommendations

The roles of mass media, particularly radio and television broadcasting services, are very important for achieving the unity in race, culture and education and for modernizing the industrial and social structures of the Republic of Indonesia. From these standpoints the improvement and expansion of radio and television broadcasting networks are given importance in national development projects. However, the shortage of

human resources for supporting broadcasting networks (particularly for technical support) is a serious problem even at present. This tendency will become more serious in the future. Under these circumstances, it is very timely and opportune for the Republic of Indonesia to request Japan's cooperation on a grant basis for the construction of the "Radio and Television Training Centre."

In order for this center to function effectively, Japan's technical cooperation for the start-up of services at the centre is an essential feature desired by the Indonesian Government. The survey team thus recommends the Government of Japan to inaugurate technical cooperation on this matter.

The survey team also recommends the Indonesian side to take proper measures so that the multimedia training centre project should go forward in harmony with the "Radio and Television Broadcasting Training Centre" Project to be accomplished by Japan's cooperation on a grant basis. The survey team strongly recommends that the Indonesian side should sufficient examination and take measures for the provision of instructors to be engaged in the training of staff necessary for running and managing the centre after its completion since considerable difficulty is expected in the provision of such instructors.

Table S5 - 1

CONSTRUCTION SCHEDULE

RADIO AND TELEVISION TRAINING CENTRE

PROJECT \ MONTH	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. EQUIPMENT																		
(1) MANUFACTURE																		
(2) TRANSPORTATION																		
(3) INSTALLATION																		
(4) ACCEPTANCE TEST & TEST OPERATION																		△
2. BUILDING																		
(1) TRANSPORTATION																		
(2) CONSTRUCTION																		
(3) ACCEPTANCE TEST															△		△	



SECTION 1 INTRODUCTION



## SECTION 1 INTRODUCTION

### 1-1 Background of Request for Technical and Economic Cooperation

The Basic Design Survey was planned and executed during the period of September 13 to October 3, 1981 on the basis of the results of the Basic Design Survey (Preliminary) made in the period of January 26 to February 6, 1981 in accordance with "Minutes of the Discussion on the Establishment Project of Radio and Television Broadcast Training Centre in the Republic of Indonesia" signed on February 2, 1981. Although the outline of the request for Japanese economic cooperation is as stated above , it is necessary to describe the reasons and factors for the request in some detail.

Technical cooperation including cooperation in the field of training for broadcasting organizations in the Republic of Indonesia has been made by the Government of Japan since 1962 when the Japanese Government sent experts in the field of broadcasting to TVRI. Although receiving a high evaluation, this technical cooperation has tended to lack providing systematically planned technical aids and cooperation in education and training has been made on a case by case basis without much continuity.



Meanwhile, the Government of West Germany has sent a total of eight specialists to work for a considerably long period (eight years since 1970) to the Republic of Indonesia to conduct rather systematic technical cooperation in line with the presentation of a complete set of radio and TV training equipment on a grant aid basis, which has been highly evaluated.

In the meantime, Mr. Tadao Iwamoto of the Broadcasting Advisors for the Department of Information of the Republic of Indonesia, who had been sent to Indonesia by the Government of Japan, noted in "A Proposal for the Establishment of the Educational Broadcast Centre of Indonesia" contained in his report "Broadcasting and National Development in the Republic of Indonesia (June 12, 1973)" that it is important to perform education and training of administrators, producers, and engineers/technicians through program production training and renamed the "Educational Training Centre" as the "Educational Broadcasting Centre" in order not to influence other projects.

In the Project Evaluation Meeting (held in the end of 1978 in connection with the completion of the Second Five-Year Development Plan), representatives from many countries pointed out the necessity of education and training in Indonesia in the beginning of their reports. In particular,

broadcasting was discussed as an indispensable means for the development of qualified personnel who can succeed by creating good broadcast programs through excellent operation of the man-to-machine system. Under these circumstances survey for the construction of the above-mentioned Educational Training Centre and the request of the Indonesian Government to the Japanese Government for the preparation of the basic plan for the construction have been steadily progressing and evolving.

## 1-2 Effects Anticipated from the Present Project

At present, the "Third Five-Year Development Plan" (Pelita III), which is to be completed in fiscal year 1983, is being executed. According to the "Guidelines" (GUIDELINES AND SUPPORTING INFORMATION FOR THE DEVELOPMENT OF THE BASIC TRAINING CENTRE RADIO-TV-FILM IN YOGYAKARTA, JAKARTA, OCTOBER 1981), the Indonesian Government will require a total of 15,000 personnel to work in RRI, TVRI and PPFN which cover the media of radio, television and film, respectively, by the accomplishment of the "Fifth Five-Year Development Plan," 10 ~ 15 years in the future. This number of personnel is about twice as large as the current number of personnel engaged in the above-mentioned three media which is 7516. Accordingly, it is necessary to recruit new employees at a rate of about 600 persons per year. The "Guidelines" proposes the basic training of 576 persons each year. This project proposes training 240 persons in radio and 240 persons in television; that is, a total of 480 persons out of 576 personnel will be trained in the Radio and Television Training Centre. Since the "Guidelines" do not specify the required number of new employees per year in the media of radio and television, it is not possible to clarify the demand fulfillment rate in the execution of

training of 480 personnel each year, but it is estimated that the demand will be fulfilled. This conduction will begin in fiscal year 1984 when the above-mentioned training centre will commence its service. In the same year the "Forth Five-Year Development Plan" is to begin. Secondly, almost all new employees will receive pre-service basic training prior to working in their respective fields by the establishment of the training centre, although currently, new employees are put into jobs with almost no pre-service basic training. Hence forth, the basic training of new employees will be established. Through the establishment of the training centre, the qualifications of new employees in the radio and TV fields of the Indonesian Government will be enhanced so as to strengthen organizations in these fields after the fiscal 1984. Where to strengthen in an organization is the question. Although it is ideal to strengthen the entire organization at one time, this is not practicable. In order for entire organization to work organically and effectively, it is necessary to develop, before everything, the basic level of the organization. This thought is a kind of oriental method of administration. However, since it is necessary to create culture through excellent operation of the man-to-machine system in the field of broadcasting service, development in the

basic level of the organization directly influences the operationality of the system. The present project aims at development in the quality of personnel in the radio and TV fields of the Indonesian Government for the long term and will greatly contribute to personnel cultivation in the Republic of Indonesia.

### 1-3 Objectives of the Survey Team

The Indonesian Government has planned the construction of a mass media training centre including radio and television in Yogyakarta for the development of radio and TV technology, for the expansion of radio and TV networks, for general information networks and for the education and training of staffs affiliated to the Department of Information. Thus it has requested the Japanese Government for economic cooperation. In response to the request, the Government of Japan sent the Preliminary Survey Team to Indonesia in January, 1981. In the present Basic Design Survey, the survey team negotiated the framework with the Indonesian Government to provide funds for cooperation in a grant form for the establishment of the radio and TV training centre on the basis of the results of the Preliminary Survey. The team summarized the contents of the request from the

Indonesian Government, and determined the details of the basic design of the training centre.

#### 1-4 Scope of Survey

The survey was conducted for the basic design of the project by the following means:

- (1) Consultation regarding training plans
- (2) Consultation regarding training facilities on the basis of training plans
- (3) Investigation necessary for the construction of the training centre

#### 1-5 Members of Survey Team

The survey team consisted of the following members appointed by Japan International Cooperation Agency.

Note: Numbers with asterisks refer to participation as indicated in the itinerary.

<u>Member</u>	<u>In Charge of</u>	<u>From</u>
Minoru ISHIDA	(Leader)	Economic Cooperation Bureau, Ministry of Foreign Affairs(*2)
Yasuo YOSHIMURA	Training plan	Economic Cooperation Bureau, Ministry of Foreign Affairs(*1) (*2)
Shigeru FUKUDA	Broadcasting plan	Minister's Secretariat, Ministry of Posts and Telecommunications (*1)(*3)

<u>Member</u>	<u>In Charge of</u>	<u>From</u>
Shigeru KONDO	Architectural Technology	Special Technical Adviser JICA (*2)
Takeshi IMAZU	Planning and Control	Grant Aid Department, JICA (*2)
Kaoru OKA	Facility Planning	Engineering Headquarters Japan Broadcasting Corperation (NHK) (*1) (*3)
Yoshihisa TAKANO	Architecture	Engineering Headquarters NHK (*1) (*3)
Shintaro WATANABE	Training System	Central Training Institute NHK (*1) (*3)
Fumio NISHIMURA	Broadcasting Facilities and Equipment	All Japan Television Services Co., Ltd.
Shotaro HAYASHIYA	Architectural Design	Yamashita Architects & Engineering Inc.

1-6 Itinerary of Survey Team

Period of survey: September 13 ~ October 3, 1981 (for 21 days)  
(The survey period of those members  
marked \*2 was for 13 days from September 13  
to 25.)

The itinerary of the survey team was as follows.

- Sep. 13 Leaves Narita (CX501). Arrives in Jakarta.
- 14 Courtesy call to the JICA office, Japanese Embassy and the Department of Information of the Republic of Indonesia.
- 15 First meeting with MMTC Steering Committee of the Department of Information.
- 16 Second meeting with MMTC Steering Committee of the Department of Information.
- 17 Preparation of training plan (\*1); Site survey (other members)  
Site survey of proposed site for construction of Training Centre in Yogyakarta.
- 18 Preparation of training plan (\*1); Site survey (other members)  
Site survey of proposed site for construction of Training Centre in Yogyakarta.
- 19 Third meeting with MMTC Steering Committee of the Department of Information  
Meeting among survey team members and data filing
- 20 Holiday
- 21 Inspection of Irrigation Training Centre construction site
- 22 Inspection of Nurse Education Centre facilities



- Sep. 23 Meeting among survey team members.  
Meeting with Department of Information staff
- 24 Meeting with Department of Information staff
- 25 Final meeting with Department of Information staff, signing of minutes, some members (\*2) returned to Japan.
- 26 Filing of data on survey and meeting
- 27 Holiday
- 28 Survey on TVRI's studios and training centre.
- 29 Survey on RRI's and TVRI's Training Centres and meeting.
- 30 Site survey of proposed site for construction of Training Centre in Yogyakarta (\*3)  
Survey on procurement of equipment at site.
- Oct. 1 Site survey of proposed site for construction of Training Centre in Yogyakarta (\*3)  
Data filing
- 2 Courtesy call to the Department of Information, Japanese Embassy and JICA office on return to Japan.
- 3 Leaves Jakarta (CX500). Arrives Narita.

Note: Asterisks indicate participation of survey team members. See paragraph 1-5 "Members of Survey Team."

1-7 Execution of the Survey and Preparation of the Report

On the training centre construction plan, Japan International Cooperation Agency conducted survey with dispatch of Basic Design Survey Mission (Preliminary) (From January 26, 1981 to February 6, 1981) and Basic Design Survey Mission (From September 13, 1981 to October 3, 1981) to the Republic of Indonesia, and with the results of these surveys, conducted preparation of this report with experts listed followings in consultation with those members engaged in above mentioned survey.

<u>Name of Expert</u>	<u>In Charge of</u>	<u>From</u>
Shintaro WATANABE	Training System	Central Training Institute, Japan Broadcasting Corporation (NHK)
Katsumi SHIRAIISHI	Production Training Plan	ditto
Kiichi ABE	Technical Training Plan	ditto
Michio ITO	Clerical/Managerial Training Plan	ditto
Kaoru OKA	Broadcasting Facility Plan (Chief Engineer)	Engineering Headquarters, NHK
Takeshi KIDO	Measuring Instrument Plan	ditto

<u>Name of Experts</u>	<u>In Charge of</u>	<u>From</u>
Bunichiro NOGUCHI	Architectural Design	Engineering Headquarters, NHK
Sannosuke OGAWA	Architectural Structure	ditto
Michio YAMATO	Architectural Facilities	ditto
Harutoshi TSUKUDA	Architectural Acoustic	ditto
Yoshihisa TAKANO	Architectural Estimation	ditto

Supervision in the Central Training Institutes of NHK  
was made by Prof. (Director) Kimio HIKOI of the Institute.

SECTION 2. RESULTS OF SURVEY



## SECTION 2 RESULTS OF SURVEY

### 2-1 Outline of the "Guidelines" Prepared by the Indonesian Side

#### 2-1-1 Concept of the "Guidelines"

As mentioned in the Minutes of Discussion on the Construction Project of Radio and Television Training Centre (Sept. 25, 1981. Jakarta) attached herewith, the Indonesian side intends to construct a Basic Training Centre for radio, TV and film media (Basic Training Centre Radio, TV and Film) in Yogyakarta within the framework of the multi-media training centre concept being introduced in Indonesia.

Efforts are being made for realizing the master plan anticipates developments expected to occur up to the year 2000 AD. At the time of survey made by the present survey team, the preparation of the Guidelines and Supporting Information\*<sup>1</sup> (hereinafter referred to as the "Guidelines") for the development of the Basic Training Centre Radio-TV-Film in Yogyakarta was being progressed under the cooperation of German consultants. In the beginning of December, 1981, an Indonesian coordination mission headed by Drs. F.Rachmadi who is the Vice-chairman of the project visited Japan and handed the "Guidelines" in the English edition to the Japanese Government. From now on, the project will be coordinated

in both software and hardware on the basis of the Guidelings and the realization of the master plan will be enhanced. The Indonesian side considers that the preparation of the master plan will be accomplished by the consultant (s) and it is considered that the Guidelines will be used as the reference manual upon preparing the master plan.\*<sup>2</sup>

It is to be noted that the Indonesian side is considering that the preparatory work of the master plan is a task to be carried out by the consultant, and that the "guideline" is a reference manual for the consultant in case of proceeding with the work.\*<sup>2</sup> In addition, the completion time of the master plan is set for April 1982. Now, of the Basic Training Centre (will be abbreviated to BTC Yogyakarta hereafter) Project, the portions of which the Japanese side will cooperate with is a major parts of the Radio and Television media, while remaining parts and the film media including development of both software and hardware are to be proceeded with the responsibility of the Indonesian side, as so far been agreed through negotiations. From now on, the Japanese and Indonesian side will proceed with their respective developmental work, but sufficiently close contact will be required during the process of this work. If not, there will be anxiety that the functions expected for a multimedia training Centre may be hindered. In this respect, similar fear has been expressed by the Steering Committee of Indonesian side through the process of negotiations,

and an expression was inserted in the Minutes dated 25 September 1981, to remind this point.\*3

It should be noted that the consideration of Indonesian side at the software was emphasized on the technical side, and there were almost no concrete instructions from each side of vision, policy, management etc. and indications on these points to pay attention.

Notes:

- \*1 "Guidelines and Supporting Information for the Development of the Basic Training Centre Radio-TV-Film in Yogyakarta (in the Frame of Multi Media Training System)" (Department of Information, Republic of Indonesia, Board of Information Research and Development, Jakarta October 1981)
- \*2 "Introduction" page 5 in the Guidelines above mentioned.
- \*3 "Minutes" 25 September, 1981, Attached Paper (Attachment-item No. 8, Minutes of Discussion on the Construction Project of Radio and Television Training Centre, September 25, 1981, Jakarta)

2-1-2 Definition of Basic Training Centre in Yogyakarta

At present, all personnel of the Department of Information do not receive pre-service training, but by the completion of the basic training centre in Yogyakarta pre-service basic training will be provided for all new employees at the Training Centre.

The Indonesian side has determined the period from 1984 to



1990 to be a transitional period during which those personnel in-service who have not received basic training will also receive basic training. This basic training for personnel in-service is expected to be performed in the existing training centres in Jakarta and the Basic Training Centre in Yogyakarta. (See Fig. 2-1.)

Fig. 2-1 Functional Classification of  
Training in Individual Training Centres

○ ... Employees in-service ▽ ... Pre-service employees ▽ ... In-service and pre-service employees	1981 - 1984			1984 - 1990 (Transitional period)			1990 -		
	Basic Training	Upgrading	Advanced Training	Basic Training	Upgrading	Advanced Training	Basic Training	Upgrading	Advanced Training
RRI Training Centre	○	○	○	▽	○	○		○	○
TVRI Training Centre	▽	○	○	▽	○	○		○	○
Film Education Project (PPFN)	○	○		▽	○	○		○	○
Staff Training Centre (Pusdiklat Pegawai)	▽	○	○	▽	○	○	▽	○	○
Overseas Training		○	○		○	○		○	○
Basic Training Centre in Yogyakarta				▽			▽		

### 2-1-3 Training Capacity and Duration

At present the Third Five-Year Development Plan is progressing, which is to be completed by the fiscal 1983. The Indonesian Government estimates that the total number of personnel to be engaged in the radio, TV and film media will reach 15,000 \*1 by the end of fiscal 1993 by which the Fifth Five-Year Development Plan is to be completed. The number of personnel amounts to about twice the number of employees working currently in the above-mentioned three media. This means that the number of personnel will increase by about 600 persons per year.

Reflecting this increase in the number of personnel, the "Guidelines" suggests that 576 new employees be recruited every year and trained in the Basic Training Centre in Yogyakarta. These new employees to be recruited annually will be: 240 personnel in radio, 240 personnel in TV, and 96 personnel in film.\*2 The training duration is expected to be one year, which includes one month for holidays and one month for testing, so that a net duration of ten months will be used for training.

The scale of the training considered by the Japanese side is given by multiplying 480 personnel (obtained by subtracting the number of personnel in film from the total number of new employees) by the training duration of one year, that is, 5760 man-months. Trainees

will be divided into four groups which will enter the training centre at four different times of the year.

\*1 ..... Guidelines, page 51

\*2 ..... Guidelines, page 119

#### 2-1-4 Training System

The location which is the basic training sub-system occupies in the total multi-media training is as shown in Fig. 2-2.\*1

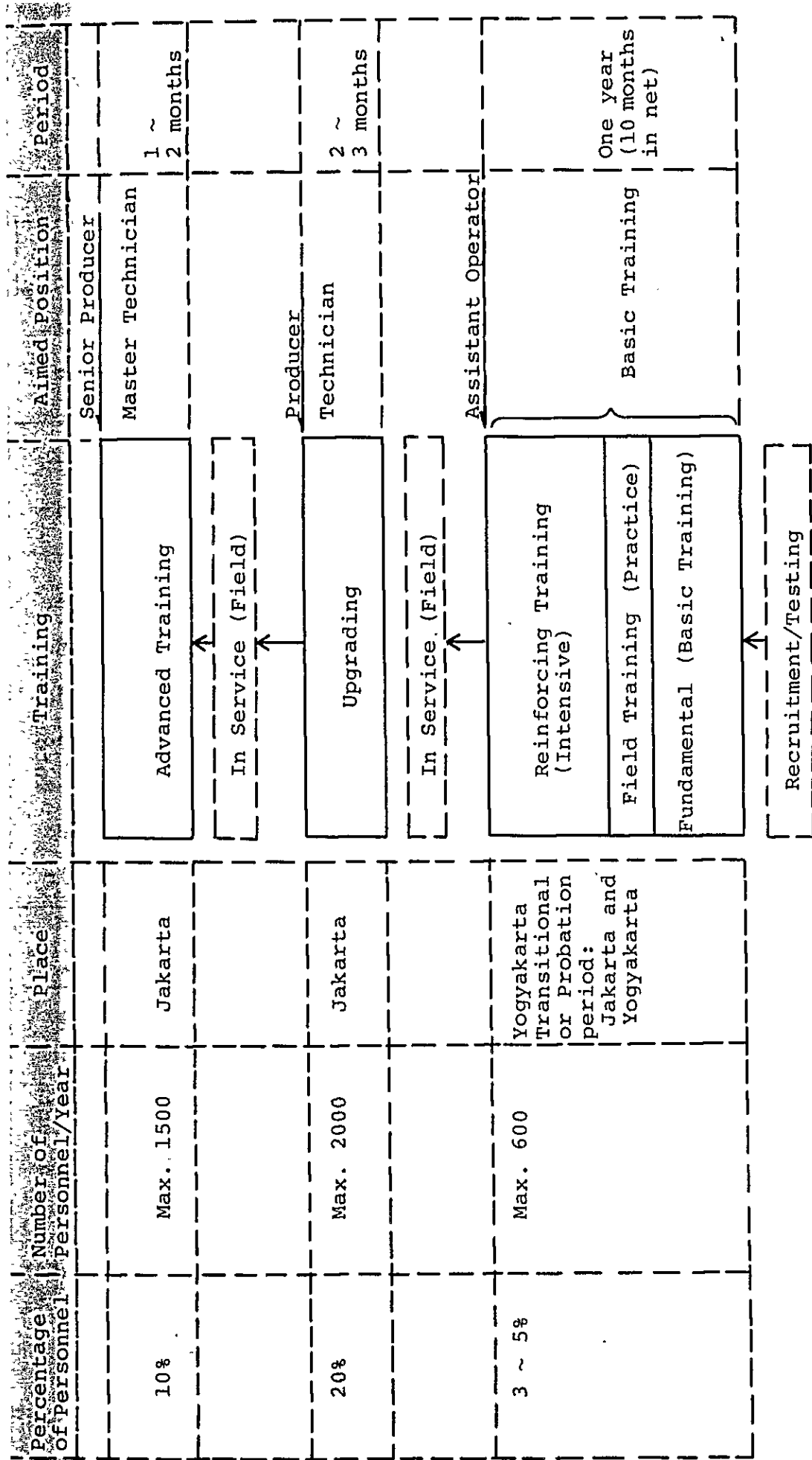


Fig. 2-2 Integrated Multi-Media Training System

The framework of the basic training is to consist of three phases and four work sequences, as shown in Fig. 2-3.\*2

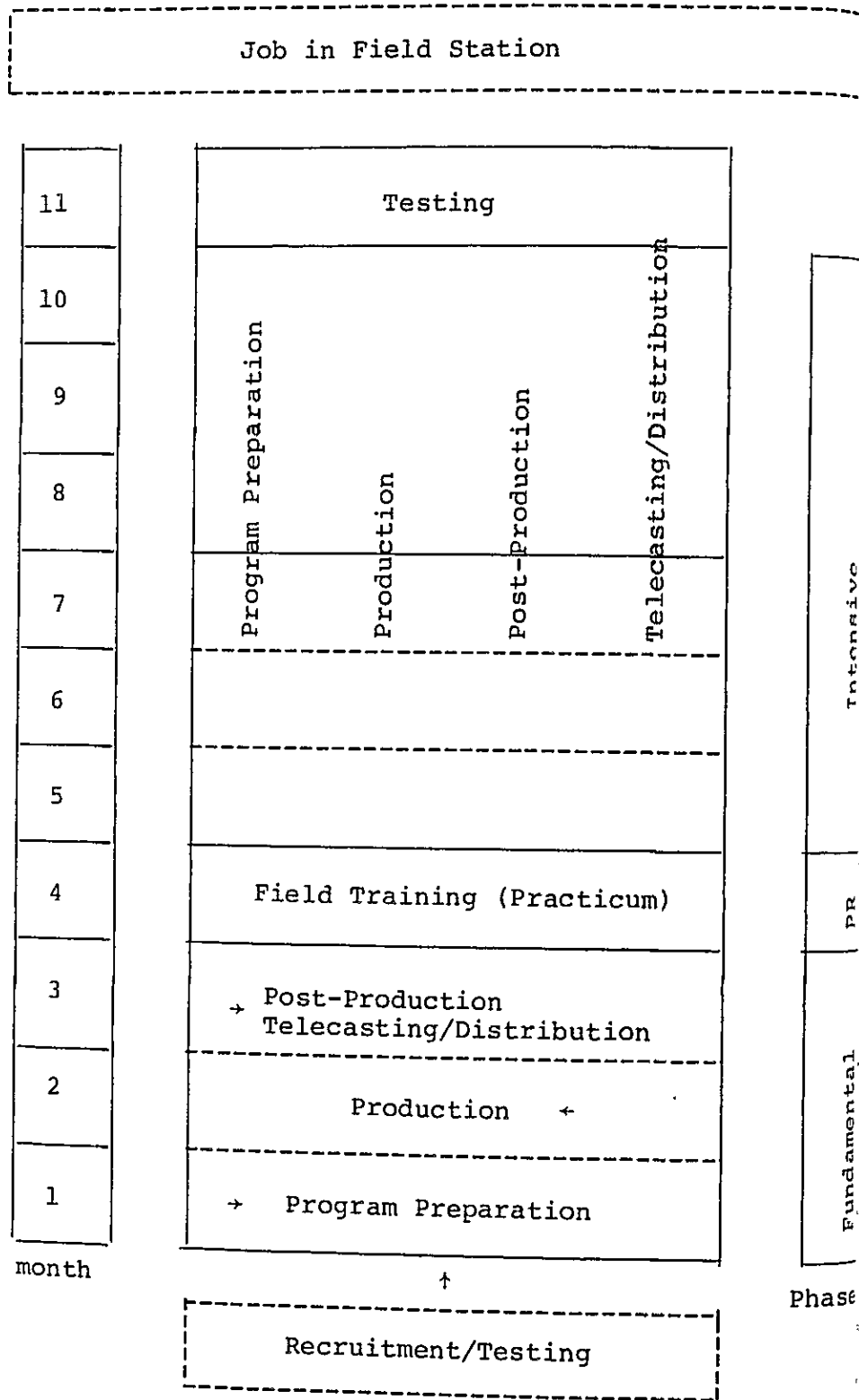


Fig. 2-3 Conceptual Diagram of Basic Training Centre System

The training duration of 10 months is to be divided into three phases. In the first basic training (Fundamental) phase, which will continue for a duration of 3 months, trainees are not to be classified by jobs in which they will be engaged in future.\*<sup>3</sup> A total of 120 trainees are to be divided into several groups each consisting of 24 trainees to be instructed from an identical curriculum. When this first basic training phase is finished, a test is to be performed so as to eliminate the unqualified persons and to determine who will receive field training (Practicum) and where. Although the "Guidelines" do not mention the treatment of those who do not pass the test, they will probably be assigned to work in the field as office personnel at this stage of the training procedures. Lesson in the class will be given mainly by lectures and demonstrations.\*<sup>4</sup> The duration of field training in the second phase is to be one month. Whether trainees are to receive field training at different broadcasting stations, whether they are to be instructed at a radio station and then at a TV station or whether they are to be trained at a radio station or TV station continuously throughout, but their training duration is not explained in the "Guidelines." The duration of the third phase of training (Intensive)

is 6 months. Through the screening processes of the first and second phases, trainees are to be put into one of the four work sequences of (1) Program preparation, (2) Production, (3) Post-production processing and (4) Telecasting/Distribution to receive training for the remaining 6 months. In the latter half of the third phase, trainees are to be divided into finer vocational sequences and to be provided practice-oriented instruction for their future functions.\*<sup>5</sup>

At the end of all basic training there will be an examination and the assignment of trainees to individual field stations.\*<sup>6</sup>

The treatment of those who will fail in this examination is not described either. The definitions of the above-mentioned four work sequences are omitted.

\*1 Guidelines, page 50

\*2 Guidelines, pages 78 and 83

\*3 Guidelines, page 79

\*4 Guidelines, page 79

\*5 Guidelines, page 83

\*6 Guidelines, page 83

## 2-1-5 Basic Concept of Curriculum Design

The Guidelines explain a basic principle of curriculum design by introducing "modules" while not adopting the conventional course system.\*1 A module specified in the Guidelines is defined to be a unit of a vocational lesson that can be taught per week.\*2 A module will consist of 20 blocks. Thus the block is a lower-ranking unit used for an auxiliary purpose. The relationship among the module, block and duration is as follows.\*3

1 module = 20 blocks
1 block = 90 minutes

The formal duration of one week is equal to 24 blocks.\*4 Accordingly, there is a difference of four blocks between one week and one module, which will be used for general theoretical education outside professional specialization.\*5 Furthermore, one day (Monday through Saturday) is considered equal to four blocks (90 minutes x 4 = 6 hours).\*6 By using these units, the Guidelines estimate the total amount of lessons per trainee per year. That is, in one year which consists of about 52 weeks, 4 weeks will be reserved for holidays, 4 weeks for field work, and 4 weeks for test activities, and the remaining 40 weeks



will be used as the net training period at the Basic Training Centre in Yogyakarta. Accordingly, 800 blocks which can be obtained by multiplying 40 by 20 (blocks), will be used for professional specialization per year and 160 blocks, which can be obtained by multiplying 40 by 4 (blocks), for general theoretical education.\*7 The Guidelines suggest that curriculum design should be made on the basis of the module concept\*8 and that the design of all modules should be finalized upon completing the preparation of the master plan.\*9 The Guidelines show some examples of module lists and module sheets for use as supporting information for the preparation of the master plan.\*10 However, all these examples are furnished without definitions and explanations on the contents and can hardly be used as direct references. It is to be pointed out that the concept of "block" which is a component unit of "module" is an important factor for the calculation of the number of instructors to be mentioned later.

- \*1 Guidelines, page 58
- \*2 Guidelines, page 86
- \*3 Guidelines, page 62
- \*4 Guidelines, page 85
- \*5 Guidelines, page 85

- \*6 Guidelines, page 85
- \*7 Guidelines, page 85
- \*8 Guidelines, page 86
- \*9 Guidelines, page 90
- \*10 Guidelines, pages 63 ~ 69

## 2-1-6 Personnel Scale of Basic Training Centre

The Guidelines set out the following six types of professionals to run the Basic Training Centre: 1) Senior instructor, 2) Assistant instructor, 3) Teacher, 4) Administrator, 5) Technician and craftsman, and 6) Service personnel.\*1

Of these six, the required numbers of 1) ~ 3) are calculated from the following prerequisites and equations. Discussion on 4) ~ 6) is expected to be presented in the master plan.\*2

### Prerequisites

- (1) Senior instructor is to be responsible for the whole module in both theoretical and practical training. He is to be in charge of 10 blocks per week.\*3
- (2) The assistant instructor is to assist the instructor in the preparation and execution of practical training but not theoretical training. He is to be in charge of 20 blocks per week.\*4

- (3) The teacher in charge of a general or non-vocational subject is to cover 10 blocks per week.\*5
- (4) Every trainee is to receive 20 vocational training blocks per week (the theory to practical field training ratio is 50:50 on an average, that is, 10 blocks in theory and 10 blocks in practical field training) and 4 blocks of general theoretical education.\*6
- (5) Trainees are to be divided into groups each consisting of 24 trainees to attend lectures and are to be divided into groups each consisting of 8 trainees on an average to receive practical training.\*7

#### Equations

(1) Number of senior instructors

$$= \frac{\text{No. of trainees per year} \times \text{No. of blocks per module}}{\text{Group volume} \times \text{No. of blocks/instructor/week}} \times (1 + 0.16)$$

where 0.16 is the shortage rate ascribable to participation in routine work other than the module (such as participation in committees, participation in advanced education and practical field work).\*8

(2) Number of assistant instructors

$$= \frac{\text{No. of trainees} \times \text{Average No. of practical training blocks per module}}{\text{Group volume} \times \text{No. of blocks/assistant instructor/week}}$$

(3) Number of teachers

$$= \frac{\text{No. of trainees} \times \text{No. of general education blocks}}{\text{Group volume} \times \text{No. of blocks/teacher/week}}$$

#### Necessary Number of Personnel

The Guidelines specify trial calculation on the basis of 576 personnel including film personnel, for which 56 senior instructors, 36 assistant instructors and 10 teachers are required.\*<sup>9</sup>

Suppose, a total of 480 trainees are to be trained annually in radio and TV media. Then, the number of required instructors are as follows:

- 1) 46 senior instructors
- 2) 30 assistant instructors
- 3) 8 teachers

Although the above calculation gives a rough estimate, it is to be noted that consideration for qualitative elements is not given. For example, it may happen that when a certain theoretical or practical

training, which may be taught only several blocks or less per week, is in a particular field and can be taught only by a special instructor who can not cover any other fields, it may be necessary to secure that instructor only for the several blocks. However, it is to be noted that discussion on such qualitative factors can not be extended unless module design and curriculum design are made concretely.

Although the method of securing instructors and teachers is not described, it is suggested that the assignment of instructors and teachers and the training of trainers (TOT) should commence within fiscal year 1982.\*10

- \*1 Guidelines, pages 114 ~ 115
- \*2 Guidelines, page 122
- \*3 Guidelines, pages 117 and 127
- \*4 Guidelines, page 120
- \*5 Guidelines, page 121
- \*6 Guidelines, page 117
- \*7 Guidelines, pages 119 ~ 120
- \*8 Guidelines, page 119
- \*9 Guidelines, pages 119 ~ 121
- \*10 Guidelines, page 128

## 2-1-7 Facility Plan

The Guidelines summarize the results of discussion on the functions of facilities as shown in Fig. 2-4.\*<sup>1</sup>

The types and physical spaces of rooms of the Basic Training Centre are estimated on the basis of the Functional Areas.\*<sup>2</sup> Spaces which will be related directly to this project are: The radio and TV training space of about 6100 m<sup>2</sup> and the administration space of 700 m<sup>2</sup>.

It is to be noted that the training space includes two radio studios, two TV studios, and observation rooms.

In this stage, the Japanese side recommends that it would be important to careful study on the necessity and effectiveness of these studios and rooms.

In Calculating physical spaces, the following values are used as standard values.\*<sup>3</sup>

Class room .....	2 m <sup>2</sup> per trainee
Laboratory .....	4 m <sup>2</sup> per trainee
Studio/Workshop .....	15 m <sup>2</sup> per trainee

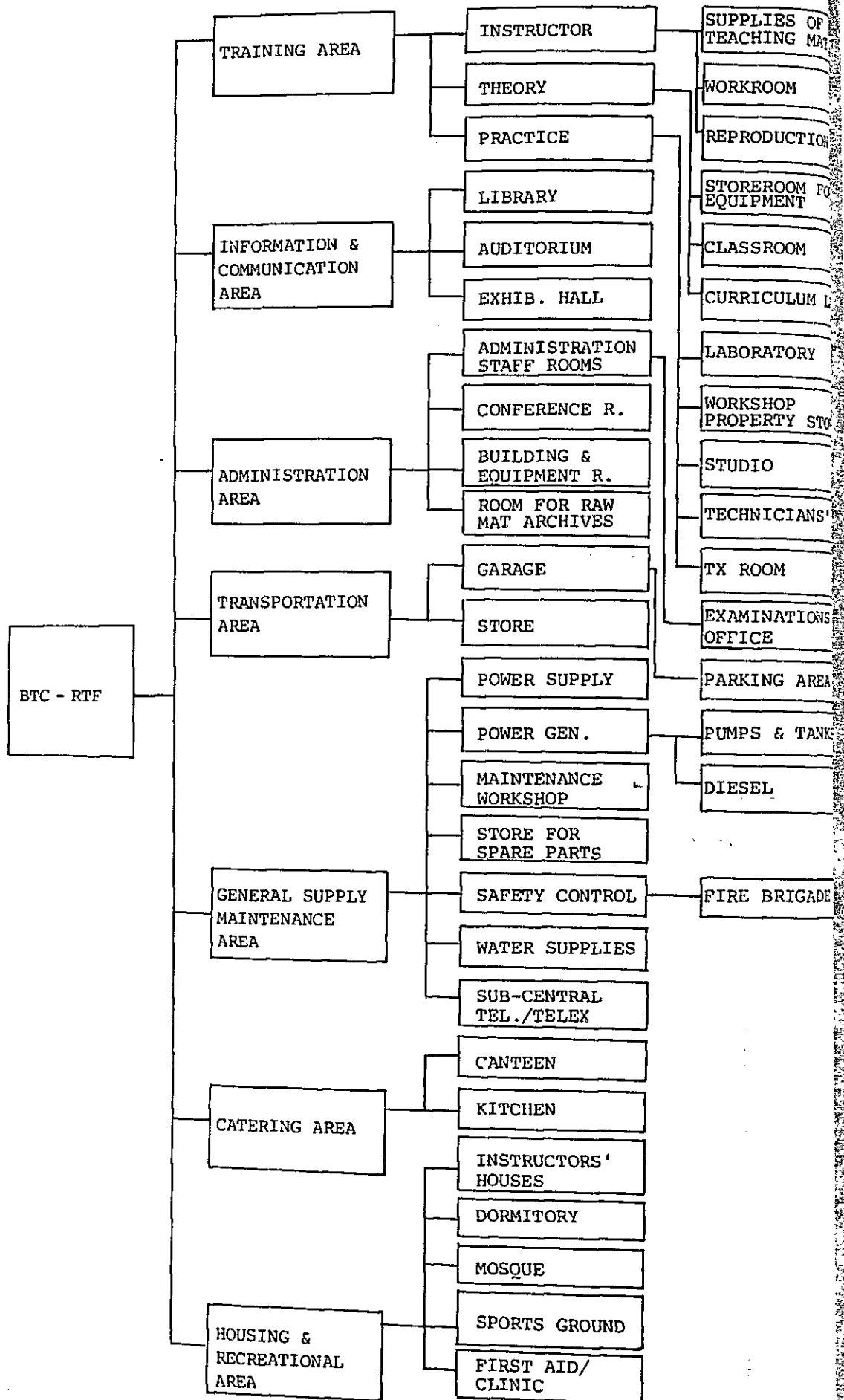


Fig. 2-4 Functional Areas

- \*1 Guidelines, page 136
- \*2 Guidelines, pages 149 ~ 152.
- \*3 Guidelines, page 148

#### 2-1-8 Budget

The Guidelines provide material on "Financing and Budgeting" which covers five pages but specify no concrete estimation for expenses, and presents only check-up items for examination upon preparing the master plan.

#### 2-1-9 Development Schedule

The activity schedule of related organizations up to the year 1990 is shown in Fig. 2-5. The whole process is divided into the three phases of 1) Planning, 2) Construction and 3) Implementation. Of these phases, the planning phase, which is our current concern, is forecast to progress in order to finish the work within March 1982 for evaluation at a joint study meeting in April 1982 to give final approval to the plan.



Institution	Time																	
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	1982	1983	1984	1985	....	1990						
	Planning						Construction						Implementation					
Department Information	Workshop in Multi Media Training System																	
Steering Committee	Manpower planning determination of recruitment regulations and training of personnel (TOT)						Recruitment						Evaluation + Development of integrated multi-media training system					
Staff Training Centre (Pusdimlat)	Selection of consultant						Supervision of construction + development of basic training system						Coordination of training centre activities					
RRI Training Centre	Supervision of master plan						Coordination of development of basic training system						Operating (temporary) basic training + Regular upgrading programs					
TVRI Training Centre	Involvement in development of Hard + Software coordination of TOT						TOT/curriculum development						Operating (temporary) basic training + Regular upgrading programs					
PPFN Training Centre	Involvement in development of Hard + Software coordination of TOT						TOT/curriculum development						Operating (temporary) basic training + Regular upgrading programs					
Local Consultant	Drawing up of master plan						Involvement in development of hard + software						Operating (temporary) basic training + Regular upgrading programs					
BTC-RFF Yogyakarta	Drawing up of master plan						Preparation for running Basic Training Centre						Operating Basic Training Centre					
Foreign Organization	Guidelines (GTC)						Hardware planning (JICA)						Cooperation on training activities					
	Workshop in Multi Media Training System						Workshop : BTC - RFF Yogyakarta						Workshop : BTC - RFF Yogyakarta					

Fig. 2-5 Basic Training Centre Development Time Schedule #1

## 2-2 Necessity of Work to Augment the Guidelines

The Guidelines prepared by the Indonesian Government are intended for use as a reference manual for the consultant(s) in preparing the master plan. Considerably minute analysis is made covering technical aspects and useful suggestions. However, the future concept of broadcasting service, the policy of the application of broadcasting service and management aspects, which we consider most important, are hardly found out except in some abstract descriptions.\*1 It is afraid that this may cause questions and confusion in the future detailed design of software.

Of the information specified by the Guidelines, the following two items are particularly important. One is the number of trainees that can be accepted every year. A total number of 576 trainees\*2 will enter the training centre at a total of four different times\*3 of the year. Formation of groups is planned and the number of instructors and teachers and the number and dimensions of rooms are estimated on the basis of the number of trainees. Another important thing relates the concept which forms the framework of training. The framework of the basic training is formed with three phases and four sequences.\*4

Apart from the former category of the three phases, the

latter categories of sequence, which are specified to be 1) Program preparation, 2) Production, 3) Post-production and 4) Telecasting/distribution\*5, are not furnished with no proper definitions or reasons why these four are picked up. Suppose the concept of this framework is accepted, if the number of sequences increase from four to five, the number of modules will increase, which will cause the number of instructors/teachers and the number of classrooms to be increased consequently.

The appropriateness of the number of trainees to be accepted every year and the concept of sequences can not be determined easily without proper analysis and vision based on prior policy and management viewpoints. Moreover, even if we set out the work to enhance any concrete training plan or facility plan on the basis of inadequately instructed policy of business or management, we wish to find adequate satisfaction in those plans.

\*1 Guidelines, pages 1 ~ 10 and page 45, page 47 and page 51.

\*2 Guidelines, page 119. Of the total number, 480 trainees are to be covered by this project.

- \*3 Guidelines, pages 141 and 143
- \*4 Guidelines, page 75
- \*5 Guidelines, pages 75 and 78

## 2-3 Outline of Existing Training Centres

### 2-3-1 Positioning and Roles of Existing Training Centres

At present, there are four training centres under the Department of Information: 1) Centre of Education and Personnel Training, 2) TVRI Training Centre (hereinafter referred to as TVRI T/C). 3) RRI Training Centre (hereinafter referred to as RRI T/C) and 4) PPFN Training Centre. Of these four training centres, the TV training centre (2) and radio training centre (3), which are our concern, are described hereunder.

Broadcasting service in Indonesia is controlled almost exclusively by the Indonesian National TV Broadcasting (hereinafter referred to as TVRI) and Indonesian National Radio Broadcasting (hereinafter referred to as RRI) affiliated to the Department of Information. Reflecting this situation, the training of staff in service has been made at TVRI T/C and RRI T/C separately.

It is to be noted that these two training centres do not belong to TVRI or RRI in system but are affiliated to the Centre of Education and Personnel Training (Pusat Pendidikan & Pegawai) which belongs directly to the Department of

Information, as shown in Fig. 2-6.\*<sup>1</sup>

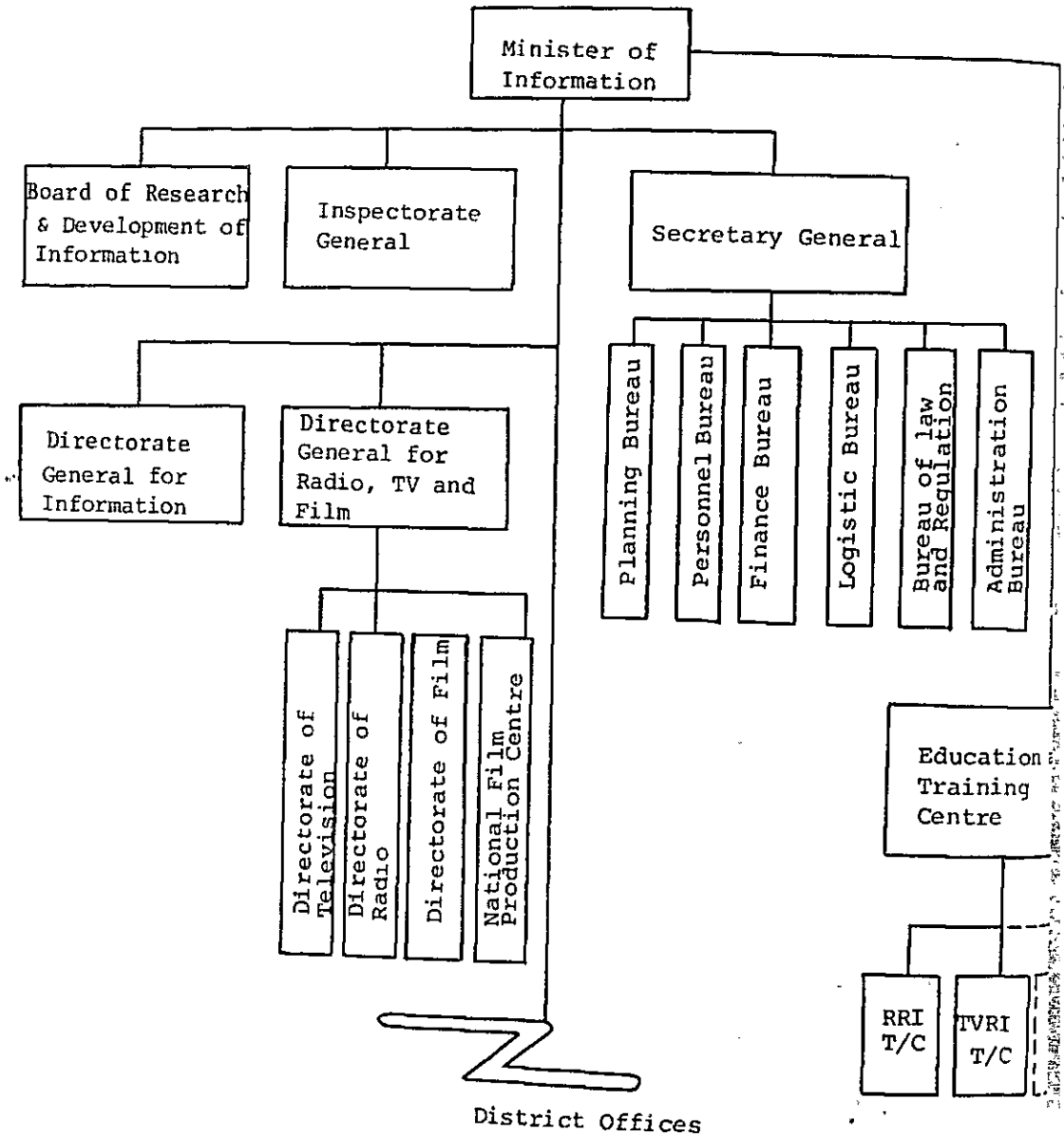


Fig. 2-6 Hierarchical Positioning of TVRI T/C and RRI T/C

The Centre of Education and Personnel Training provides the development function of the entire training plan and performs training mainly of different levels of staff and training of managing staff, while leaving vocational training to be performed at RRI T/C and TVRI T/C. The current training scales and facility scales of RRI T/C and TVRI T/C are shown in

Table 2-2.\*2

Table 2-2 Capacity and Aspects of Training

Item	Training Facility	RRI T/C	TVRI T/C
1) Number of courses per year		7 in Jakarta 1 in the provinces	16 in Jakarta 6 in the provinces
2) Approximate number of participants/course		25	18
3) Approximate number of participants/year		200	396
4) Number of instructors (public servants)*3		11	19
5) Number of administrators		15	37
6) Number of classrooms		5	5
7) Workshop & Lab.		3 editing 2 labs.	2 editing 2 workshop 1 film lab.
8) Studios		4	1
Duration of Course (in months)	9) Basic	3	6 ~ 9
	10) Advanced	1	2 ~ 6

- \*1 By the "District Office of Ministry Information" obtained at the site.
- \*2 Guidelines, page 16
- \*3 For the classification by school education, refer to the Questionnaire in the annexed reference of this report.

#### 2-3-2 Activities of TVRI T/C

The activities of TVRI T/C were initiated in 1968 when an agreement for cooperation on the training centre was signed between the Government of Indonesia and the Government of West Germany; however, actual training activities began in August, 1970. Training had been performed through the financial and personnel assistant from the Government of West Germany until 1978, but the present training is performed under the management of the Indonesian Government.\*<sup>1</sup> In the period of eleven years including 1970 to 1980, TVRI T/C trained about 1000 persons: 850 persons in basic training and about 150 persons in upgrading training.\*<sup>2</sup>

Training has two major features, that is, long training durations and high weight of general theoretical education in the whole curriculum.\*<sup>3</sup> Apart from the duration of basic maintenance technique training of 18 ~ 24 months, the duration of the basic training is 9 ~ 12 months.

and that of upgrading training 3 ~ 6 months, although one of the current tendencies is to give opportunities to as many personnel as practicable by shortening training durations. (Refer to Fig. 2-7 )

Now, time distribution to non-technical subjects in the curriculum is shown in Table 2-3.

Table 2-3 Percentages of Non-Technical Subjects .  
in Curriculum\*5

(Unit: hours)

Item Course	(a) Total hours	(b) Basic education	(c) Related education	(d) Professional education	(e) Test/ Evaluation	Non-Techni- cal Training Ratio $\frac{b+c}{a} \times 100$
Program produc- tion basic course (hrs)	974	34	216	532	192	26%
Program produc- tion advanced course (hrs)	205	6	59	124	16	32%
Maintenance technique basic course (hrs)	2592	330	354	1908	Unknown	26%
Maintenance technique upgrading course (hrs)	864	—	288	576	Unknown	33%

Typical training items included in the basic education and related education are as follows:

- (1) Basic education ... Pancasila, Basic Law of 1945



Ref.: Number of trainees who participated in training at TVRI T/C in 1979 is 409.

(1979)

(1980)

Item	Month	I			II			III			IV	
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb
I Basic training for personnel in service												
1	Field work	29 (trainees) 18 months from Jan, 1978										
2	Film color field work	9			9			9			9	
3	Color production field work	25		25		25		25		25		
4	Monochrome production field work				10		10		10		10	
5	Monochrome studio production field work				5		5		5		5	
6	Monochrome film field work				9			9			9	
7	Program production field work				9							
II Basic training for new employees												
1	Program production							32				
2	Studio technique							25				
3	Maintenance technique										18 18 months to Mar, 1981	
4	Film training	20										
5	Transmitter technique							21				
6	Diesel engine generator							20				

Fig. 2-7 Training Schedule of Fiscal Year 1979\*4  
(April 1979 ~ March 1980)

(UUD '45), General Government Orders (GBHN), Corps of Government Employees (KORPRI), Employee Regulation, Fundamental Services of the Department of Information and TVRI, fundamentals of administration, music, psychology, sociology, ethnology, etc.

(2) Related education ... Indonesian, English, mathematics, physics, chemistry, optics, cultural anthropology, information sociology, mass communication, program production theory, etc.

\*1 The Republic of Indonesia Preliminary Basic Design Study Report on the Construction Project of Radio and Television Training Centre (March 1981, Japan International Cooperation Agency) (Japanese Version) (hereinafter referred to as Preliminary Basic Design Study Report), pages 11 ~ 13.

\*2 Preliminary Basic Design Study Report, page 12

\*3 Preliminary Basic Design Study Report, page 14

\*4 Based on "The Program Work for Education and Training (Project of Training Centre TVRI Budget DIP 1979/1980)" obtained through

cooperation of residing Japanese experts at the site.

\*5 Prepared on the basis of the curriculum of TVRI T/C obtained through the cooperation of the residing Japanese experts.

### 2-3-3 Activities of RRI T/C

The activities of RRI T/C have begun since 1973, a little later from those of TVRI. Unlike TVRI T/C, RRI T/C starts training activities at its own expense; however, since 1976 had been supported by the financial, technical and personnel assistance of the Government of West Germany and through the modernization of facilities more than 200 trainees have been accepted annually.\*1

The major features of training at RRI T/C are: 1) Short training durations and 2) Less non-technical subjects; these differ from TVRI T/C. For the feature of 1) above, refer to Fig. 2-8.

(Unit: No. of trainees)

Item		Month												
		Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Febr	Mar	
I. Basic Training														
1	Program production		← 25 →		6th									
2	Technical training		← 25 →		6th									
II. Upgrading Training														
1	Announcing										← 25 →	15th 25th		
2	Entertainment Programs								← 20 →	13th 13th			← 30 →	14th 6th
3	Maintenance technique								← 20 →	13th 13th				
4	Studio production technique										← 20 →	15th 15th		
5	Transmitting technique										← 20 →	4th 25th		
6	Local programs							← 20 →	20th 20th			← 20 →	7th 27th	
7	News							← 30 →	1st 30th					

Fig. 2-8 Execution of Training at RRI T/C  
in Fiscal Year 1979

Another feature of training at RRI T/C is that trainees stay in a dormitory while being trained. RRI T/C has a dormitory near the training centre building from which

trainees commute to the training centre. The dormitory had a starting capacity of 40 beds and has been expanded.\*2

\*1 Preliminary Basic Design Study Report  
(Japanese Version), pages 15 ~ 17

\*2 Preliminary Basic Design Study Report  
(Japanese Version), page 15

#### 2-4 Training Expenses

Table 2-4 indicates the expenses of training at RRI T/C during the past several years.\*1

Table 2-4 Budgets for Training at RRI T/C

Fiscal Year	Budget	
	Sum in \$	Sum in Rp.
1977	154,560	97,372,800
1978	128,730	81,099,900
1979	154,880	97,574,400
1980	208,980	131,657,400

Note: The dollar to Rupiah exchange rate is assumed to be: US\$ 1 = Rp. 630

The budget of fiscal year 1980 corresponds to Rp. 500,000 per trainee (average training duration: 1.5 months) of

which the largest component expense is expense for trips or Rp. 150,000 per trainee on an average.\*2 The standard amounts of major expenses used for RRI T/C to estimate the budget are given in Table 2-5.

Table 2-5 Standard Amounts for Estimation of Training Expense

Expense	Standard Amount	Description
Salary for Instructor	Rp. 3,500/hour*3	This amount is the standard salary of Echelon III corresponding to an assistant manager or section chief in Japan. Instructors are usually at Echelon III or IV.
Lodging Expense for an Instructor	Rp. 21,000/night	This is required for sending an instructor for training in a local area.
Lodging Expense for a Trainee	Rp. 5,000/night	This standard amount corresponds to Echelon II or III.
Miscellaneous Expense for a Trainee	Rp. 1,000/day	This amount is paid to every trainee as pocket money depending on the training duration.
Expense for Teaching Materials	Rp. 2,000/person Rp. 1,500/person	The upper amount corresponds to the expense for teaching material per person in a technical field and the lower amount to that in program production.

\*1 Preliminary Basic Design Study Report (Japanese Version), page 16

\*2 The domestic airlines in Indonesia are run by Garuda Indonesia Airways which raised domestic flight costs in April, 1981.

In preparation for the necessity of the estimation of the operating expenses of the Basic Training Centre in Yogyakarta, we examined the airway flight costs (one way) between eight cities where TV stations are located and Yogyakarta and the results are as follows:

From	Flight Cost to Jakarta	Flight Cost between Jakarta and Yogyakarta	Total (in \$)	Total (in Rp)
Jakarta	—		47.70	30,050
Medan	\$121.30		169.00	106,470
Palembang	\$47.70		95.40	60,100
Balikpapan	\$111.70		159.40	100,420
Ujung Pandang	\$120.90	\$47.70	168.60	106,210
Surabaya	\$67.50		115.20	72,570
Denpasar	\$41.20		88.90	56,000
Manado	\$199.90		247.60	155,980
Average	\$88.78	\$47.70	136.48	85,970

◦ Examined by Mitsui Airline Service on October 28, 1981.

◦ Dollar to Rupiah exchange rate: US\$ 1 = Rp.630

\*3 One hour unit corresponds to a training duration of 45 minutes. Every trainee usually receives 45 minutes x 8 lessons per day.

2-5 Results of Questionnaire from Those Engaged in  
Training in Indonesia

In order to grasp the current personnel administration system and training system in the Department of Information, and problems which might be encountered in establishing the Basic Training Centre in Yogyakarta and sending experts to work in Indonesia, the survey team visited Indonesia with check sheets containing 90 questionnaire items.

The check sheets were handed to the Indonesian side at the first meeting with the Indonesian Steering Committee and replies were requested.

Answers were handed to the survey team from those engaged in RRI T/C just before the survey team returned to Japan and answers from those in TVRI T/C were handed over to the survey team through Drs. F. Rachmadi during his visit to Japan in the beginning of December, 1981. Although answers from both fields included many blank papers regarding personnel administration and expected answers were not necessarily obtained due to misunderstanding of the intensions of questions, there were many useful for comments understanding the present situation and criticisms possessed by those concerned. Such information is not contained in the Guidelines but regards the Basic Training Centre in Yogyakarta. The outlines of answers are stated hereunder.

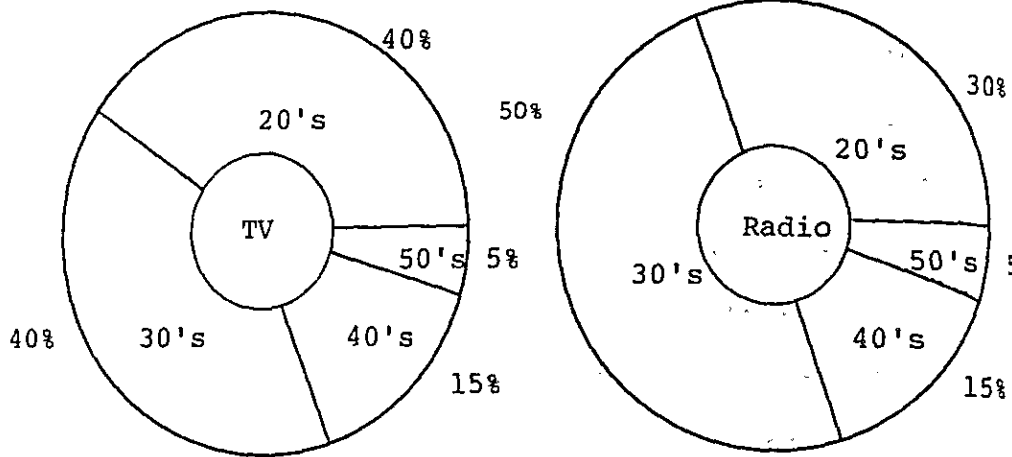
For the complete list of questions given in the questionnaire, refer to the Attached References at the end of this report.



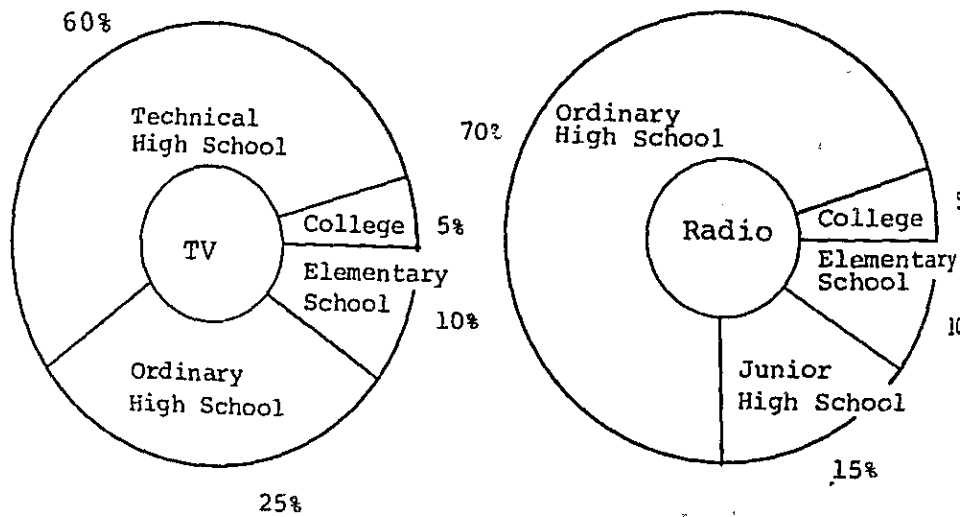
2-5-1 Personnel Administration

(1) Characteristics of TVRI and RRI personnel are as follows

1) Classification by age



2) Classification by educational background



3) Classification by position rank

	TV		Radio	
	%	(persons)	%	(persons)
Bureau director	0%	2	0%	2
Division manager	0.5%	14	1.3%	50
Section chief	2.6%	70	6.3%	250
General personnel	96.8%	2,633	92.5%	3,698

4) Classification by vocational fields ... No answer in either  
TV or radio media

(2) Expected personnel composition in fiscal year 1983  
in which the Third Five-Year Development Plan (REPELITA III)  
is to end (classification by functional fields)

Functional Field	TVRI (persons)	RRI (persons)
Program production	509	3,250
Program editing	273	50
Announcing	45	200
Film camera	70	—
Studio production technique	440	500
Transmitting technique	520	500
Maintenance technique	120	500
Total	1,977	5,000

In the above table, office personnel are not referred  
to in either TVRI or RRI. Their number should be  
confirmed from the Indonesian side.

(3) Personnel exchange between TVRI and RRI

Personnel exchange is done at many levels ranging  
from Bureau Director to Chief, but the scale of exchange  
seems to be as small as 50 persons. Exchange between

chiefs seems to be done mainly in program production, announcing and technical fields.

- (4) For promotion, educational background seems to be the most important factor. Experience and record/capability are the next most important factors.
- (5) Periodical salary increase is conducted on across-the-board basis by vocational rank categories.
- (6) Employees retire at the age of 56 in both TV and radio media.

#### 2-5-2 Current Training System

- (1) Trainee numbers after REPELITA III are as follows:  
TVRI T/C ... 396 trainees/year  
RRI T/C .... 220 trainees/year
- (2) Personnel in both TVRI and RRI desire to participate in training. Supervisors in the field also welcome the participation of their men in training.
- (3) Trainees and supervisors in TVRI consider that the training durations are proper, whereas those in RRI consider that training durations are too short.
- (4) There is a difference between TVRI and RRI in the method of covering the jobs of men who have gone for training. In TVRI specially

assigned personnel cover the jobs of men who have gone for training, whereas in RRI, supervisors cover their jobs.

- (5) TVRI T/C, RRI T/C and together with the Department of Information are entitled to plan and compile training curriculums.
- (6) At both training centres trainees are subject to examination upon completion of their training to evaluate their achievements. Certificates for courses completed are given to those personnel who pass the examination.
- (7) One of the major problems in executing training is the shortage of fulltime instructors in both TVRI T/C and RRI T/C. The assignment/demand ratios for different functional training fields by fulltime instructors are as follows:

Functional Field	TVRI T/C	RRI T/C
1) Program production	80%	100%
2) Program editing	80%	80%
3) Announcing	100%	100%
4) Design and TV setting	100%	—
5) Film camera	80%	—
6) Studio production technique	80%	80%
7) Transmitting technique	80%	80%

(continued)

8) Maintenance technique	80%	80%
9) Film development	80%	—
10) Office work	20%	(No entry)
11) General subjects, etc.	10%	50%

(8) Number of instructors and their educational backgrounds are as follows:

Educational Background	TVRI T/C (persons)	RRI T/C (persons)
College	8	4
High school	11	7
Total	19	11

(9) Regarding the contents of training, there are some answers which suggest that although conventional training has been offered mainly for improving vocational knowledge and capabilities, it is necessary to increase the range of contents from now on.

2-5-3 Regarding Commencement of Service at Basic Training Centre in Yogyakarta

(1) By asking respondents to rank the difficulty of it to prepare for the commencement of the service at the Basic Training Centre in Yogyakarta, the following data was obtained:

Scale of Difficulty

(where 1 = most difficult and 8 = least difficult)

Items to be prepared	TVRI T/C	RRI T/C
1) Preparation of curriculum	1	1
2) Preparation of teaching materials	7	8
3) Securing fulltime trainers	2	7
4) Training of trainers	3	2
5) Revision of relevant regulations	5	3
6) Budgeting for running expenses	8	4
7) Provision of trainees	4	5
8) Provision of clerical personnel	6	6

- (2) The annual number of trainees to be accepted after completion of REPELITA III is estimated to be 288 TVRI personnel and 252 RRI personnel.
- (3) According to the answer from those concerned of TVRI T/C, the accommodation capacity of the dormitory which can be used upon commencing the service of the Basic Training Centre in Yogyakarta would be 300 trainees. It is also mentioned that the accommodation capacity of the dormitory (300 trainees) can be used solely for radio and TV training.

- (4) Regarding the necessary number of fulltime trainers (instructors), there is only an answer from RRI T/C which says that 30 fulltime trainers will be necessary out of which ten trainers are desired to be invited from overseas professional organization(s) for training for about 3 months. The professional fields to be trained at overseas organization(s) are expected to cover program production and technical fields.
- (5) Regarding the provision of fulltime trainers, there seems the necessity of selecting proper trainers/instructors only from the Department of Information, TVRI and RRI.
- (6) In regard to the estimated schedule for the commencement of service at the Basic Training Centre in Yogyakarta one such answer from TVRI T/C can be summarized by the following chart although the original answer was handwritten and contains some illegible portions.

	'82			'83												'84		
	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Exchange of views (software & hardware)	////																	
Completion of Guidelines	////																	
Explanation of the Guidelines to the Japanese side	////																	
Adjustment of discussion in Japan on equipment and facilities		////																
Completion of master plan			////															
Detailed plan of building construction				////														
Preparatory contract for dormitory construction									////									
Construction of dormitory building										////	////	////	////	////	////	////	////	////
Construction of studio areas										////	////	////	////	////	////	////	////	////
Provision of furnitures, etc., in dormitory																	////	////
Instructors' training							////	////	////	////	////	////	////	////	////	////	////	////
Recruiting tests for trainees into Basic Training Centre																	////	////

(subjected to change)

(7) Regarding the expected running expenses of the Basic Training Centre in Yogyakarta, there were answer only from TVRI T/C, which is as follows:



Expenses	Amount (Unit: Rp. million)
1) Preparation of teaching materials	180
2) Maintenance of training facilities	120
3) Power supply, fresh water, others	25
4) Expense relating to dormitory	108
5) Cleaning of facilities and equipment	15
6) Expenses for participation in training (trips, meals, etc.)	180
7) Expenses in relation to staff	200
8) Fixtures	100
Total	928

These figures are evaluated later on in this report:

## 2-6 Shape and Environmental Condition of the Site

The site was expected to be located 2km north of TVRI, which is different from the adjacent place of TVRI as determined in the preceding preliminary survey.

The change of the location of the site is ascribable to the adjustment by the Indonesian side because the predetermined site adjacent to TVRI was too narrow for the scale of the entire project in terms of an examination performed by the Indonesian side.

The new site is currently used for agriculture. Three hectares are to be purchased in 1982 and two hectares in 1983, so that a total of five hectares are to be procured.

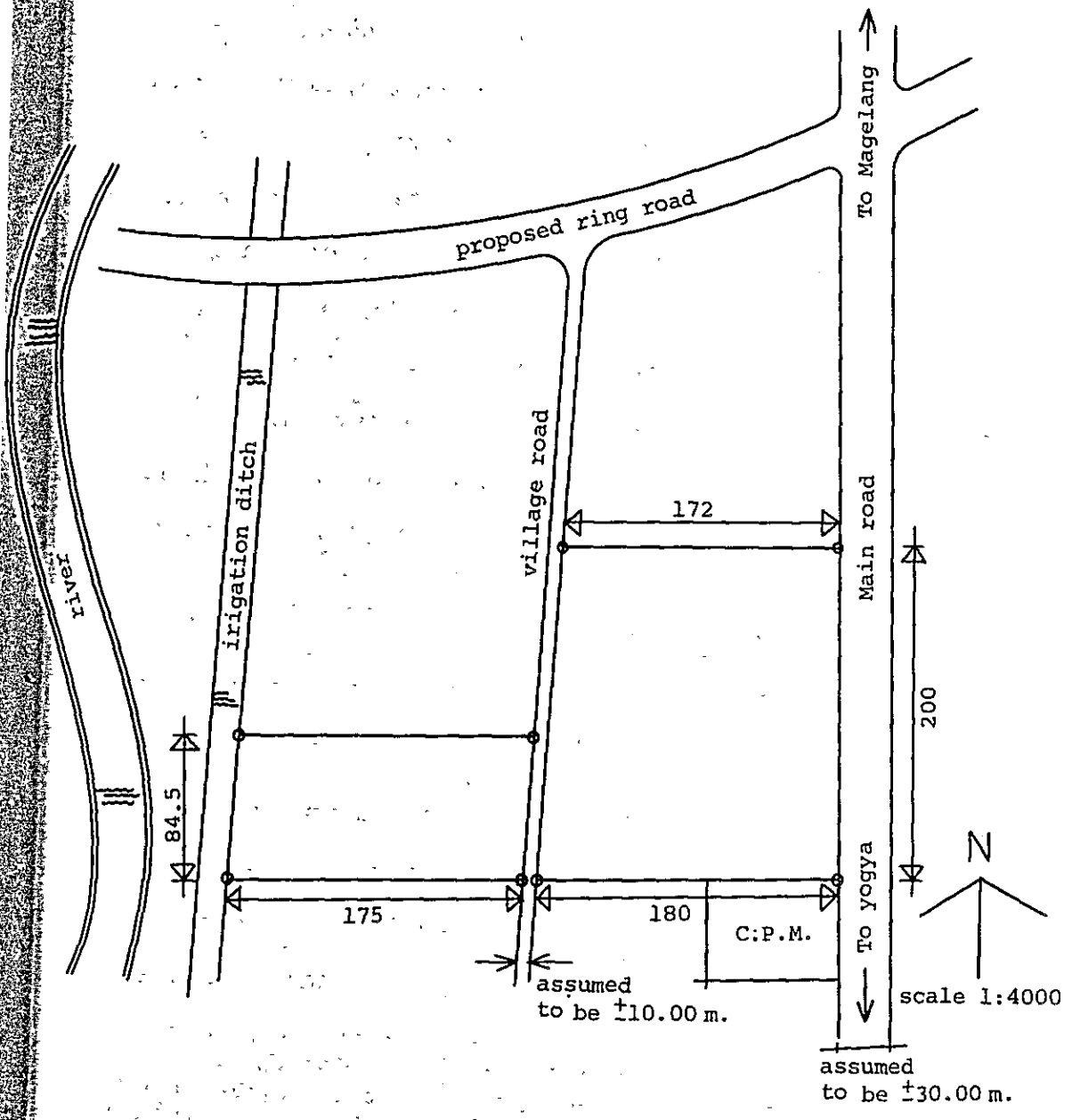
This site is located about 5km north of the central portion of Yogyakarta City and is on the principal road passing from Yogyakarta through Semarang and famous Borobudur Temple.

The site is surrounded mostly by agricultural land. On the north border line of the site a highway is expected to be constructed in the future. This highway will form a ring road to pass from the neighborhood of the airport located in the eastern part of Yogyakarta City to the western part of the city. The expected road width is 80m. Accordingly, the site, which is currently in a quiet environment, can be expected to be urbanized in the future.

The site environmental condition viewed from the project standpoint is described below.

Yogyakarta is a quiet city with a population of about 600,000 and has Gajah Mada University having the largest number of students. Many students ride on motorcycles manufactured in Japan on streets. This area is also known as a historical town or a town of traditional arts. Near the centre of the city there is the ancient palace of the "sultan", whereas in the end of the town there are small Batik factories producing famous Java cotton print as if they compete in their minute dyeing techniques.

Unlike Jakarta, this town has not yet suffered from the invasion of large or foreign capital. Regarding hotels, only Sheraton Hotel caught our eyes as a hotel on foreign capital. Foreigners were scarcely seen. We hear that almost no Japanese enterprises have ever put resident staff in this area. Reflecting on this condition, those concerned of the Department of Information answered in our questionnaire that there is no educational organization for foreigners. As for medical organizations intended particularly for foreigners, although there are two general hospitals in this area. For housing conditions which is a point of concern, those concerned of the Indonesian side answered in the



NEW SITE FOR  
M.M.T.C PROJECT  
YOGYAKARTA

questionnaire that it may be difficult to find houses to rent, although not impossible. The house rent seems to be about Rp. 2,000,000 (about ¥700,000) per year with telephone, etc., being charged separately. Payment in advance may not be required as in Jakarta. The procurement of cars for private use and the provision of drivers seem to be easier to arrange than in Jakarta. Communication with Jakarta is also good. Direct dial telephone calls are possible and an urgent telegram is guaranteed to reach its destination in Jakarta in half a day. Regarding public safety and sanitary conditions, there is no particular problem.

#### 2-7 Soil Survey

Since the expected construction site had not yet been procured to be readily surveyed, soil survey could not be performed. In addition, the neighborhood is nearly all agricultural land without any large buildings and no particular useful soil information was obtained. However, since continuous footing was employed without piles in the expansion of TVRI's building 2km apart from the expected site, the soil does not seem to be soft.

In anycase, consideration for soil strength is inevitable for designing any building and it is necessary to perform a boring test at an early time after procuring the site.

## 2-8 Earthquakes

Indonesia is in the Java-Sumatra volcanic zone and has encountered several large earthquakes in the past. The major earthquakes encountered since 1900 are as shown in Table 2-6.

Table 2-6

Year	District	Magnitude	Number of Deaths
1909	Sumatra	7.7	200
1917	Bali Is.	-	1,300
1924	Java Is.	-	609
1926	Sumatra	-	222
1964	Sumatra	6.7	110
1975	Java Is.	5.8	-
1975	Sumatra	7.0	-

## 2-9 Climate

Indonesia is in the oceanic tropical zone with high temperature, has much rain and high humidity. The average temperature in Indonesia is about 28°C and the annual average amount of rainfall is about 2000mm, although this varies depending on the area. The year is divided into a dry season from April to September, and a rainy season from October to March. In April and October when the season changes, people suffer from the worst climate throughout the year.

Table 2-7 Climatic Data of Jakarta and Yogyakarta (From 1978 ~ 1980 materials of Central Bureau of Statistics)

Item	Month												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Temperature	Minimum (°C)	23.9	24.2	24.0	24.2	24.5	23.9	23.5	23.6	23.5	23.6	23.6	24.0
	Maximum (°C)	30.9	31.5	32.0	33.0	33.0	31.8	32.1	32.5	32.4	32.4	32.7	30.7
	Average (°C)	26.8	27.0	27.3	27.8	28.1	27.1	27.1	27.5	27.3	27.3	27.5	26.7
Sunshine (%)	41	47	40	70	66	40	59	68	58	60	59	27	
Humidity (%)	79	79	78	74	76	77	74	72	73	75	73	80	
Rainfall (mm)	212	262	274	68	137	167	114	79	130	128	183	264	
Wind Speed	Maximum (m)	15	14	20	12	15	15	12	12	14	10	14	
	Average (m)	4	4	4	4	4	4	4	4	4	3	4	
Temperature	Minimum (°C)	23.7	23.9	24.2	24.5	24.6	23.5	22.6	22.9	23.0	23.6	23.6	-
	Maximum (°C)	30.1	30.3	31.4	32.0	32.7	31.9	32.2	33.3	32.6	33.3	31.7	30.9
	Average (°C)	26.3	26.7	27.2	27.8	28.0	27.1	26.7	27.3	27.3	28.0	27.7	27.1
Sunshine (%)	(24)	(20)	(56)	(46)	(56)	-	-	(40)	(75)	(59)	(53)	-	
Humidity (%)	83	83	81	76	78	78	76	72	75	73	75	81	
Rainfall (mm)	536	248	380	138	232	139	76	169	218	223	358	290	
Wind Speed	Maximum (m)	18	18	16	16	16	16	18	-	14	18	14	
	Average (m)	4	4	3	3	2	3	4	3	3	3	4	

Note 1: Above data are of 1978 except those in ( ) which are of 1977.

Note 2: All data of Yogyakarta are those of Semarang (6°59'S/110°22'E) except data of wind speed.

## 2-10 Building Construction Prices

Building construction prices in Indonesia vary greatly depending on various factors. For example, building construction price variation depends greatly on the difference between the local and Japanese contractors, the difference between Jakarta and local cities, the difference between local and imported architectural materials, etc.

Particularly, area differences in labor costs are extremely large as shown below.

Table 2-8 From the "BASIC PRICES-1980" issued by  
the Department of Public Services

Type of Occupation	Jakarta Rp./day (Yen/day)	Yogyakarta Rp./day (Yen/day)
Laborer	1,500 (524)	600 (210)
Carpenter	3,000 (1,048)	1,000 (349)
Rockworker	2,500 (873)	900 (314)
Electrician	2,000 (698)	1,000 (349)

Prices gathered during the present survey are as follows:

(These prices are current prices in local cities.)

### (1) Broadcasting station building

Reinforced concrete, 2-stories .... 200,000Rp./m<sup>2</sup>  
(including costs for ordinary lighting facilities,  
waterwork and drainage, design fee, and contingency  
expenses in the field (approx. 7%))



(2) Office-building

Reinforced concrete, 2-stories .... 160,000Rp./m<sup>2</sup>  
(including costs for ordinary lighting facilities,  
waterwork and drainage, design fee, and contingency  
expenses in the field (approx. 7%))

(3) Airconditioning facility

Refrigeration ..... 1,250,000Rp./ton

(4) Power facility

a) Power distribution board ..... 70,000Rp./KVA

b) Line connection (including power receiving  
transformer and inspection)

Inside high-voltage power

distribution network ..... 75,000Rp./KVA

Outside high-voltage power

distribution network ..... 165,000Rp./KVA

(5) Waterworks

a) Private waterworks (well), 1 set ... 25,000,000Rp.

b) Leading in of water supply, 1 set ... 5,000,000Rp.

(6) Grounding lightning arrester, 1 set ..... 10,000,000Rp.

(7) Fire extinguishing facilities (in the case of 9,000m<sup>2</sup> building)

a) Smoke sensing facility, 1 facility .. 17,500,000Rp.

b) Fire hydrant, one location ..... 4,000,000Rp.

(8) Construction materials

- a) Cement, one bag (40kg) ..... 2,000Rp.
- b) Brick, 1 piece ..... 30Rp.
- c) Studio sound absorption wall ...17,500Rp./m<sup>2</sup>
- d) Control room sound  
absorption wall .....15,000Rp./m<sup>2</sup>
- e) Soundproof doors  
(large, medium, and small, 3 doors)  
..... 30,000,000Rp.
- f) Floor sheet ..... 2,000Rp./m<sup>2</sup>
- g) Floor tile ..... 280Rp./tile
- h) Ceiling textile (300x600x9) .... 820Rp./piece
- i) Toilet stool (TOTO-S516,C420) 125,000Rp./set

Note: Items f) ~ i) were examined at building materials stores in Jakarta.)

2-11 Prices of Fixtures for Use at Office and Lecture Rooms

The survey team visited Yogyakarta City to inspect the expected site of the Basic Training Centre. While staying in Yogyakarta City, the survey team intended to examine the standard prices of major pieces of office furniture in the city, visited the local office of the Department of Trade (BIDANG) together with TVRI Yogyakarta Station staff, and collected the following data through

the cooperation of the Collecting and Analyzing Data Section (PENGUMPULAN & ANALISA DATA).

Table 2-9 Prices of Major Fixtures in Yogyakarta City

Item	Price	Remarks
1) Office desk	Rp. 60,000	} More reasonable if desks and chairs are purchased in sets.
2) Office chair	Rp. 45,000	
3) Cabinet (made of stainless steel)	Rp. 90,000	Documents shelf (rolling doors) ..... Rp.80,000
4) Locker	Unknown	
5) Bookshelf	Rp. 80,000	
6) Reception set	Rp.150,000	
7) Telephone set	Unknown	
8) TV receiver ("Sharp," color, 20-inch)	Rp.685,000	"National," color, 14-inch ..... Rp.325,000
9) Tea tool shelf (wood cupboard)	Rp.200,000	200cm x 135cm
10) Refrigerator	Rp.150,000	
11) Lecture room desk	Rp. 50,000	
12) Lecture room chair	Rp. 20,000	
13) White board (90cm x 120cm)	Rp. 40,000	

## 2-12 Laws and Regulations Regarding Building Construction

The most fundamental laws and regulations among various laws and regulations regarding architecture and building construction in Indonesia are as follows.

- Building Construction Regulations of the Republic of Indonesia
- Structural Standard Regulations of the Republic of Indonesia

These regulations are applied upon execution of construction and are most practical for the control of building construction. These regulations were drafted by the architectural and construction problem laboratory of the Department of Public Service and all architecture and building construction activities have been guided and supervised by these regulations since 1970.



SECTION 3 TRAINING PLAN



## SECTION 3 TRAINING PLAN

### 3-1 Prerequisites and Scope in Preparing Training Plan

#### 3-1-1 Prerequisites

The survey team carried out the preparation of the training plan to be contained in this report on the basis of the following three prerequisites:

- (1) Detailed design of software such as the design of specific curriculums is to be accomplished through another opportunity in the future.
- (2) The "Guidelines" prepared by the Indonesian side during the past year should be followed as much as practicable.
- (3) For information not specified in the "Guidelines",\*<sup>1</sup> an opportunity for minimum system change will be given depending on the results of the work to be done by the Indonesian side to augment the "Guidelines."

\*<sup>1</sup> Refer to paragraph 2-2 "Necessity of Work to Augment the Guidelines."



### 3-1-2 Range of Training Plan

As stated before, the Indonesian side has positioned the Basic Training Centre to be constructed in Yogyakarta as an overall training centre for radio, TV and film media and the "Guidelines" support this idea constantly, whereas only a training plan for a "Radio and TV Training Centre" was proposed in accordance with the minutes of discussion agreed between the Japanese survey teams and the Indonesian Steering Committee.

Considering that the major purpose of this report is to determine the scale of hardware to be constructed by the Japanese side through agreement with the Indonesian side, the scope of the software plan is limited to setting out software requirements which give large influence to the scale of hardware. Such specific matters are set out as follows

- (1) Training objectives
- (2) Goals to reach
- (3) Training scale
- (4) Framework and curriculum concept
- (5) Number of trainers
- (6) Number of staff
- (7) Minimum number of needed major facilities
- (8) Preliminary examination to detailed design
  - a) Taking up necessary modules
  - b) Procedures for developing curriculums and teaching materials

- c) Training staff development methods
- d) Organization of training centre
- e) Consideration of initial and operating expenses

### 3-2 Training Objectives

The "Guidelines" set out the following five items as the objectives of training to be performed by the Department of Information:\*

- (1) Development of quality, professional knowledge and capabilities of Department of Information personnel
- (2) Creation of unified patterns of thinking
- (3) Improvement and development of the methods for accomplishing work
- (4) Improvement of career prospects

The "Guidelines" positions the training centre to be constructed in Yogyakarta as a Basic Training Centre. Accordingly, "Basic Training" is one of the objectives. Furthermore, since the Indonesian side asserted in the meetings between the Steering Committee and the survey team that from now on broad-minded, versatile personnel who will be adaptable to almost all types of jobs and who will not be single-capability men should be

trained. This is very important and meets completely what we feel and insist constantly.

To summarize, the basic design of software is to be forwarded aiming at the acquiring of a "wide-range basic knowledge, skills, capabilities, and attitude necessary for future broadcasting."

\* Guidelines, page 13

### 3-3 Goals to Reach

Criteria for evaluating the degree of achievement of the above-mentioned objectives are required. Here, we agree with the "Guidelines" and have picked up the level of personnel sufficiently capable of working as "assistant operator\*" as the goal to reach. In other words, the goal of the training is "to furnish the personnel with thorough basic knowledge for the job they are to be engaged in and capabilities needed for accurately carrying out the applicable job under general supervision of his superior.

\* Guidelines, page 50

### 3-4 Training Scale

The most important items that determine the scale of training are the number of acceptable trainees and training duration. The "Guidelines" set out a total of 576 high school graduates (240 personnel in radio, 240 personnel in TV and 96 personnel in film) as the number of trainees to be accepted per year.\*1

Since the scope of this design does not include film, a total of 480 personnel are to be trained per year in this project.

As pointed out earlier on in this report, the source of this figure is not clear, however we have considered that training at least for some time after the commencement of service at the training centre will be performed for the number of trainees nearly equal to this figure from the following condition and thus we have accepted this figure as a basic input to the system. That is, 1) the number of trainees currently accepted for basic training performed at TVRI T/C and RRI T/C in Jakarta is nearly 500 (120 new employees plus about 290 in-service personnel at TVRI T/C and 100 in-service personnel at RRI T/C)\*2, which is nearly equal to this figure, 2) about a half of all personnel of TVRI (approx. 2700) and RRI (approx. 4000 in total) have not yet undergone basic training\*3 and 3) the number of personnel

who retire from TVRI and RRI will abruptly increase from 1990 or so.\*4

With regard to the capacity of the dormitory of trainees at a time of April 1984 when the Basic Training Centre in Yogyakarta will commence service, those concerned of TVRI T/C answered that the capacity will be about 300 trainees.\*5 Although it may appear practical to commence service for less than 300 trainees per year, it is not proper to employ a transitional figure for the ordinary condition of the input to the system. With regard to the training duration, which is another factor that determine the scale of training, we have to take into consideration the levels of trainees and training durations at the existing training centres. First, it is to be noted most trainees are graduates from local high schools as mentioned earlier and have considerably large difference in intellectual levels. The total number of TV receivers spread in Indonesia is about 1,900,000\*6, which is less than 2% of the population. Accordingly, it can be estimated that a considerably large number of people have no experience of watching TV in Indonesia. Since it is necessary to train this type of persons as "assistant operators" as mentioned earlier, a considerable patience will be required. It may be very difficult to upgrade these people to the required level within half a year.

TVRI T/C in Jakarta performs basic training for new employees (excluding maintenance technique fundamentals) in a period of 9 months.\*7 On the other hand, RRI T/C performs basic training in a period of 3 months. The reason why the training duration of RRI T/C is shorter than that of TVRI T/C may be partly because radio require less complicated techniques than TV and also partly because in-service personnel and not new employees are trained at RRI T/C. However, it is also true that many trainees and instructors seem to feel that the training duration of RRI T/C is somehow too short.\*8 On the other hand, the "Guidelines" set out a training duration of one year. However, this training duration includes one month for holidays and one month for the examination period, so that the net duration is 10 months. Considering that the intellectual level of trainees to enter the Basic Training Centre will be lower than new employees to the existing TVRI\*9 and considering the current training duration and contents of TVRI T/C, we have accepted the training duration specified in the "Guidelines" as an appropriate training duration.

\*1 Guidelines, page 119; this report, page 2-5

\*2 This report, pages 2-29 and 2-32

- \*3 Explanation was made by the Indonesian side in the meeting held during the "Preliminary Survey."
- \*4 This report, page 2-37 "Classification by Age"
- \*5 Refer to "Questionnaire" (Annexed Reference)
- \*6 "Preliminary Basic Design Survey Report," page 7
- \*7 Refer to "Questionnaire" (Annexed Reference)
- \*8 Refer to "Questionnaire" (Annexed Reference)
- \*9 For the classification of TVRI personnel by school education, refer to page 2-37 of this report. (Technical high school graduates are most dominant.)

### 3-5 Framework and Curriculum Concept

#### 3-5-1 Framework

We reviewed the framework\*1 of training indicated by the "Guidelines" while taking into consideration of the training objectives, the goal of training, the estimated levels of trainees, etc., and found the following.

- (1) We can understand the idea of not dividing trainees into professional fields from the beginning, but dividing them gradually in steps with the progress of training.
- (2) Accordingly, we can understand from our experience also that it is appropriate to divide the entire training duration into three phases: (1) Fundamental, 2) Practical and 3) Intensive)\*2; thus, give trainees general common knowledge in the first phase, give trainees opportunities for understanding what is actually going on in the field at a broadcasting station in the second phase, and give trainees professional knowledge and capabilities suitable for work after assignment in the third phase.
- (3) It is a problem to divide the course to be performed in the third phase into sequences.  
The "sequence," which is not defined in the "Guidelines," may be understood as the "working sequence" to go with the progress of program production. In the work sequences such as program preparation, production, post-production processing, and telecasting, personnel with applicable professional capabilities participate to progress in program production. However, we have experienced that the program director, for example, should



direct the entire progress of the program production by participating in all these work sequences and thus we can not understand the idea of classifying trainees into four vertical flows and then dividing them more minutely later. We consider that the division of trainees in the third phase should be made by function. Regarding the time allotment in the first and second (final) stages of the third phase, we determine that it is more appropriate to allot more time to the second (final) stage if it is desired for the trainees who have undergone the training to start work as able personnel immediately after their assignment.

- (4) Although the Indonesian side indicates that administration staff will be directly assigned to work in the field after completion of training in the first phase<sup>3</sup>, when and how they are classified as administration staff are not specified. We fear that unqualified personnel may automatically become administration staff to be assigned to work in the field without being given any opportunity for receiving further training. If this is the case, various undesirable influences may appear in the field. So, "filtering" should be performed properly and administration staff should undergo functional training for administration staff before assignment to work in the field. Of course, this functional training for administration staff need not be so long as those of other functions since general office work does not require the use of

complicated electronic equipment, except perhaps work related to computers.

In consideration of these points, we have set such framework as shown in Fig. 3-1.

an  
ur  
se  
it  
se  
o  
lat  
th  
Month

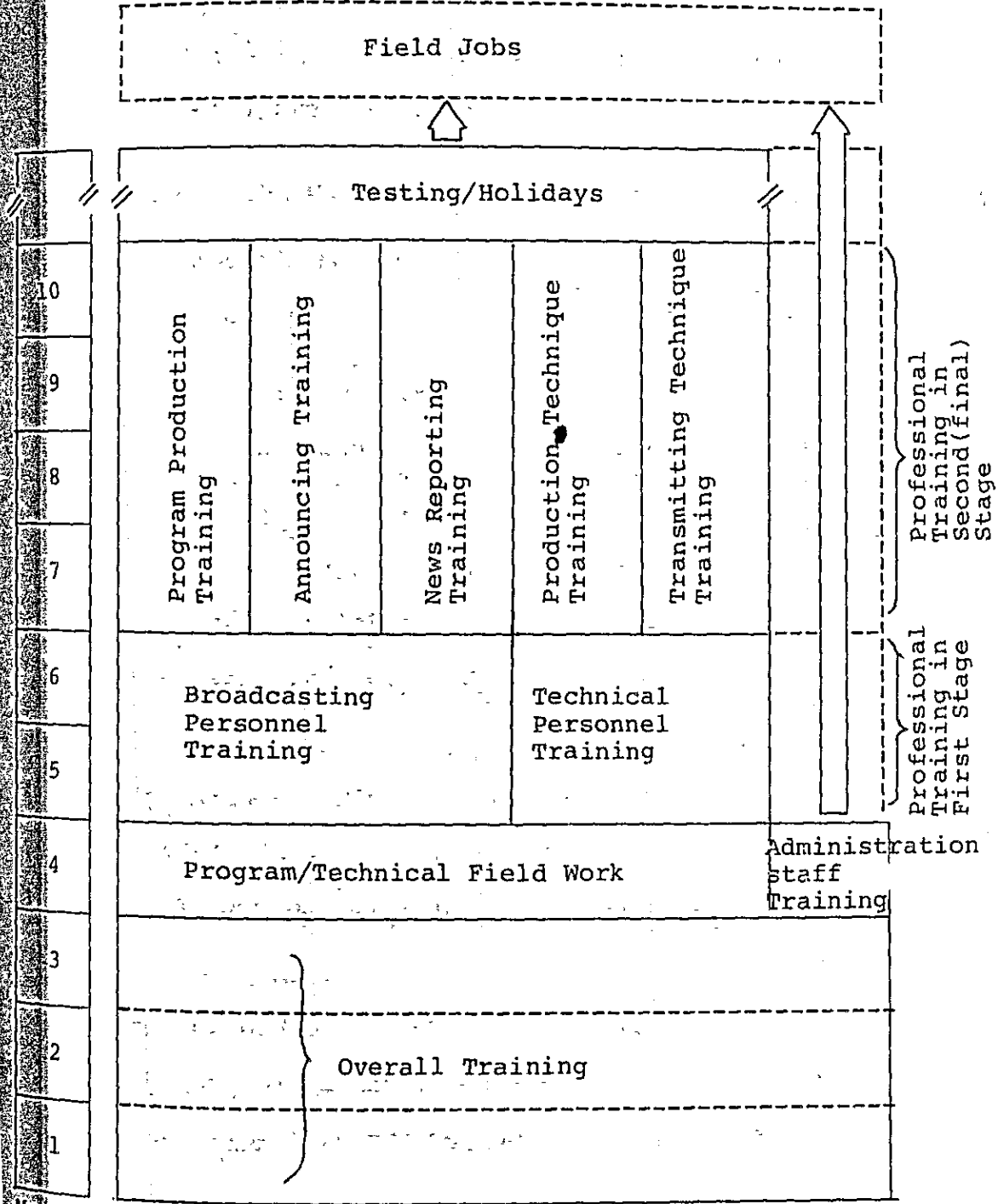


Fig. 3-1 Framework of Basic Training  
3 - 11

- \*1 Guidelines, page 78; this report, page 2-8
- \*2 The "Guidelines" use the term of "phase."
- \*3 "Brief Summary of the Guidelines and Supporting Information for the Development of the Basic Training Centre Radio-TV-Film in Yogyakarta" (Jakarta, November 1981), page 5.

### 3-5-2 Concept of Curriculum

Through our review of the "Guidelines," we find that we agree the "Guidelines" in the following points:

- 1) The idea of considering the curriculum as a concept based on the type of trainees, training objectives, requirements for training, contents of training, training method, teaching materials, and evaluation method
- 2) The idea of compiling the curriculum by using given spans and modules having certain logical contents and the idea of making a span equal to one week in principle.
- 3) The idea of dividing each module into blocks and specifying daily activities of the trainees and trainers by using the block as the unit.

- 4) Regarding the relationship between the three phases and contents of the framework of training, the functional training phase should be intended mainly for theoretical education and demonstration and the intensive training phase mainly for practical training in designing the curriculum.

We like to suggest for the "Guidelines" in the following points.

- 1) We are afraid about the degree of detailness of the module plan to be specified in the master plan to be finalized in April, 1982. It may be impractical to achieve such details as shown in the module list and sheets of the "Guidelines." Unless long-term business activity plan programming plan, and demanded man power plan for different functions and different stations are not clearly specified, even the term "module" can not be determined usable, as mentioned earlier in this report.\*<sup>1</sup>
- 2) The proposal of charging 4 blocks per day or 24 blocks per week to trainees with each block used as a component of the module being equal to 90 minutes\*<sup>2</sup> may somehow be too severe for trainees in consideration of the climate of the country, the ages of the trainees, and our experience having been acquired so far.

- 3) Likewise, the teaching hours of an instructor (15 hours per week or 90 minutes x 10 blocks)\*3 is rather severe from our experience,\*4 even for senior instructors.

Accordingly, we suggest to change the practical indices of the "Guidelines" as follows although we accept the concept of the "Guidelines" and the two principles in curriculum development\*5 (job-oriented & participant-oriented).

- 1) Number of modules to be covered by trainees excluding office personnel ..... 37

- Reasons:
- a) One year ..... 52 weeks
  - b) Period of testing ..... 4 weeks
  - c) Holidays and supplementary lessons\*6 ..... 5 weeks
  - d) Field practice ..... 4 weeks
  - e) Trips (to the training centre in Yogyakarta and to station field) ..... 2 weeks

Hence, we obtain:

$$a - (b+c+d+e) = 37 \text{ weeks}$$

- 2) Number of modules to be covered by office personnel ..... 16

- 3) "Lesson" should be provided as the lower-ranking concept of "module" with one lesson corresponding to 60 minutes.
- 4) Trainees should be taught five lessons per day and thus 30 lessons per week.
- 5) The breakdown of the 30 lessons should be: 22 lessons for vocational training, 6 lessons\*7 for general knowledge, and 2 lessons\*8 for physical exercise.

The allotment of modules to the entire training period is shown in Fig. 3-2.

10	Production Module Group (M = 17)	Announcing Module Group (M = 17)	News and Reporting Module Group (M = 17)	Production Engineering Module Group (M = 17)	Transmitting Engineering Module Group (M = 17)
9					
8					
7					
6	Broadcasting Personnel Training Module Group (M = 8)			Engineering Personnel Training Module Group (M = 8)	
5					
4	(Field Practice)				Office Adm. Training Module Group (M=4)
3	Basic Overall Training Module Group (M = 12)				
2					
1					

Month      Note:    M: Number of modules

Fig. 3-2 Module Groups and Their Modules

- \*1 This report, pages 2-21 and 2-22
- \*2 Guidelines, pages 79 and 85
- \*3 Guidelines, page 117
- \*4 Although training courses for foreigners at NHK are performed for 4.5 ~ 5 hours per day (Saturday off), many trainees appear fatigued in the latter part of the week. The actual time of AIBD Training seems to be three hours in the morning and two hours in the afternoon.
- \*5 Guidelines, page 70
- \*6 Although the Guidelines repeatedly specify the execution of testing, it is not proper if measures are not taken to recover those personnel who fail to pass the testing.
- \*7 It is generally said that such basic subjects as mathematics, physics, chemistry, language (mother), foreign language, Pancasila and the Constitution should be learned little by little continuously rather than being learned concentratively so as to raise the efficiency of learning. Accordingly, it is desirable to compile one or more than one of these six subjects into daily lessons.

\*8 The climate of this country is much more severe than that of Japan and, in addition, trainees will be young people having just finished high-school education, so that particular consideration should be taken for health. Sports may be effective for cultivating the spirit of observing rules in group activities, sympathy to others, and loyalty to the group that the trainee belongs to.

### 3-5-3 Outline of Each Module Group

The module groups mentioned above have the following natures and objectives:

Table 3-1 Natures and Objectives of Individual Module Groups

Module Group	Nature, Objectives, Etc.
Basic Overall Training Module Group	This module group corresponds to the "overall training" phase. Modules should be developed so as to cultivate the consciousness and responsibility of personnel to work as broadcasting men in the future and allow all trainees to understand the fundamentals common to all fields of work to be engaged in.



(Continued)

	<p>The modules to be provided should include: 1) one that facilitates smooth introduction from school life to vocational life, 2) one that allows the mission and responsibility of broadcasting service to be understood, and 3) one that causes trainees to look out for the program production processes.</p>
Broadcasting Personnel Training Module Group	<p>This module group corresponds to the "broadcasting personnel vocational training." Modules should be developed so as to provide common basic knowledge and techniques necessary for those expected to work as program director, announcer, reporter, cameraman, designer, effects man and editor in the future. As a result, more modules may be required in connection with the production of radio programs.</p>
Production Module Group	<p>This module group corresponds to "program production vocational training." Such modules that present professional knowledge for those expected to become program director, designer, effects man and editor and develop the practical vocational capabilities should be provided.</p>

(Continued)

<p>Announcing Module Group</p>	<p>This module group corresponds to the "announcing training." Such modules that allow those expected to become announcers in future to acquire necessary professional knowledge and techniques should be provided.</p>
<p>News Reporting Module Group</p>	<p>This module group corresponds to the "news reporting training." Such modules that allows those expected to become reporters and cameramen to acquire necessary professional knowledge and techniques should be developed.</p>
<p>Engineering Personnel Training Module Group</p>	<p>This module group corresponds to the "technical personnel training" intended for those expected to work in the technical fields of studio production, transmitting, operation, maintenance, etc. Such modules that allow trainees to acquire common basic knowledge and techniques necessary for work in the respective technical fields should be provided. Consequently, many modules may be related with radio technology.</p>

(continued)

<p>Production Engineering Module Group</p>	<p>This module group corresponds to the "production engineering training" intended for those personnel expected to work in the field of studio production, operation, maintenance, etc. Such modules that allow trainees to acquire professional knowledge and techniques systematically should be provided.</p>
<p>Transmitting Engineering Module Group</p>	<p>This module group corresponds to the "transmitting engineering training" intended for those expected to work in the field of transmitting technique at radio and TV broadcasting stations and relay stations. Such modules that allow trainees to acquire professional knowledge and technique should be provided. In consideration of work in this field, more emphasis should be put on practical training than in other module groups.</p>
<p>Office Administration Training Module Group</p>	<p>Such modules that allow trainees to acquire fundamental knowledge and techniques for clerical work.</p>

### 3-6 Number of Trainers

As mentioned earlier on in this report, qualitative approach is not achievable for the number of trainees for the time being, we have no choice but to follow quantitative approach only.\*1 On the other hand, since we are not ready to specify any new quantitative approach to substitute for the method specified in the "Guidelines," we have determined to adopt the method of the "Guidelines" as an appropriate one. By adopting the method, we have obtained those numbers of trainers as given in Table 3-2 for numbers of trainers required. However, it is to be noted that these numbers of trainers are rough values for use at this stage. So, it may become necessary for these values to be corrected when the qualifications of trainers are discussed in detail through the progress of module design.

Table 3-2 Expected Number of Trainers Required

(Total: 91 trainers)\*2

Type of Trainer	Number of Trainers
Senior Instructor	46
Assistant Instructor	30
General Subject Instructor	11
Physical Exercise Instructor	4

In estimating the above-mentioned number of trainers, equations given on pages 2-14 ~ 15 in this report were employed. For the parameters, the following values were employed.

- 1) Number of trainees to be taught per year: 480  
(240 trainees respectively in radio and TV media)
- 2) Number of blocks (= lessons) per module: 22
- 3) Number of trainees per group: 24  
(For assistant trainers expected to be in charge of practice, one group will consist of 8 trainees)
- 4) Number of blocks (lessons) to be taught by one trainer per week: 11  
(22 for assistant trainer)

\*1 This report, pages 2-15 ~ 16

\*2 If the standard for the calculation of the number of teachers (trainers) of Japanese public high schools is employed, the necessary number of teachers (trainers) is 42. However, considering that the contents of each module in training

at this training centre can not be so generalized or standardized as in school education, that the contents of each module should constantly be reviewed in consideration of everlasting technical innovation, that it is necessary to have practical training that requires much care at a high ratio in vocational training, this number of trainers (= 91) may not be said to be sufficient. We fear that it may be necessary to increase the number of trainers in future. The standard equation in the case of Japanese public high schools is: Number of teaching staff =  $\{(Number\ of\ classes\ \times\ 2) + 2\}$  where +2 corresponds to principal and vice-principal. In the case of this training centre, the number of classes can be taken as 20 by dividing the number of trainees per year (480) by 24 and by application of the above-mentioned equation, we obtain 42 for the number of required trainers, for reference's sake. It is also to be noted that a teacher in a Japanese public high school teaches 18"hours" (each hour corresponds to 50 minutes) per week.