

2-2-4 Procurement Plan

2-2-4-1 Work Principles and Procurement Principles

The Project will be implemented within the framework of Japan's grant aid scheme. Accordingly, the Project will only be implemented after the approval of project implementation by the Government of Japan and the signing of the Exchange of Notes (E/N) by the both governments. The basic matters and important points in relation to the implementation of the Project are described below.

(1) Implementing Agency

The government office responsible for the supervision of the Project and the implementing agency on the Indonesian side are The Ministry of State-Owned Enterprises (BUMN) and the PT. Televisi Republik Indonesia (TVRI) respectively.

The appointment of a person(s) to be responsible for the implementation of the Project by both the BUMN and the TVRI Makassar Station is necessary. As representatives of the Indonesian side, these persons will not only liaise and hold discussions with the Japanese consultant and Supplier but will also fully explain the project contents to related organizations and persons in Indonesia to enlist their cooperation.

(2) Consultant

A Japanese consultant will conclude a design and supervision agreement with the TVRI and will execute the detailed design (including the preparation of the tender documents) and procurement supervision (including assist in the tendering and procurement supervision) for the Project.

(3) Supplier

The supplier for the Project will be restricted to a Japanese trading firm and/or Japanese manufacturer. This supplier will be responsible for the delivery of equipment which meets the specifications set forth in the tender documents by the designated date based on its contract with the Indonesian side.

The supplier will also be responsible for post-project after service, including the supply of spare parts and the arrangement of repair work, etc., at the expense of the Indonesian side.

(4) Necessity for Dispatch of Engineers

As the equipment to be procured under the Project will require high skills for its installation as well as adjustment and testing after installation, the dispatch of engineers from Japan will be necessary to conduct quality management, technical guidance and schedule control at the time of such work.

In regard to the existing main control room, arrangements must be made to configure the circuitry to make it capable of switching over to ensure continued broadcasting by the TVRI Makassar Station during the work period. This switching over operation should be conducted with the minimum duration of off air. The dispatch of an expert engineer from Japan to oversee this switching over operation will be essential.

Other important aspects relating to the installation of the broadcasting equipment are power supply and air-conditioning to maintain the proper operation of the equipment. While the work related to power supply, air-conditioning, interiors and the removal of existing equipment will be conducted by the Indonesian side, proper understanding of the progress situation of such work by the Japanese side prior to the commencement of its own work will be necessary. For this reason, a relevant engineer will be dispatched from Japan to observe the progress of the work by the Indonesian side.

The technical staff of the TVRI Makassar Station have experience of operation and maintenance skills regarding broadcasting equipment and no special technical problems relating to equipment maintenance are anticipated. However, these staff are unfamiliar with the operation and maintenance of the latest digital equipment, necessitating technical guidance on operation and maintenance by a Japanese engineer(s) to ensure the smooth changing over from the existing to the new equipment to be procured under the Project. Technical guidance will also be conducted for programme processing methods.

2-2-4-2 Important Points for Work and Procurement

(1) Situation of Local Companies

While there are several building construction companies as well as electrical suppliers in Makassar where the TVRI Makassar Station is located, no local company has the advanced skills required for the installation of the broadcasting equipment to be provided under the Project. Accordingly, a Japanese engineer(s) will be dispatched at the time of the installation work to conduct technical guidance, quality management and schedule management.

(2) Use of Local Equipment and Materials

Equipment and materials will be procured locally as much as possible.

(3) Use of Local Supplier

As implied in (1) above, workers, transport vehicles and construction machinery can be secured locally with relative ease. Accordingly, a local Supplier will be employed to recruit the workers, etc., required for the equipment installation work under the Project.

2-2-4-3 Division of Procurement and Installation Work

Recent broadcasting equipment is digitalised and its compact design despite a high performance means a high level of operability. Such functional improvement is primarily because of progress in terms of integration, in turn made possible by the use of mini-computers and the advancement of electronic technologies. Meanwhile, it is vulnerable to a rise of the ambient temperature, etc., which can destabilise its functions.

Because of this delicate nature of the latest broadcasting equipment, work to ensure a stable power supply and to install an air-conditioning system is required. As a result of consultations with the Indonesian side, it has been agreed that the Indonesian side will conduct the following work.

- ① Installation of new outlet of power supply
- ② Renewal of the central air-conditioning system serving the broadcasting equipment rooms which is currently out of order
- ③ Interior work, including ceilings and partition walls
- ④ Removal of the existing equipment
- ⑤ Building reinforcement work required for the installation of lighting equipment for Studio No.2
- ⑥ Field Pick up Unit (FPU) installation work

In addition to the above, reinforcement of the power supply for the TVRI Makassar Station in future plan is also undertaken by the Indonesian side.

The procurement and installation of the broadcasting equipment will be conducted by the Japanese side while the removal of the existing equipment and renovation of the existing facilities will be conducted by the Indonesian side.

The division of the work between the Japanese side and the Indonesian side is shown in Table 2-2-6.

Table 2-2-6 Division of Work Between the Japanese and Indonesian Sides

Work Item	Responsible Side		Remarks
	Japan	Indonesia	
(1) Procurement of equipment (including spare parts)	○		
(2) Inland transportation of equipment	○		
(3) Installation of equipment	○		
(4) On-site testing and on-site adjustment after installation	○		
(5) Installation of new power supply equipment		○	To be completed prior to the shipment of the equipment procured by the Japanese side
(6) Renewal of central air-conditioning system serving the broadcasting equipment room which is currently out of order		○	-ditto-
(7) Interior work, including ceilings and partition walls		○	-ditto-
(8) Removal of existing equipment		○	-ditto-
(9) Building reinforcement work required for the installation of lighting equipment in Studio No.2		○	-ditto-
(10) FPU installation		○	To be installed by the Indonesian side after the equipment procured by the Japanese side.

Note: ○ denotes the side responsible for the work in question.

2-2-4-4 Work and Procurement Supervision Plan

In accordance with the grant aid scheme of the Government of Japan and based on the purposes of the basic design, the consultant will form a project team which will work consistently throughout the detailed design and work supervision stages to ensure the smooth implementation of the Project. At the work supervision stage, the consultant will dispatch engineers in line with the progress of the equipment installation work, on-site testing and on-site adjustment after the installation work, etc., to supervise the work conducted by the supplier in order to conduct schedule management, quality management, progress management and safety management. In addition, the consultant will conduct the pre-shipment inspection of the equipment manufactured in Japan to prevent the occurrence of any problems after the delivery of the equipment to the project site.

The major important points for work and procurement supervision are as follows.

(1) Schedule Management

The consultant will require that the supplier abide by the time limit for the work specified in the agreement and will conduct weekly as well as monthly work progress checks. If the completion of the work may be delayed, the consultant will inquire the supplier of the possible delay and the submission of implementation plan to rectify the situation.

Comparison of the planned schedule and actual progress will mainly be based on the following.

- ① Progress work (manufacturing progress at the plant(s) and shipment progress)
- ② Actually delivered equipment
- ③ Planned input and actual input of engineers, skilled workers and labourers

(2) Quality and Progress Management

Supervision of the quality and work progress will be conducted to ensure that the procured equipment meets the quality and completed amount specified in the agreement. If the check results suggest that the required quality and/or completed amount may not be achieved, the consultant will immediately demand that the supplier make the necessary correction, alteration or modification.

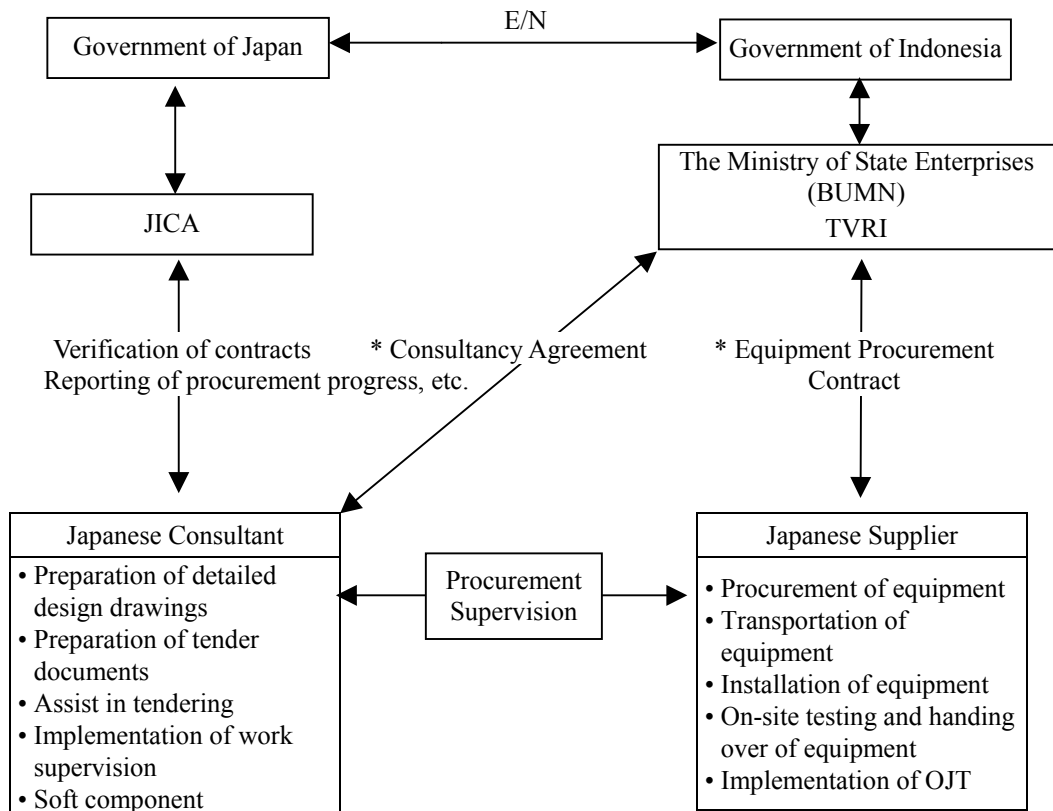
- ① Checking of the equipment specifications
- ② Checking of the shop drawings and specifications for the equipment
- ③ Witnessing of the plant inspection or checking of the plant inspection results
- ④ Checking of the installation manuals
- ⑤ Witnessing of the test operation and adjustment of the equipment and checking of the inspection manuals
- ⑥ Supervision of the on-site equipment installation work and witnessing of the test operation, adjustment and inspection

(3) Labour Management

Proper consultations with the person assigned by the supplier to be responsible for safety management must be conducted to prevent site accidents involving workers as well as damage or accidents involving third parties during the work period. The important points for on-site safety management are listed below.

- ① Establishment of safety management rules and appointment of a safety manager
- ② Establishment of travelling routes for work vehicles and transport machinery and the strict implementation of safe driving
- ③ Introduction of welfare measures for workers and the strict enforcement of day-off arrangements

Fig. 2-2-3 shows the relationship between the persons involved in the Project.



Note: Both the consultancy agreement and the Supplier contract must be validated by the Government of Japan

Fig. 2-2-3 Project Implementation Relationship

(4) Work Supervisors

The supplier will be responsible for the procurement, delivery and installation of equipment. The supplier must ensure that the local contractor properly understands the work schedule, quality and progress requirements and safety measures specified in the agreement and will dispatch engineers with experience of similar work overseas to the project site to provide guidance and education for the local contractor.

2-2-4-5 Quality Management Plan

The conformity of the procured equipment with the technical specifications in the tender document must be confirmed at the time of the pre-shipment plant inspection. At the on-site work stage, quality management must be conducted in accordance with the work management criteria specified in the work manual.

2-2-4-6 Procurement Plan

(1) Equipment Procurement Plan

As the equipment to be procured under the Project is not manufactured in Indonesia, it will be procured in Japan. Some broadcasting equipment may be procured from a third country (US or Europe) after strict assessment of the performance and price competitiveness. Such equipment shall be assembled by a Japanese manufacturer and given a comprehensive quality control and maintenance as a broadcasting system.

(2) Packing and Transportation Plan

The equipment to be procured under the Project will be packed for export in Japan and will be transported by sea to Port Makassar via Jakarta, followed by road transportation by truck to the TVRI Makassar Station, i.e. the site for its installation.

The immediate packing of all broadcasting equipment to be procured under the Project in a case after manufacture and testing for transportation to the project site is planned.

2-2-4-7 Implementation Schedule

The project implementation schedule shown in Fig. 2-2-4 is planned based on the timetable required by the grant aid scheme of the Government of Japan.

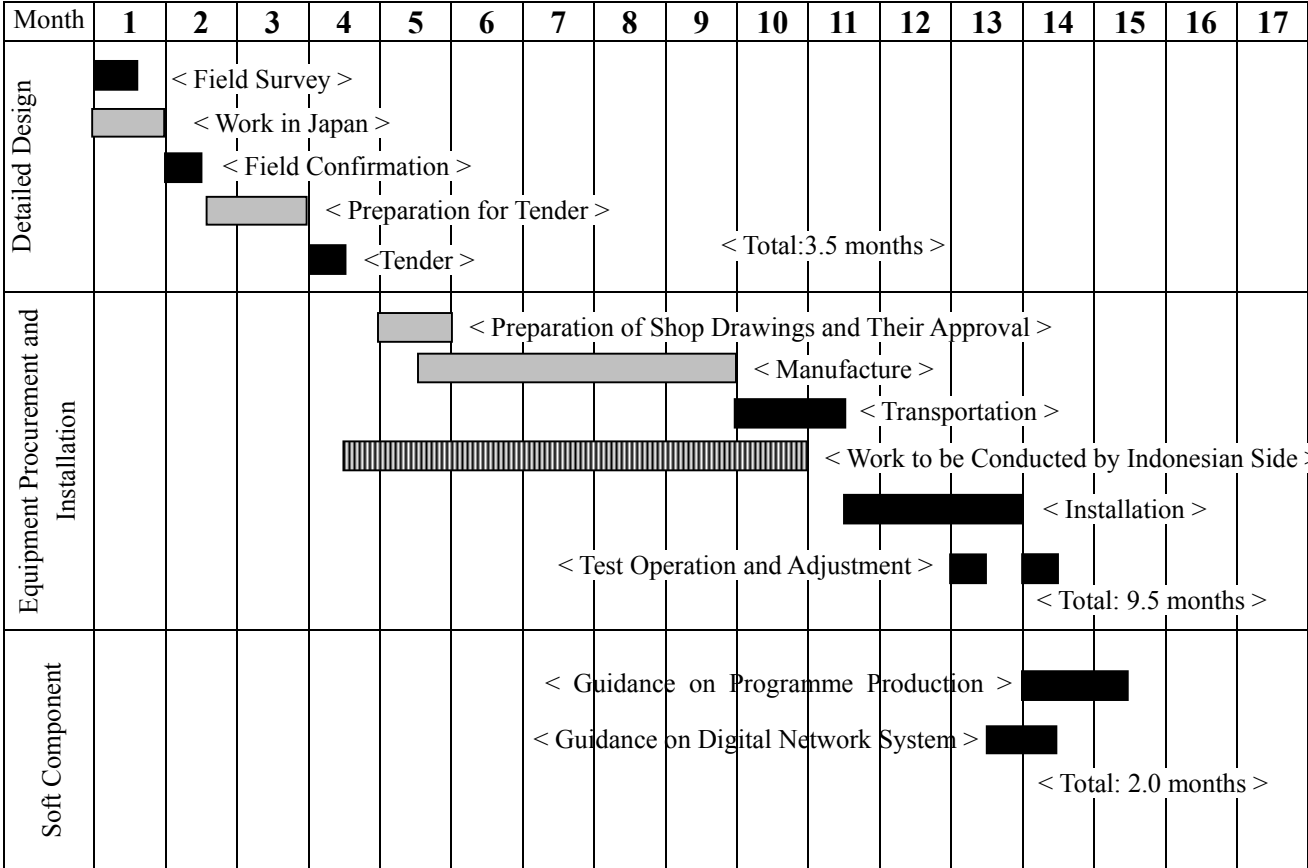


Fig. 2-2-4 Project Implementation Schedule

2-3 Obligations of Recipient Country

As part of the Project, the Indonesian side will be responsible for the following measures and work in addition to the work, etc., indicated in 2-2-4-3.

- (1) To provide information and data required for the implementation of the Project,
- (2) To install power distribution board and to withdraw the existing equipment before installation work to be done by the Japanese side.
- (3) To ensure all the expenses and prompt excursion for unloading, customs clearance at the port of disembarkation and internal transportation of the products for the Project,
- (4) To permit Japanese nationals to enter or stay in Indonesia in relation with the supply of products and services under the verified contract,

- (5) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in Indonesia with respect to the supply of the products and services under the verified contracts,
- (6) To bear a commission to a bank in Japan for opening bank account
- (7) To bear all the expenses, other than those covered by the Japanese Grant Aid, necessary for the implementation of the Project,
- (8) To appoint a project manager and active participation in the transfer of operation and maintenance techniques,
- (9) To proceed the necessary power cut during the equipment installation work,
- (10) To secure proper use and maintenance of the equipment procured under the Japanese Grant Aid.

2-4 Project Operation Plan

2-4-1 Operation and Maintenance Plan

(1) Implementation System

1) Equipment Maintenance Plan

In order for the TVRI Makassar Station to perform its role as a local broadcasting station, equipment procurement and renewal based on the planning and budget of the TVRI are necessary. Accordingly, the maintenance plan shown in Table 2-4-1 for the equipment to be procured under the Project takes the periodic renewal of such equipment into consideration.

According to this plan, such parts as DAT tapes and tape cleaning rollers, etc., will be replaced every year because of their rapid wear due to constant use. The heads of the cassette tape recorders and VTRs, etc., will be renewed every three years in view of their physical service life. The VTRs, editing control unit and other main equipment will be completely renewed after 10 years of service in view of the depreciation period of this equipment and technical innovations. In Japan, this type of equipment is usually replaced every six years. The renewal period for the TVRI Makassar Station is set at 10 years in consideration of the less frequent use at this local station.

Table 2-4-1 Equipment Maintenance Plan

Renewal Period	Subject Items
Every year	Video and sound recording tapes; some relay cables; batteries; some microphones
Every 3 years	Video and sound recording tapes; some relay cables; some mechanical parts; some lamps
After 10 years	VTRs; audio equipment; TV cameras

2) Routine Checks

The improved reliability and durability of electronic equipment due to technological innovations in recent years and the decrease of the number of parts have reduced the occurrence of equipment malfunctioning. Following this trend, the interval for equipment checking is becoming longer in Japan.

Nevertheless, routine and regular checks are essential to ensure the effective use of equipment for a long period of time.

The proper implementation of these checks is even more important for such organizations as the TVRI which cannot frequently renew equipment due to financial constraints. Minimum maintenance standards for routine and regular checks will, therefore, be formulated to create a system to prevent equipment break downs.

The routine and regular check items for the equipment procured under the Project and the measuring instruments/tools required for these checks are shown in Table 2-4-2.

Table 2-4-2 Equipment Check Items and Required Instruments/Tools

Type of Check	Check Items	Required Instruments/Tools
Routine/Daily Check	Visual inspection of various meters and breakdown indicators, etc., and confirmation of video and audio test recording	Video and audio monitors
	Visual check of connections	Tool set
Six Monthly Check (Characteristics Check)	Measuring of characteristics of video and audio equipment (frequency characteristics; S/N); bias rate; level diagramme	Video and audio signal testers and test tapes
	Measuring of power source voltage and other voltages	Oscilloscope and digital tester

2-4-2 Spare Parts Procurement Plan

In the case of the Project's implementation, the manufacturer's guarantee period for the equipment is assumed to be one year. Accordingly, the inclusion of only such consumables as tapes in the Project is planned. The Indonesian side must prepare the budget to procure the necessary additional spare parts to that these parts can be procured without fail. Table 2-4-3 shows a plan to procure consumables.

Table 2-4-3 Procurement Plan of Consumables

Item		Quantity				
		PC Room	Studio No.2	News Gathering	One to One Editing	Total
Consumables	Video Cassette Tapes	100		100		200
	Audio Cassette Tapes	50				50

2-5 Project Cost Estimate

2-5-1 Cost of the Project under the Grant

The amount of the cost for the Project under the grant aid scheme of the Government of Japan is JPY 459 million.

This cost estimate is provisional and would be further examined by the Government of Japan for the approval of the Grant.

Item	The amount of the cost	Note
Equipment cost	JPY 411 million	Including installation and transportation fee
Consultant fee	JPY 48 million	Including soft component fee
Total cost	JPY 459 million	

Note: Exchange rate between US Dollar and Japanese Yen (JPY) is US\$1=JPY 120.32

2-5-2 Undertakings by the Indonesian Side

- (1) Removal of the existing equipment: Rp74.0 million (approx. JPY1.1 m)
- (2) Temporary studio during replacement: Rp.76.0 million (approx. JPY1.0 m)
- (3) Electric power work (incl. earthing work): Rp.40.0 million (approx. JPY0.6 m)

(4) Renewal of air-conditioning equipment:	Rp.369.0 million (approx. JPY5.5 m)
(5) Interior construction of ceilings, walls, etc.,	Rp.34.0 million (approx. JPY0.5 m)
(6) Reinforcement of the building for lighting equipment for Studio No.2:	Rp.456.0 million (approx. JPY 6.8 m)
(7) Installation of FPU:	Rp.34.0 million (approx. JPY0.5m)
Total:	Rp1,074 million (approx. JPY16 m)

Note: The estimation mentioned above is required for the minimum cost of the Project.

2-6 Operation and Maintenance Cost

In order for the TVRI Makassar Station to be operated in good conditions, it is necessary to replace the equipment procured the Project on a periodic basis. An operation and maintenance plan needs to take into account the new and existing equipment as well as the periodic replacement of the equipment discussed in 2-4.

2-6-1 Preconditions

Assumptions for operation cost and revenue are as follows:

(1) Expenditure

An annual expenditure is estimated assuming that the equipment procured in the Project will be put in operation in 2005, and the replacement cost (approx. 200million Japanese Yen equivalent to 14 billion Rupiah)of the main parts expected to incur in 2015 (after 10 years) will be accumulated annually as savings (reserve fund for new equipment).

Other costs and estimation methods are as follows:

Operation Cost Item	Estimation Methods
Salary	Adopt the data of 2002.
Office supply equipment	Adopt an average of the last three-year data (2000-2002).
Maintenance expense (Studio Equipment)	Necessary cost estimated for equipment maintenance as described in Chapter 4. Overhaul every three years.
Maintenance expense (Buildings, vehicles, etc.,)	Adopt an average of the last three-year data (2000-2002).
Programme production expense	Same as above.
General expense	Same as above.
Transmitting expense	Same as above.

(2) Revenue

The operation revenue is estimated by adding commercial fee to be allocated by the TVRI headquarters to the compensation and assistance from private enterprises the TVRI Makassar receives for cooperation fee for producing programmes and event coverage fee from private enterprises and other institutions.

It is assumed that the revenue such as the event coverage and cooperation fee from private enterprises can kept at the same level as the year 2002. In addition, revenue from commercials and advertisements (CM fee) will be included according to estimation made by the TVRI headquarters as follows:

Item	Annual Amount	Estimation Methods
Event Coverage	Rp.471 million	Adopt actual revenue amount in 2003
Cooperation Fee	Rp.1,509 million	Same as the above
CM fee	Rp7,200 million (Rp.3,600 million in 2003 only)	TVRI headquarters estimated at Rp.400 billion from CM fee in 2004 and is planning to allocate Rp.12 billion (3% of total revenue) to the Makassar station. However It is judged that 60% of TVRI assumption will be allocated to the Makassar station in this estimate which is relatively conservative assumption. Moreover, a half of its estimate is deemed as revenue in 2003.

Note: Conversion rate between Japanese Yen and Rupiah is JPY 1=Rp.70.

(3) Subsidy from the Central and Provincial Government

The government subsidy is assumed as follows:

Government	Subsidy Amount (Rp million/year)	Remarks
Central government	Personnel salary (labor cost)	The entire amount will be subsidized by 2003, No more subsidize from 2004
South Sulawesi Province Government	Rp.1,000 million	Included from 2003 as it has been agreed with the Province Government.
City of Makassar	Rp.500 million	Included from 2003 as it has been agreed with the City.
27 Districts (in South Sulawesi Province)	Rp.50million/district x 27x50% = Rp.675 million	Included from 2004. Under negotiation with 27 District Governments and likely to be approved by a half number of the District Government.

2-6-2 Estimation Results

Based on the assumptions described above, the revenues and costs are estimated until 2015 when the equipment is planned for replacement and shown in Table 2-6-1. It shows that the fund can be secured for the replacement in 2015.

Among the revenue sources, the CM fee is expected to largely expand by the new management strategy of the TVRI.

However, since there has been no experience so far, the revenue estimate is rather conservative, about 60% of the revenue estimated by the TVRI Makassar Station. Despite the conservative estimate, the balance of revenues and expenditure is good.

Table 2-6-1 Annual Revenue and Expenditure Assumption for TVRI Makassar Station (Unit: Rp million)

			1	2	3	4	5	6	7	8	9	10	11	
	Item	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
A.	Revenue													
	Event Coverage	471	471	471	471	471	471	471	471	471	471	471	471	
	Cooperation	1,509	1,509	1,509	1,509	1,509	1,509	1,509	1,509	1,509	1,509	1,509	1,509	
	Advertisement	3,600	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	
	Sub Total	5,580	9,180	9,180	9,180	9,180	9,180	9,180	9,180	9,180	9,180	9,180	9,180	
B.	Expenditure													
	Personnel	5,335	5,335	5,335	5,335	5,335	5,335	5,335	5,335	5,335	5,335	5,335	5,335	
	Office Supply Expense	709	709	709	709	709	709	709	709	709	709	709	709	
	Maintenance Expense (Studio Equipment)	440	440	69	69	166	69	69	166	69	69	166	69	14,000
	Maintenance Expense (Building, Vehicle, etc.)	479	479	479	479	479	479	479	479	479	479	479	479	
	Broadcasting Expense	2,807	2,807	2,807	2,807	2,807	2,807	2,807	2,807	2,807	2,807	2,807	2,807	
	General Expense	121	121	121	121	121	121	121	121	121	121	121	121	
	Transmitting Expense	33	33	33	33	33	33	33	33	33	33	33	33	
	Sub Total	9,924	9,924	9,553	9,553	9,650	9,553	9,553	9,650	9,553	9,553	9,650	9,553	
C.	Balance (A-B)	-4,344	-744	-373	-373	-470	-373	-373	-470	-373	-373	-470	-373	
D.	Government Fund													
	State Government	5,335	0	0	0	0	0	0	0	0	0	0	0	
	Provincial Government	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	
	Makassar Municipality	500	500	500	500	500	500	500	500	500	500	500	500	
	District Government (27 Districts)	0	675	675	675	675	675	675	675	675	675	675	675	
	Sub Total	6,835	2,175	2,175	2,175	2,175	2,175	2,175	2,175	2,175	2,175	2,175	2,175	
E.	Balance (C-D)	2,491	1,431	1,802	1,802	1,705	1,802	1,802	1,705	1,802	1,802	1,705	1,802	
F.	Reserve Fund for New Equipment	0	0	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	1,400	
	Accumulated Reserve Fund	0	0		2,800	4,200	5,600	7,000	8,400	9,800	11,200	12,600	14,000	-14,000
G.	Balance (E-F)	2,491	1,431	402	402	305	402	402	305	402	402	305	402	

Exchange Rate : 1Japanese Yen=Rp.70、April 2003

2-7 Other Relevant Issues

(1) Necessity of Soft Component Introduction

Through the implementation of the Project, the existing analogue equipment at the TVRI Makassar Station will be replaced by new digital equipment. Although the staff of the TVRI Makassar Station are lack experience of public broadcasting using the latest system technologies, such as analogue/digital conversion and network data transmission using digital equipment.

Therefore, the provision of technical guidance for the staff of the TVRI Makassar Station on broadcasting equipment operating technologies (particularly digital networking technologies) required to change the broadcasting equipment from the existing analogue equipment to the newly procured digital equipment will be necessary.

(2) Outline of Activities

For this transfer of technologies, 1) one instructor to the digital network system guidance for 30 days and 2) two instructors to programme production technologies guidance for 45 days each are dispatched.

Some 20 minutes trial programme is produced by the TVRI Makassar staff under the guidance to be conducted by the Japanese.

Chapter 3

Project Evaluation and Recommendations

CHAPTER 3 PROJECT EVALUATION AND RECOMMENDATION

3-1 Project Effects

Current Situation and Problems	Improvement Measures Under the Project (Project Components)	Degree of Effects and Improvement with the Project
1. The advanced stage of deterioration of the existing equipment makes its urgent renewal necessary to establish a system to ensure reliable broadcasting.	Supply of the following range of equipment <ul style="list-style-type: none"> • Equipment for Studio No. 2 • Equipment for Continuity Studio (PC) • Editing equipment for programme-making • Equipment to produce news programmes • FPU (Field Pick up Unit) • Measurement Tools, etc., 	A reliable system will be established to continue the existing six hour evening broadcasting.
2. The existing equipment cannot broadcast morning programmes which existed in the past.	As above	Morning broadcasting (5:00–7:00) will be on air.
3. Because of the absence of private broadcasting stations in South Sulawesi Province, the TVRI Makassar Station is the only station capable of transmitting local visual information to central Indonesia. However, this situation will soon cease to exist with the further deterioration of the existing equipment.	As above	Information on the culture of South Sulawesi Province can be broadcast nationwide via the TVRI Jakarta Station.
4. While the TVRI plays the important role of conveying information to local areas as the sole public broadcasting body in Indonesia, the existing range of equipment cannot maintain the proper functioning of its local stations.	As above	The TVRI will be able to properly perform its roles as a public broadcasting body.
5. The TVRI Makassar Station does not have any accumulated know-how of digital equipment.	As above	The staff members of the TVRI Makassar Station will become familiar with the handling of digital equipment, making it possible to pass on their knowledge and skills.
6. The deterioration of the equipment has reduced the number of locally produced programmes, resulting in a decreasing frequency of recorded tapes to other local stations nearby.	As above	The status of the TVRI Makassar Station in eastern Indonesia will be greatly improved.

3-1-1 Direct Effects

(1) Extension of Broadcasting Hours of Locally Planned and Produced Programmes

The implementation of the Project will provide the TVRI Makassar Station with the latest broadcasting equipment. Locally specialized and produced programmes will be broadcast in eight hours a day. When morning programmes (5:00–7:00) which have been suspended will be revived in addition to the present broadcasting evening programmes (16:00-22:00).

(2) Increase of Number of Programmes With the Use of Digital Equipment

The implementation of the Project will increase the programme-making capacity of the TVRI Makassar Station compared to its current capacity based on analogue equipment. As a result, the number of locally produced programmes will increased together with improvement of the programme quality due to the use of digital equipment.

3-1-2 Indirect Effects

(1) Contribution to Socioeconomy in Eastern Indonesia

As the sole television programme-making station is located at the center of eastern Indonesia, the TVRI Makassar Station can contribute to educational promotion and cultural exchange in eastern Indonesia by increasing number of programmes with good quality to be broadcast.

(2) Swift Broadcasting of News Programmes

The implementation of the Project will make it possible to swiftly broadcast local news such as natural disasters, accidents, incidents and social events, etc., to local people.

3-2 Recommendations

It will be necessary for the Indonesian side to conduct the following to ensure the progress of the Project as planned.

(1) Removal of Existing Equipment

Removal of the existing analogue equipment prior to the installation of the new equipment will be necessary (in practice, such removal must be completed prior to the loading of the new equipment to the ship).

(2) Establishment of Temporary Studio During Switch-Over Period

Studio No. 1 should be temporarily revived during the installation period of the new equipment in Studio No. 2 so that broadcasting can continue without interruption.

(3) Power Supply Work

The work to supply power to the new equipment will be necessary.

(4) Renewal of Air-Conditioning System

Renewal of the central air-conditioning system which serves the broadcasting equipment room and which is currently out of order will be necessary.

(5) Interior Work

It will be necessary to conduct interior work, including a false ceiling and partition walls, in places where the new equipment will be installed.

(6) Reinforcement of Building for Installation of New Lighting Equipment

Reinforcement of the building must be conducted to enable the installation of the new lighting equipment in Studio No. 2.

(7) Installation of Field Pick up Unit (FPU)

A FPU must be installed at the tower.

(8) Soft Component

To assign capable counterparts to get new technology such as digital network system and program production technology under the technical guidance by the Japanese