NO.

BASIC DESIGN STUDY REPORT
ON
THE PROJECT FOR IMPROVEMENT OF MEDICAL CARE OF PUBLIC HOSPITALS IN WEST KALIMANTAN PROVINCE
IN
THE REPUBLIC OF INDONESIA

March 2005

JAPAN INTERNATIONAL COOPERATION AGENCY
FUJITA PLANNING CO., LTD.

GM
JR
05-029

PREFACE

In response to a request from the Government of Indonesia, the Government of Japan decided to conduct a basic design study on the Project for Improvement of Medical Care of Public Hospitals in West Kalimantan Province and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent to Indonesia a study team from October 7 to November 6, 2004.

The team held discussion with the officials concerned of the Government of Indonesia, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Indonesia in order to discuss a draft design, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

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

March 2005

Seiji Kojima
Vice-President
Japan International Cooperation Agency

Letter of Transmittal

We are pleased to submit to you the basic design study report on the Project for Improvement of Medical Care of Public Hospitals in West Kalimantan Province in the Republic of Indonesia.

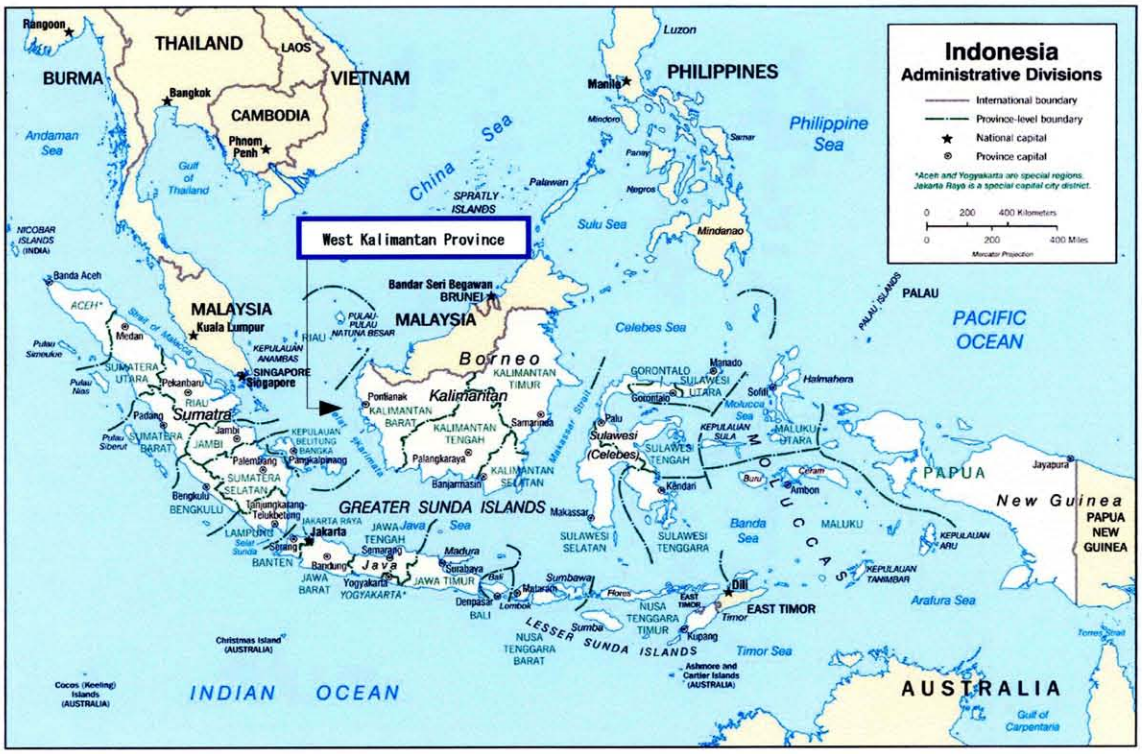
This study was conducted by Fujita Planning Co., Ltd., under a contract to JICA, during the period from October 2004 to March 2005. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Indonesia and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

Finally, we hope that this report will contribute to further promotion of the project.

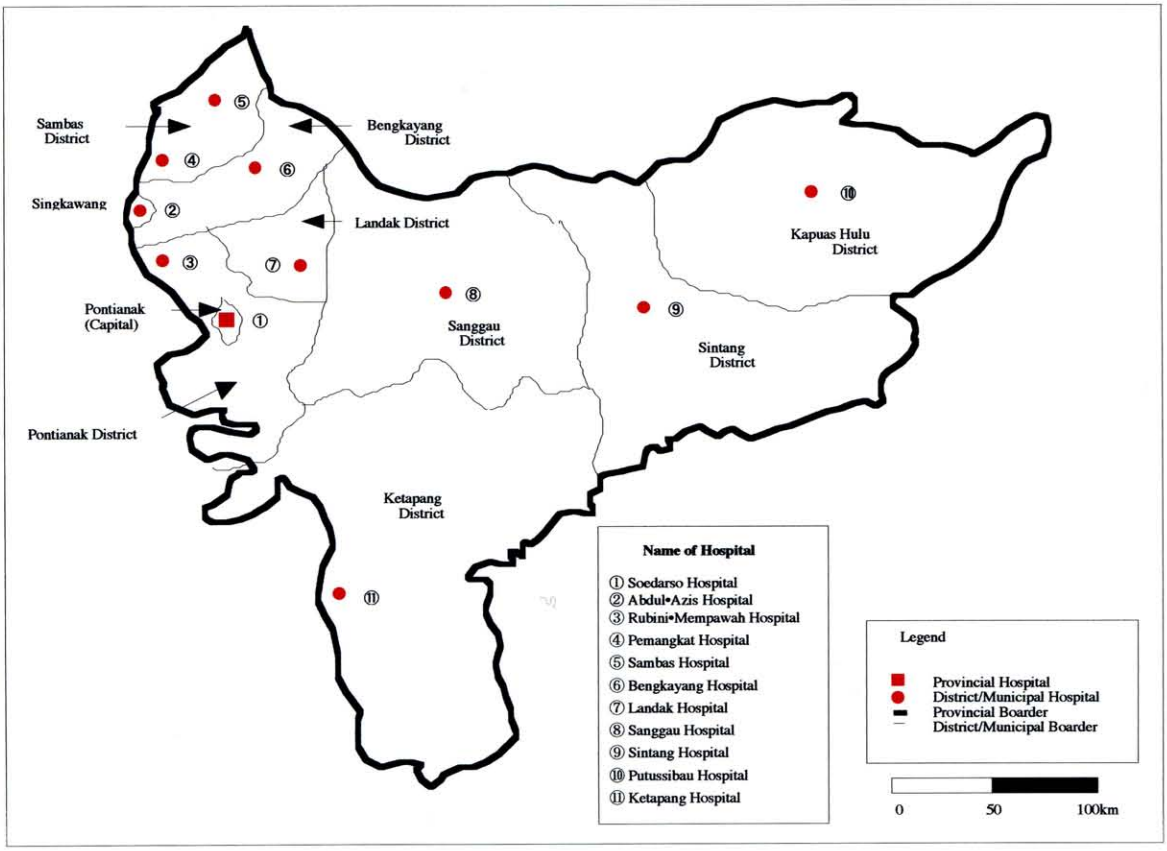
Very truly yours,

Tamotsu Nozaki
Project Manager
Basic Design Study Team on the Project for Improvement of Medical Care of Public Hospitals in West Kalimantan Province
Fujita Planning Co., Ltd.

Location Map of the Project Sites



West Kalimantan Province



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Abbreviations

EOC	Emergency Obstetrics Care
HDI	Human Development Index
IMF	International Monetary Fund
IMR	Infant Mortality Rate
MMR	Maternal Mortality Rate
MOH	Ministry of Health
UNFPA	United Nations Population Fund
WB	World Bank
ASKES*	Asuransi Kesehatan Indonesia
DK*	Departmen Kesehatan
JPKM*	Jaminan Pemeliharaan Kesehatan Masyarakat
POLINDES*	Pondok Bersalin Desa
POSYANDU*	Pos Pelayana Terpadu
PROPENAS*	Program Perbangunan Nasional
PUS TU*	Puskesmas Pembantu

(*Indonesian Language)

Others

Balai Kesehatan	Clinic
Dinas Kesehatan	Health Office
Propinsi	Province
Kabupaten	District
Kecamatan	Sub-District
Kota	Municipality
Puskesmas	Health Center
Rumah Sakit	Hospital
Rumah Bersalin	Maternity Hospital

Summary

Summary

The Republic of Indonesia ("Indonesia") is an island country consisting of about 17,000 islands large and small (of which about 6,000 are inhabited and the rest are uninhabited), scattered across a vast expanse of sea stretching 5,110 km east-west and 1,888 km north-south, with a land area of 1.9 million km^2 (about 5.08 times the land area of Japan) and a population of about 200 million. The main islands include Sumatra, Java, Kalimantan (Southern Borneo), Sulawesi (Celebes) and Irian Jaya. While the official language is Indonesian (Malay language family), more than 300 tribal languages and dialects are spoken in everyday situations, including Javanese, Sundanese and Arabic, varying from area to area. As for religion, about 87% of the population is Muslim, about 10% is Christian and other religions include Hindu and Buddhism.

The government of Indonesia is promoting organizational reform in the health sector in line with the "Healthy Indonesia 2010" plan (proclaimed in April 1999), which aims at switching the focus of medical care from treatment to preventive care and health promotion, and at enhancing and expanding the health service to make it high in quality, impartial and affordable for citizens. At the same time, the "PROPENAS 2000-2004" program announced in 2000 targets such development issues in the field of health care as 1) Education in health-related activities through community participation, 2) Improvement of hygiene and sanitation, 3) Measures to combat infectious diseases and to boost maternal and child health, 4) Promotion of health care activities including nutrition, 5) Improvement of health care facilities, 6) Human resources development for health care professionals, 7) Management of drugs and medicines, foods and hazardous materials and 8) Enhancement of health care policies and management, on the basis of the "Healthy Indonesia 2010" plan announced earlier for the purpose of promoting these measures. However, there still remains to be solved the problem of the significant differences between provinces or between urban and rural areas. Western Kalimantan Province, a target area of this Project, has poorer health conditions than anywhere else, partly due to the delay in economical development there. The province falls behind the national average in all of the major health indicators (statistics for 2002) such as average life expectancy (66.98 years in contrast to the national average of 68.23 years) and the infant mortality rate (51 per 1,000 live births in contrast to the national average of 44 per 1,000 live births). In particular, the maternal mortality rate (MMR) is 500 per 100,000 live births, far higher than the national average for Indonesia of 390 per 100,000 live births, mainly because a high percentage of babies are born through home delivery, a majority of them with the help of traditional midwives. In view of these circumstances, those concerned at the Ministry of Health, central government of the Indonesia and Health Office in West Kalimantan Province receiving after the economic crisis assistance from international assistance organizations such as the World Bank and

the United Nations Population Fund (UNFPA) and in cooperation with local NGOs, have been attempting to eliminate the discrepancies between different areas through, e.g., poverty alleviation for the poorest segment of population; enhancement of health care for the socially vulnerable, i.e., pregnant and parturient women and infants (in the perinatal period); and consideration of the elderly. Currently, there are indications that the primary health/medical services are beginning to improve. The secondary medical facilities such as district/municipal hospitals that are supposed to offer secondary health care, however, have not been sufficiently improved partly due to the financial difficulties of the government, which is hardly able to provide the necessary medical services yet. Under these circumstances, the Government of Indonesia requested the Government of Japan to extend grant aid to upgrade medical equipment at a total of eleven medical facilities, in order to improve the functionality of secondary-level medical facilities in Western Kalimantan Province.

In response to the request from the Indonesian Government, the Japanese Government dispatched a Basic Design Study Team to Indonesia during the period from October 7 to November 6 2004, to examine how the proposed assistance project would relate to the plan to improve medical services in the Western Kalimantan Province of Indonesia, to survey present activities and peripheral conditions of the target medical facilities, to check the content of the requested medical equipment and to study the current status of and problems facing the medical services provided in Western Kalimantan Province, in order to determine the necessity and appropriateness of the proposed project. After returning to Japan the Study Team analyzed the survey findings to create a Draft Basic Design Report, and finalized this report after visiting Indonesia again from January 10 to 18 2005, to present to the Indonesian authorities the outline of the Draft Basic Design Report.

The study confirmed that the requested Project will contribute to the improvement of hospital medical services, especially the emergency obstetric care particularly needed by the target medical facilities, and will also contribute to the development of a better and more appropriate medical care network with the primary medical facilities. The target medical facilities covered by this Project and the major medical equipment to be procured are listed in the tables given below.

Project Sites

Name of Hospital	Location
Soedarso Hospital	Pontianak City
Abdul Azis Hospital	Singkawang City
Rubini Mempawah Hospital	Pontianak District
Pemangkat Hospital	Sambas District
Sambas Hospital	Sambas District
Bengkayang Hospital	Bengkayang District
Landak Hospital	Landak District
Sanggau Hospital	Sanggau District
Sintang Hospital	Sintang District
Putussibau Hospital	Kapuas Hulu District
Ketapang Hospital	Ketapang District

Outline of the Planned Equipment

Soedarso Hospital Fluoroscopic X-ray Diagnostic Unit, General X-ray Unit, Electro-surgical Unit, Operating Light, Steam Sterilizer (Table Top), Patient Bed, etc.
District / Municipal Hospital (10 hospitals) Fluoroscopic X-ray Diagnostic Unit, General X-ray Unit, Mobile X-ray Unit, Ultrasound Scanner, Dental Chair Unit, Defibrillator, Delivery Table, Infant Incubator, Infant Warmer, Anesthesia Apparatus, Operating Table, Electro-surgical Unit, Patient Monitor, Infusion Pump, Suction Unit, Patient Bed, etc.

Additionally, the Soft Component Program, aimed both at building an information flow system used in relation to the operation and maintenance of the equipment and at enhancing organizational management through the creation of a management register, will be launched in order to promote more efficient use of the medical equipment procured.

The Project, if approved, will be implemented over a period of about 12 months, of which about four months will be spent on detailed design study including public tender, and about eight months will be spent on the procurement and installation of medical equipment, and the implementation of the Soft Component Program by the consultant. The total cost of this Project is estimated at four hundred thirty five (435) million yen (all of which will be borne by the Government of Japan).

The operating expenses of the target hospitals are covered by appropriations from the local governments responsible for them. Considering the fact that the purpose of most of the equipment to be procured by this Project will be to upgrade the existing aging equipment, and that the equipment to be newly introduced will be covered by appropriate budget measures that the local government has promised to take, it is calculated that the expenses for the operating and

maintenance of the newly-procured medical equipment can be secured. The actual maintenance work will continue to be carried out by the technicians of the medical facilities, with the use of external maintenance services. To reinforce the operating and maintenance capabilities of each target facility, the Project will include the Soft Component Program. Since the operations of this Project can be carried out by the health care professionals already in place, the completion of the Project is likely to result in an immediate invigoration of medical service activities. More specifically, implementation of this Project is expected to bring about the following effects and benefits:

(1) Enhancement of Emergency Obstetric Care (EOC) Services

By improving facility infrastructure and providing employment for medical professionals at the target hospitals, this Project is expected to bring about the following improvements in conditions relating to medical care:

- An increase in the number of outpatients and cesarean deliveries, and a decrease in the stillbirth rate
- A decrease in the hospital mortality rate (especially hospital infant mortality rate and hospital maternity mortality rate)

(2) Improvement in Local Residents' Access to Clinical/Medical Services

In Indonesia, which has a social security program (social safety net) that allows even the poorest segment of the population to receive clinical/medical services free of charge, this Project will allow local residents, including the poorest, to receive medical services, in particular, more appropriate EOC.

To improve the functioning of the medical system, medical activities as a whole, including the running of facilities, content of medical services provided by each clinical department, training of medical staff and coordination with other medical facilities, need to be examined. To achieve the optimum overall result, each function needs to be improved through the conscious efforts of the staff members of the target medical facilities. If the equipment to be provided by this Project is to be put to good use for the smooth and effective enhancement of the performance of each target facility, the Indonesian side needs to work in good faith on the following issues that are expected to arise:

(1) Operation and Maintenance of the Equipment

Daily inspection of medical equipment by the operators is essential if the equipment

provided by Japan is to be used to best effect. In the case of equipment that cannot be easily maintained or serviced by non-specialists, or equipment that requires regular replenishment of supplies, each medical facility should work together with the local agent of the equipment manufacturer in order to ensure the proper maintenance and the provision of supplies. While this Project plans to strengthen and support the operating and maintenance system of each medical facility through implementation of the Soft Component Program, it is important for each facility to designate and assign personnel who will conduct continuous supervision of the equipment management register and the operating manuals, in line with support based on the Soft Component Program.

(2) Raising of Awareness for Facility Operations

Due to progress in administrative decentralization, control of the budget and personnel management of hospitals has been transferred to the local governments. The personnel of the target hospitals need to work in close cooperation with the local governments and run each facility on their own initiative.

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Chapter 1 Backgroud of the Project

Chapter 1 Background of the Project

The government of Indonesia is promoting organizational reform in the health sector in line with the "Healthy Indonesia 2010" plan (proclaimed in April 1999), which aims at switching the focus of medical care from treatment to preventive care and health promotion, and at enhancing and expanding the health service to make it high in quality, impartial and affordable for citizens. At the same time, the "PROPENAS 2000-2004" program announced in 2000 targets such development issues in the field of health care as 1) Education in health-related activities through community participation, 2) Improvement of hygiene and sanitation, 3) Measures to combat infectious diseases and to boost maternal and child health, 4) Promotion of health care activities including nutrition, 5) Improvement of health care facilities, 6) Human resources development for health care professionals, 7) Management of drugs and medicines, foods and hazardous materials and 8) Enhancement of health care policies and management, on the basis of the "Healthy Indonesia 2010" plan announced earlier for the purpose of promoting these measures.

However, there still remains to be solved the problem of the significant differences between provinces or between urban and rural areas. Western Kalimantan Province, a target area of this Project, has poorer health conditions than anywhere else, partly due to the delay in economical development there. The province falls behind the national average in all of the major health indicators (statistics for 2002) such as average life expectancy (66.98 years in contrast to the national average of 68.23 years) and the infant mortality rate (51 per 1,000 births in contrast to the national average of 44 per 1,000 births). In particular, the maternal mortality rate (MMR) is 500 per 100,000 births, far higher than the national average for Indonesia of 390 per 100,000 births, mainly because a high percentage of babies are born through home delivery, a majority of them with the help of traditional midwives.

In view of these circumstances, those concerned at the Ministry of Health, central government of the Indonesia and Health Office in West Kalimantan Province receiving after the economic crisis assistance from international assistance organizations such as the World Bank and the United Nations Population Fund (UNFPA) and in cooperation with local NGOs, have been attempting to eliminate the discrepancies between different areas through, e.g., poverty alleviation for the poorest segment of population; enhancement of health care for the socially vulnerable, i.e., pregnant and parturient women and infants (in the perinatal period); and consideration of the elderly. Currently, there are indications that the primary medical services are beginning to improve. The secondary health/medical facilities such as district/municipal hospitals that are supposed to offer secondary health care services, however, have not been sufficiently improved partly due to the financial difficulties of the government, which is hardly able to provide the necessary medical services yet.

Under these circumstances, the Government of Indonesia requested the Government of Japan to extend grant aid to upgrade medical equipment at a total of eleven medical facilities, in order to improve the functionality of secondary-level health/medical facilities in West Kalimantan Province.

Table 1.1 Contents of the Request (Target Hospitals and Requested Equipment)

No.	Name of Hospital	Location	Equipment Items
1	Soedarso Hospital	Pontianak City	Delivery Table, Infant Incubator, Operating Table, Dental Chair Unit, Electric Generator, Fluoroscopic X-ray Diagnostic Unit, Fiberscope, Ambulances, etc.
2	Abdul・Azis Hospital	Singkawang City	
3	Rubini・Mempawah Hospital	Pontianak District	
4	Pemangkat Hospital	Sambas District	
5	Sambas Hospital	Sambas District	
6	Bengkayang Hospital	Bengkayang District	
7	Landak Hospital	Landak District	
8	Sanggau Hospital	Sanggau District	
9	Sintang Hospital	Sintang District	
10	Putussibau Hospital	Kapuas Hulu District	
11	Ketapang Hospital	Ketapang District	

Source: Grant Aid Proposal prepared by the Indonesian Government, December 2003

Chapter 2 Contents of the Project

Chapter 2　Contents of the Project

2-1　Basic Concept of the Project

Renovation of health/medical care facilities for qualified health/medical services to all residents living in West Kalimantan Province is explicitly incorporated in the Government's Health Development Plan, such as「Healthy Indonesia 2010」and 「Health Development Plan 2001-2005」in West Kalimantan Province. Although in primary level facilities, such as health centers (Puskesmas) were promoting the strict adherence getting with donor assistance, but in secondary level facilities have been failing to make proper appropriations for the maintenance and control of the equipment of each facility due to a lack of financial faculty.

Under these circumstances, this Project is aiming the improvement of function in the Emergency Obstetric Care (EOC) as target medical services in each hospital by providing basic medical equipment.

Implementation of this Project is expected to improve the EOC in each target hospital, it is likely produce results upgrade of clinical/medical care services for public hospitals in West kalimantan Province.

2-2　Basic Design of the Requested Japanese Assistance

2-2-1　Design Policy

Prior to formulating the basic design of the Project, the following policies were set up respecting surrounding conditions and related environment.

(1) Basic Policy

- The Japanese assistance should be in line with the national development plan of the Indonesian Government for the health sector.
- The Project should be manageable within the framework of the Grant Aid System of Japan.
- The equipment which will be procured under this Project should be provided basically for the clinical/medical departments related to the improvement of EOC, and extent to surrounding for EOC activities.
- If the installation of certain equipment items requires the Indonesian side to renovate the target hospitals and/or conduct the recruitment of personnel to be operating the equipment. Such items should be selected only to the extent that such renovation work and /or recruitment is

possible.

・ The equipment should be selected within the technical and financial capabilities of the Indonesian side to operate and maintain the equipment.

(2) Policy on Facility Infrastructures

Our field survey observed that the target hospitals had a relatively small voltage fluctuation within a range of around ±5%, but many suffered from frequent power failure. To counter the situation, we consider attaching a UPS to each Anesthesia Machine, Electro-surgical Unit, Infant Incubator, Infant Warmer, Cardiotocograph, Vacuum Extractor, and other types of equipment that are susceptible to power supply interruptions and surges.

(3) Policy on Using Instruction Manuals in Indonesian Language

Since most of the clinical/medical staff, including doctors, have difficulty reading English documents, all the equipment items, except for Surgical Instruments and other such minor devices, should be provided with instruction manuals written in Indonesian as well as in English. As for the X-ray Unit, Ultrasound Scanner, Anesthesia Machine, Defibrillator, Electro-surgical Unit, Electrocardiograph, Cardiotocograph, and Dental Unit, it would be sufficient to translate only the part of the manuals that are related to the operation, maintenance, and trouble-shooting of the equipment.

(4) Policy on Work Schedule

The implementation of this Project is estimated to take about 12 months. If the installation of certain equipment requires the suspension of medical activities at some hospitals, the work schedule should be so designed to minimize such interruption.

2-2-2 Basic Plan

(1) Overall Plan

The guideline of the equipment plan is upgrading the equipment items that are dilapidated and/or existing aging ones, if the equipment items should be required the installation/fixing works, such as X-ray Diagnostic Unit, Operating Light and Dental Chair Unit will be replaced the existing ones. The necessary utilities works (electricity, water supply and drainage, etc.) for the installation will be covered by the existing infrastructures.

The procuring equipment for this Project will be used to improve the EOC and its auxiliary clinical/medical services in the target hospitals.

(2) Equipment Plan

The contents of the equipment which will be planned for each clinical/medical department is as followings:

1) Out-Patient Department

The equipment list for this department consists of general and basic items used for examining and treating out patients. Our field survey found out that most of these items have not been replenished or renewed for 15 to 20 years and are therefore aged, broken, and/or deficient. This Project will renew or supplement Weighing Scales, Examination Lights, Medical Refrigerators, Steam Sterilizers, Electrocardiograph, Dental Units, Ultrasound Scanner, etc. according to the current status of personnel, medical activities, and existing equipment of each target hospital.

Some hospitals will also be provided with certain dental and ophthalmology instruments to renew existing ones that are severely deteriorated so that they will not have to refer dental/ophthalmology patients to other medial facilities as they have been doing quite frequently.

2) Emergency Department

All target sites suffer from insufficiency and/or deterioration of equipment necessary for simple surgical procedures. In addition to such instruments, this Project will also renew aged Stretchers, Examination Lights, Defibrillators, etc.

3) Obstetrics Department

Most of the basic instruments for assisting delivery, such as Doppler Fetus Detector, Examination Light, Vacuum Extractor, Delivery Table, and Cardiotocograph, have not been renewed or replenished for many years and are therefore aged, broken, and/or deficient. This Project will renew or supplement these items according to the current status of personnel, activities, and existing equipment of each target hospital.

4) Neonatal Department

This project will procure Infant Incubators, Infant Warmer, Transcutaneous (Bilirubin Meter), Phototherapy Unit, and other basic equipment that are necessary for caring neonates, including premature and low-weight babies.

5) Operation Theatre

Items to be procured mainly consist of equipment for caesarean section and other obstetric operations, which can also be used for other basic surgical procedures. This Project, based on the survey findings, will renew severely deteriorated equipment, including Operating Tables,

many of which cannot be properly adjusted for height or angle, Patient Monitors, Suction Units, Anesthesia Machines, Electrosurgical Units, Operating Lights, Infusion Pumps, and Surgical Instruments.

6) Intensive Care Unit (ICU)

ICU equipment, such as Bedside Monitor, Defibrillator, Infusion Pump, and Suction Unit, will be procured for renewing aged equipment at five (5) hospitals and providing additional equipment for Sanggau Hospital that is to be expanded.

7) Laboratory Department

Aged Blood Bank Refrigerator, Drying Oven, Steam Sterilizer, Centrifuge, Water Distilling Apparatus, Binocular Microscope, Spectrophotometer, etc. will be renewed.

8) X-ray Department

Aged X-ray Fluoroscopic X-ray Diagnostic Unit, Mobile X-ray Unit, Ultrasound Scanner, etc. will be renewed.

9) Other

Patient Beds will be procured for newly constructed buildings of Seodarso Hospital (Emergency Department) and Landak Hospital (Ward). Baby Cots of each hospital will be renewed.

The list of equipment to be procured by this project is shown in Table 2.1 below.

Table 2.1 List of Medical Equipment

No.	Clinical/Medical Department	Name of Equipment	Name of Hospital											Total Q'ty
			A	B	C	D	E	F	G	H	I	J	K	
1	Out-patient	Infant Scale		1	1	1	1		1		1		1	7
2		Weighing Scale for Adult		1	1	1	1		1		1		1	7
3		Examination Light		2	1	2	1		1					7
4		Medical Refrigerator		1		1	1							3
5		Steam Sterilizer, Table Top		2		2	1		1		1			7
6		Electrocardiograph		1		1			1		1	1	1	6
7		Ultrasound Scanner (A)			1		1	1	1	1	1	1	1	8
8		Dental Chair Unit				1					1		1	3
9		Instrument Set for Dental	2	1	1	1	1	1	1	1	1	1	1	12
10		Instrument Set for Ophthalmology		1										1
11	Emergency	Instrument Set for Minor Surgery	2	2	2	2	2	2	2	2	2	2	2	22
12		Stretcher		2		1	1		1					5
13		Examination Light		1		1	2				1		1	6
14		Suction Unit		1	1	1	1				1	1	1	7
15		Defibrillator			1						1			2
16		Pulse Oximeter			1			1	1		1	1		5
17	Obstetrics	Doppler Fetus Detector		1	1	1	1	1	1			1	1	8
18		Examination Light		2		2	1	1	1			1	1	9
19		Vacuum Extractor		1	1		1		1	1		1	1	7
20		Delivery Table		4		3	1		1			1	1	11
21		Cardiotocograph (CTG)		1		1		1	1			1	1	6
22	Neonate	Infant Incubator		1		1	1				1	1		5
23		Infant Warmer		1		1	1				1	1	1	6
24		Transcutaneous	1	1	1	1	1	1	1	1	1	1	1	11
25		Phototherapy Unit		1		1	1					1	1	5
26	Operation	Anesthesia Machine w. Ventilator				1	1			1	1	1		5
27		Patient Monitor		1	1	1		1	1			1	1	7
28		Suction Unit		1		1	1	1			1	1	1	7
29		Electro-surgical Unit	1	1	1	1			1	1	1	1		8
30		Instrument Set for Surgery	2	2	2	2	2	2	2	2	2	2	2	22
31		Steam Sterilizer, Table Top	1	1	1	1	1	1	1	1	1	1	1	11
32		Drying Oven	1	1	1		1	1	1		1	1	1	9
33		Infusion Pump			1					1	1	1	1	5
34		Syringe Pump			1					1	1	1	1	5
35		Operating Light, Mobile			1	1	1				1	1	1	6
36		Operating Light, Ceiling	1									1	1	3
37		Operating Table	1	2	1	1	1				1	1	1	9
38		Defibrillator			1						1	1	1	4
39	ICU	Bedside Monitor		1		1				2	1	1		6
40		Defibrillator				1				1	1			3
41		Infusion Pump								2	1			3
42		Syringe Pump								2	1			3
43		Suction Unit		1						2	1			4
44	Laboratory	Blood Bank Refrigerator	1	1	1	1	1	1	1	1	1	1	1	11
45		Drying Oven	1	1	1	1		1	1		1	1	1	9
46		Steam Sterilizer, Table Top		1		1	1							3
47		Steam Sterilizer, Vertical		1										1
48		Centrifuge, Table Top								1	1	1	1	4
49		Water Distilling Apparatus		1		1	1	1	1		1	1		7
50		Binocular Microscope	1	1	1	1	1				1	1	1	8
51		Centrifuge, Hematocrit	1		1						1	1		4
52		Spectrophotometer										1	1	2
53		Water Bath						1	1			1	1	4
54	Imaging (X-ray, Ultrasound)	X-ray Fluoroscopic Diagnostic Unit A	1											1
55		X-ray Fluoroscopic Diagnostic Unit B		1										1
56		General X-ray Diagnostic Unit	1								1	1	1	4
57		Mobile X-ray Diagnostic Unit		1	1	1	1			1	1	1	1	8
58		Ultrasound Scanner (B)				1							1	2
59	Other	Patient Bed	47						16					63
60		Baby Cot	10	3	2	3	2		2	2	2	2	2	30

A: Soedarso Hospital, B: Abdul・Azis Hospital, C: Rubini・Mempawah Hospital, D: Pemangkat Hospital,
E: Sambas Hospital, F: Bengkayang Hospital, G: Landak Hospital, H: Sanggau Hospital, I: Sintang Hospital,
J: Putussibau Hospital, K: Ketapang Hospital

Table 2.2 Specifications of Main Equipment Items

No.	Name of equipment	Qty.	Specifications / Outline
1	X-ray Fluoroscopic Diagnostic Unit (A)	1	Used especially for fluoroscopy and radiography of the digestive system. Renewal of aged equipment.
2	X-ray Fluoroscopic Diagnostic Unit (B)	1	Used especially for fluoroscopy and radiography of the digestive system. Renewal of aged equipment.
3	X-ray Diagnostic Unit	4	Used for taking X-ray pictures of the chest, etc. Renewal of aged equipment.
4	Mobile X-Ray Unit	8	Used for taking X-ray pictures of the chest, fractured bones, etc.
5	Ultrasound Apparatus (A)	8	Used for examining pregnant and parturient women to check the development of fetus, gestation weeks, abnormal pregnancy, imminent abortion, etc.
6	Ultrasound Apparatus (B)	2	Used for examining pregnant and parturient women to check the development of fetus, gestation weeks, abnormal pregnancy, imminent abortion, etc.
7	Anesthesia Machine	5	Used for anesthetizing patients undergoing surgery. Renewal of aged equipment.
8	Patient Monitor	7	Used for managing the vital signs (electrocardiograph, pulse wave, blood pressure, SpO2, etc.) of patients during surgery.
9	Bedside Monitor	6	Used for managing the vital signs (electrocardiograph, pulse wave, blood pressure, SpO2, etc.) of patients after surgery.
10	Electrosurgical Unit	8	Used in surgery for dissection, homeostasis, and blood coagulation. Renewal of aged equipment.
11	Instrument Set for Surgery	22	Consists of epidural anesthesia set, perineal set, caesarean set, appendicitis set, and hysterectomy set
12	Dental Unit	3	Used for dental examination and treatment of decayed teeth, etc. Renewal of aged equipment. Promotion of dental health, as well as healthy diet, is important especially for pregnant women.

2-2-3 Implementaion Plan

2-2-3-1 Implementation Policy

(1) Standard Implementing Procedure of the Grant Aid Project

Based on this report, related governmental agencies of Japan reviews the contents of this proposed Project, and, following the approval of the Japanese Cabinet, the Exchange of Note (E/N) will be officially conducted by and between the governments of Japan and Indonesia under the framework of the Grant Aid system of the Japanese government. In accordance with the E/N, the consultant and the equipment supplier of this Project will conclude agreement/contract with the government of Indonesia, then the Grant Aid Project will be implemented. The above-mentioned agreement/contract are to be approved by the Japanese government.

(2) Project Implementation System

This project will be implemented under the supervision of the Ministry of Health (MOH), and the Health Office of West Kalimantan Province. The Directorate General for Medical Care of the MOH will be the party to the Design/Supervision Contract, Equipment Procurement Contract, Banking Arrangement (B/A), and other such agreements to be concluded for this Project. The

Health Office of West Kalimantan Province will be in charge of arranging discussions and coordinating technical details and other matters concerning specific contents of the Project.

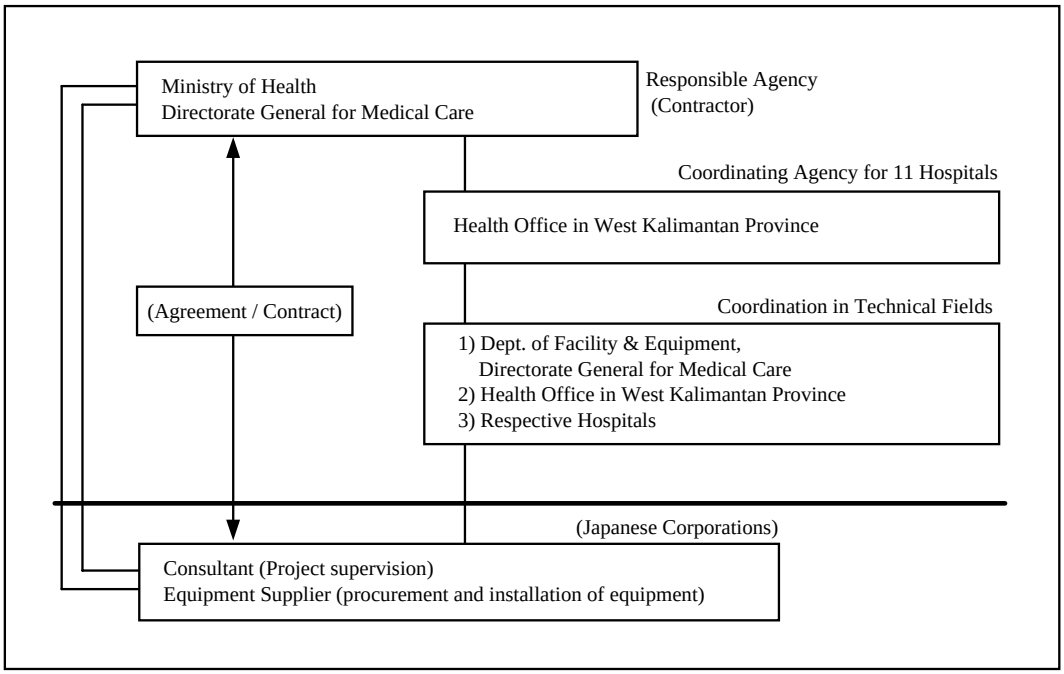

Figure 2.1 Project Implementing System

(3) Consultant

Following the signing of the E/N, the MOH shall conclude a consultancy agreement with the Japanese consultant firm, which participated in the Basic Design Study, with regard to the Detail Design (including tender-related works) and the Supervision of the procurement/installation. Said agreement is subject to verify of the Japanese government. For the smooth implementation of the Project, it is important to conclude the agreement immediately after the signing of the E/N. Upon conclusion of the agreement and Japanese government verifies the said agreement, the consultant will immediately start services based on this Basic Design Study Report with the MOH and related authorities concerned, then, prepare tender documents, obtain the approval, conduct the public tender, and supervise the procurement/installation works following to the scope of works under the tender conditions.

(4) Equipment Supplier

The equipment supplier to procure and install the equipment for the Project shall be selected through public tender. As a rule for the tender, the bidder offering the lowest price shall be successful bidder. The equipment supplier will then conclude the supply contract with the successful bidder of the equipment and obtain the verification of the Japanese government. The

supplier shall complete required works within the period specified in the contract, and handover the equipment to the MOH after conducting final inspection at the each target hospital.

2-2-3-2 Implementation Conditions

In implementing the Project, special attention should be paid to the following points:

(1) To minimize the Interruption of Clinical Services during Installation Period

Because the hospitals covered by the Project need to continue their regular clinical services during the installation period, the period in which the services are interrupted must be minimized. In order to minimize the interruption, the procurement process of the equipment should be strictly supervised, and the installation and inspection schedule should be formulated through discussion in advance and strictly observed with those related to the target hospitals. In addition, certain measures should be taken to ensure the safety of patients and medical staff at each installation site.

(2) Inland Transportation Routes in Indonesia

Although the target hospitals are located across the West Kalimantan Province, the equipment will undergo customs clearance at Jakarta Port and then unloaded at Pontianak Port, where the equipment transported to the respective hospitals by container truck. However, use of pickup trucks may be necessary for transporting equipment to such remote areas as Putussibau and Ketapang that are situated in remote areas beyond Pontianak, as the access roads to those areas may be too narrow for large trucks.

2-2-3-3 Scope of Works

The Project will be implemented under the cooperation of the governments of Indonesia and Japan. The works to be borne by both parties are as follows.

(1) Works to be carried out by the Government of Japan

- execute the procurement of the equipment on the Project,
- transport the equipment to the respective hospitals, which includes marine and inland transportation in Indonesia,
- install and set up the equipment, and
- perform the test run, give instructions for operation and maintenance and do final inspection for all equipment.

(2) Works to be carried out by the Government of Indonesia

- present data, documents, and other information necessary for the installation and set up of the equipment,
- remove old equipment and prepare the rooms to which the new equipment is to be installed,
- prepare facility infrastructures, such as electricity, water supply/drainage, in the sites where the new equipment will be installed,
- provide places to unload the equipment,
- temporary storage spaces for the equipment until the installation,
- secure delivery routes for the equipment
- complete the extension and renovation work for the buildings.

2-2-3-4 Consultant Supervision

Based on the Japanese Grand Aid scheme, the Japanese consultant shall conclude the consultancy agreement with the MOH, according to which the consultant will render Detailed Design (including tender-related works) and perform procurement supervisory services. The purpose of consultant supervision is to make certain that the equipment supplier selected through public tender is properly carrying out its assigned obligations according to the contract concluded with the MOH and to give guidance and make necessary adjustments from an objective viewpoint to ensure proper execution. The supervisory work consists of the following services.

(1) Assistance with Tender Procedure and Contracting

To select a Japanese trading company to take charge of the equipment procurement/installation, the consultant will prepare tender documents, announce the tender publicly, distribute the tender documents to bidders, accept and evaluate tenders offered, and give advice with regard to the contract to be concluded between the MOH and the selected supplier.

(2) Instructions, Advice, and Coordination for the Supplier

The consultant will examine the procurement/installation plan and give instructions and advice to the supplier to make certain adjustments if necessary.

(3) Inspection and Approval of Related Documents

The consultant will examine the equipment procurement/installation schedule and its management structure by staff concerned, technical documents related to the equipment, and other necessary documents to be submitted from the supplier, give advice as necessary, and approve the documents.

(4) Report on the Progress of the Work

The consultant will monitors the progress of actual work against the proposed plan, and report to the related parties in Japan and Indonesia.

(5) Inspection and Testing upon Completion

Upon completion of the work, the consultant will attend the on site inspection and test-run of the equipment in order to confirm that the equipment is consistent with provisions of the contract. Final inspection report will be submitted to authorities concerned on the Indonesian side.

(6) Training in Operation and Maintenance of the Equipment

Equipment to be procured in the Project requires basic maintenance and operation skills. It will be necessary to train the clinical staff and maintenance staff in operation and troubleshooting of the equipment during the period of installation, adjustment, and test running. The consultant will give necessary instructions for the training program.

In providing the above-mentioned services, the consultant will organize a team of three (3) engineers consisting of a chief engineer and two (2) equipment planners to supervise procurement works in Japan and Indonesia.

2-2-3-5 Procurement Plan

In procuring the equipment for the Project, the following points should be noted:

(1) Guidelines for Origin of the Equipment

The equipment for this Project will be procured from Japan and Indonesia, as well as certain third countries. As Indonesian products Patient Beds, and as the third-country products Electrocardiographs, Patient Monitors, Cardiotocographs, Electro-surgical Units, and Anesthesia Machines will be considered for the sustainable operation and maintenance of the equipment at target hospitals as well as faire competition on the public tender.

(2) Transportation Period

It is estimated to take a total of about 35 to 40 days to transport the equipment. It will take 20 to 25 days to transport the items to be procured from Japan and third countries, and additional 20 days or so for customs clearance procedure and inland transportation.

2-2-3-6 Implementation Schedule

After the signing of the E/N by both governments, the Project will be implemented in the

following two (2) stages; tender and tender-related works and procurement and installation of the equipment.

(1) Tender and Tender-related Works

After signing of the consultancy agreement between the MOH and the consultant, and after verification of the said agreement by the government of Japan, the preparation of tender and tender-related works will start. Tender and tender-related works include final confirmation of the technical specifications of the equipment and preparation of the instruction to tenderer(s). This set of documents needs to be approved by the Indonesian side. Then, the consultant will announce applicants, hold the tender, evaluate the submitted documents from applicants, nominate the winner and help to conclude the supply contract between the MOH and the supplier. This stage takes about four (4) months.

(2) Procurement and Installation of Equipment

After the Japanese government verifies the supply contract between the MOH and the equipment supplier, the supplier starts procuring the equipment in compliance with the contract documents. The works related to the equipment procurement, transportation and installation in the respective hospitals takes about eight (8) months.

Based on the above, the work process after the signing of the E/N is outlined in Figure 2.2 below:

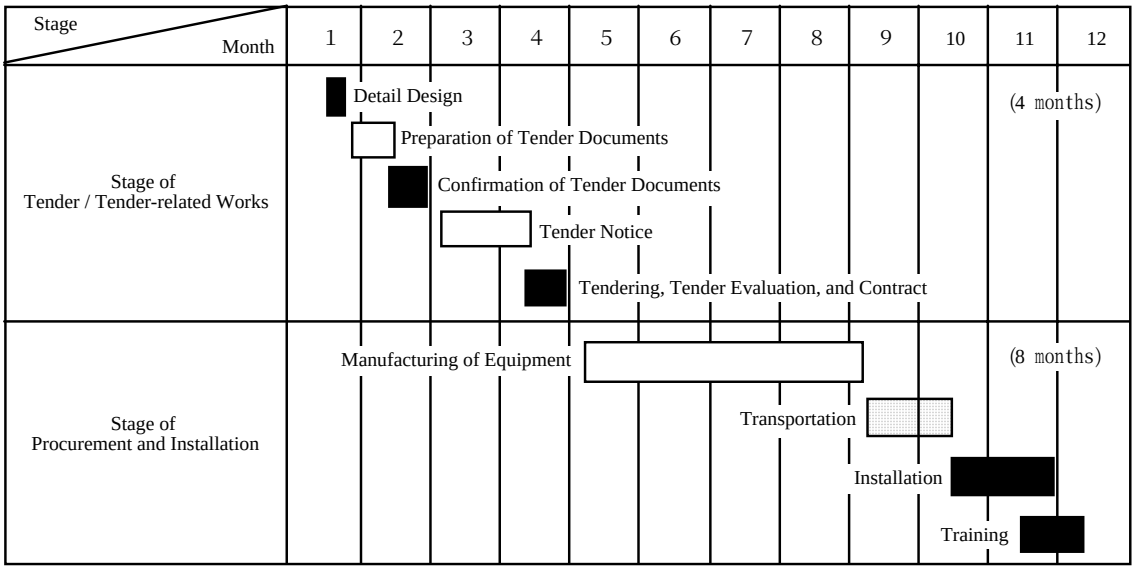

Figure 2.2 Project Implementation Schedule

2-3 Obligations of the Government of Indonesia

2-3-1 Renovation Work for Soedarso Hospital

Under the Project implementation, Soedarso Hospital is required to complete the renovation works within the year of 2005.

2-3-2 Other Obligations

Other obligations of the government of Indonesia in relation to the implementation of the Project are as follows:

- to provide the necessary information and data for the Project,
- to provide support for the supplier, such as prompt customs clearance of the equipment under the Project at ports of disembarkation in Indonesia,
- to exempt Japanese nationals who are staying in Indonesia for providing services in connection to the implementation of the Project, from customs duties, internal taxes and fiscal levies which may be imposed in Indonesia,
- to accord necessary security and protection to Japanese nationals entering or staying in Indonesia for the purpose of providing services and to their equipment brought in for the implementation of the Project,
- to conduct the Banking Arrangement (B/A), and to pay commissions associated with the issuance of the Authorization to Pay (A/P),
- to allocate the personnel/budget required for the effective implementation of this Project (including operation and maintenance costs of equipment procured using Grant Aid),
- to bear all other expenses except covered by Japan, associated with the implementation of the Project.

2-4 Project Operation Plan

The responsible agency for this Project is the Directorate General for Medical Care of the MOH and Health Office of West Kalimantan Province. Also, each hospital will carry out the hospital operations under the jurisdiction of their local government.

The basic allocation of the clinical/medical staff at the target hospitals are measured as prioritized issues. However, as described in the section 2-6, Soft Component Program, the target hospitals do not have an established chain of command to process information related to equipment operation and maintenance, such as the procurement of consumables and repair works.

Establishment of an operation/maintenance system is urgently needed to coordinate effects with external organizations and to systematically control various documents, especially operation manuals, related to the equipment to be procured by the Project.

2-5 Cost Estimation of the Project

2-5-1 Cost Estimation of the Project

The cost estimation of the Project is calculated as following table. The estimated cost of the Japanese assistance (Table 2.3) is provisional and would be further examined by the Government of Japan for the ceiling amount shown on the E/N.

Table 2.3 Estimated Cost of the Japanese Assistance

Total Estimated Cost: Approx. 435.55 Million Yen

Name of Hospital	Department	Estimated Costs (Million Yen)	
1. Soedarso Hospital	Imaging Department (X-ray & Ultrasound)	33.46	47.74
	Operation Theatre	7.85	
	Emergency, Obstetrics, Neonate, and others	6.43	
2. Abdul・Azis Hospital	Imaging Department (X-ray & Ultrasound)	44.19	66.50
	Operation Theatre	5.79	
	Emergency, Obstetrics, Neonate, and others	16.52	
3. Rubini・Mempawah Hospital	Imaging Department (X-ray & Ultrasound)	12.09	25.63
	Operation Theatre	5.93	
	Emergency, Obstetrics, Neonate, and others	7.61	
4. Pemangkat Hospital	Imaging Department (X-ray & Ultrasound)	10.87	37.46
	Operation Theatre	9.12	
	Emergency, Obstetrics, Neonate, and others	17.47	
5. Sambas Hospital	Imaging Department (X-ray & Ultrasound)	12.09	26.69
	Operation Theatre	5.76	
	Emergency, Obstetrics, Neonate, and others	8.84	
6. Bengkayag Hospital	Imaging Department (X-ray & Ultrasound)	6.28	14.37
	Operation Theatre	3.32	
	Emergency, Obstetrics, Neonate, and others	4.77	
7. Landak Hospital	Imaging Department (X-ray & Ultrasound)	6.28	19.07
	Operation Theatre	4.19	
	Emergency, Obstetrics, Neonate, and others	7.88	
8. Sanggau Hospital	Imaging Department (X-ray & Ultrasound)	12.09	28.93
	Operation Theatre	6.33	
	Emergency, Obstetrics, Neonate, and others	10.51	
9. Sintang Hospital	Imaging Department (X-ray & Ultrasound)	21.12	45.92
	Operation Theatre	7.35	
	Emergency, Obstetrics, Neonate, and others	17.45	
10. Putussibau Hospital	Imaging Department (X-ray & Ultrasound)	21.15	45.72
	Operation Theatre	9.75	
	Emergency, Obstetrics, Neonate, and others	14.82	
11. Ketapang Hospital	Imaging Department (X-ray & Ultrasound)	26.23	45.04
	Operation Theatre	4.96	
	Emergency, Obstetrics, Neonate, and others	13.85	
Consultants' Supervision (Detailed Design, Supervision for Procurement & Installation, and Operation & Management Guidance for Equipment to be done by the Soft Component Program)			32.48

Currency exchange rate: 1 Indonesian Rupia = 0.012 Japanese Yen

Condition of the Estimation

Date of estimation : February 2005

Currency exchange rate : 1US$=106.87 Japanese Yen, 1Rp.=0.012 Japanese Yen

Duration of Project Implementation : Approx. 12 months

Other : This Japanese assistance will be implemented according to the Japanese Grant Aid Sysem.

2-5-2 Financial Feasibility on the Target Hospitals

Since some of the equipment items to be procured by this Project will be additional or

supplemental to the existing equipment, whether or not they will be able to cover their own expenses needs to be examined. Table 2.4 shows the estimated annual operational costs of main equipment items to be procured by this Project. The estimate cost for all of the target hospitals is approximately 18 million Japanese yen. However, operational expenses for newly introduced and planned for additionally, or in other words the net increase in operational expenses for all target hospitals, is estimated to be roughly 5 million Japanese yen.

Table 2.4 Estimated Annual Running Cost of Main Equipment (unit: Indonesian Rupia)

Name of Hospital	Running Costs				Total (J.Yen)	
	Consumables		Spare Parts			
1. Soedarso		45,000,000		60,000,000		105,000,000
Hospital	New/Add.	-	New/Add.	-	Newly/Add.	-
2. Abdul・Azis		73,275,000		85,875,000		159,150,000
Hospital	New/Add.	-	New/Add.	-	Newly/Add.	-
3. Rubini・Mempawah		35,850,000		55,875,000		91,725,000
Hospital	New/Add.	6,300,000	New/Add.	-	Newly/Add.	6,300,000
4. Pemangkat		60,225,000		84,375,000		144,600,000
Hospital	New/Add.	9,000,000	New/Add.	30,000,000	Newly/Add.	39,000,000
5. Sambas		18,225,000		58,500,000		76,725,000
Hospital	New/Add.	9,000,000	New/Add.	30,000,000	Newly/Add.	39,000,000
6. Bengkayang		22,500,000		37,125,000		59,625,000
Hospital	New/Add.	22,500,000	New/Add.	37,125,000	Newly/Add.	59,625,000
7. Landak		32,250,000		40,500,000		72,750,000
Hospital	New/Add.	32,250,000	New/Add.	40,500,000	Newly/Add.	72,750,000
8. Sanggau		75,750,000		81,000,000		156,750,000
Hospital	New/Add.	46,800,000	New/Add.	30,000,000	Newly/Add.	76,800,000
9. Sintang		91,050,000		105,000,000		196,050,000
Hospital	New/Add.	21,583,000	New/Add.	31,875,000	Newly/Add.	53,458,000
10. Putussibau		135,825,000		111,750,000		247,575,000
Hospital	New/Add.	9,000,000	New/Add.	31,875,000	Newly/Add.	40,875,000
11. Ketapang		120,225,000		122,625,000		242,850,000
Hospital	New/Add.	9,000,000	New/Add.	30,000,000	Newly/Add.	39,000,000
Total （11 Hospitals）						1,552,750,000
Total; Newly Introduced and Planned as Additional (11 Hospitals)						426,808,000

Currency exchange rate: 1 Indonesian Rupia = 0.012 Japanese Yen

By other hand, Table 2.5 shows the ratio of the additional running cost in relation to the total operational cost in FY 2003 of each hospital. Although there will be little or no impact on some of the hospitals, the increase is estimated to represent an additional 5 to 6% of the current total operational costs at both Bengkayang and Landak hospitals. As a result, the district governments which are jurisdiction organization of the hospitals, should be considered to take additional budgetary measures starting in FY 2006 for the hospitals.

In looking at the trends of operational costs for each target hospital since 2000, because there is an annual increase of 20 to 30% in overall expenditures, it can be summarized that budgetary measures to absorb the additional running costs of the equipment to be procured in this Project are

feasible.

Table 2.5 Examination of Financial Feasibility at each Hospital (unit: Indonesian Rupia)

Name of Hospital	Operational Cost (FY 2003) (A)	Estimated Running Costs as Increased Add. (B)	(B) /(A)
1. Soedarso Hospital	24,673,735,000	-	-
2. Abdul･Azis Hospital	6,950,880,000	-	-
3. Rubini･Mempawah Hospital	5,156,678,000	6,300,000	0.12%
4. Pemangkat Hospital	3,958,000,000	39,000,000	0.98%
5. Sambas Hospital	2,350,000,000	39,000,000	1.65%
6. Bengkayang Hospital	1,259,060,000	59,625,000	4.73%
7. Landak Hospital	973,045,000	72,750,000	5.77%
8. Sanggau Hospital	6,855,300,000	76,800,000	1.12%
9. Sintang Hospital	6,390,833,000	53,458,000	0.83%
10. Putussibau Hospital	2,950,000,000	40,875,000	1.38%
11. Ketapang Hospital	6,538,358,000	39,000,000	0.59%

Currency exchange rate: 1 Indonesian Rupia = 0.012 Japanese Yen

2-6 Soft Component Program

2-6-1 Background

Although all the hospitals allocate engineers to maintain the equipment attend problems, some clinical/medical departments directly contact outside agents to supply consumables and provide repair services while others do so through the administrative department of the hospital. In addition, basic information on the existing equipment as to when and what kinds of equipment were procured and are being used in which departments, whether or not instruction manuals and/or repair record exist, etc. has not been compiled systematically. Therefore, it is urgently required to establish standardized procedures and guidelines with regard to the managing of medical equipment, including the control of maintenance logs and instruction manuals and purchase of accessories and consumables for the equipment to be procured by this Project.

2-6-2 Goal (Direct/Short-term)

Equipment to be procured by this Project is properly maintained and managed at each target hospital.

2-6-3 Outcomes

The central management system (personnel and organization) on the equipment maintenance will be established at each target hospital. In addition, maintenance logs and related documents, including personnel organization structure, flow chart of procurement procedures, and preventive

maintenance guidelines, etc. will be prepared.

2-6-4 How to Measure the Outcomes of the Soft Component

Table 2.6 below lists a number of indices to measure the degrees to which the objectives of this project are achieved.

Table2.6 Indices to Measure the Outcome of the Soft Component

Outline of Soft Components	
〈Objective〉 Equipment procured by this Project is properly maintained and controlled.	**〈Index〉** The number of equipment items that are left broken has decreased.
〈Outcome〉 ① Personnel in charge of controlling each equipment item are clearly defined. ・Personnel responsible for the equipment is clear to everyone. ・If the above person is absent, everyone knows who takes over his/her responsibilities. ② Workflow and chain of command with regard to the practice of preventive maintenance work are established. ・Inspections become easier to conduct. ・Checkpoints and frequencies are clearly defined. ・Personnel responsible for inspection is clear to everyone. ・If the above person is absent, everyone knows who takes over his/her responsibilities. ・Information concerning equipment is shared among medical staff and maintenance engineers. ③ Well-designed maintenance log for each equipment item is prepared. ・The log is so designed that the reader can easily find out when and who used which equipment for how long. ・The log is so designed that the reader can easily find out which equipment failed when and how.	**〈Index〉** Conduct a test to verify if all staff members can write down the name of the person in charge of controlling the equipment. Check the actual sites to see if inspection manuals are in place and the information flow system is established. Check the actual sites to see if maintenance logs that clearly show the status of each equipment item are in place.

2-6-5 Activities (Input Plan)

Specific activities to be carried out under the soft component program are as follows:

(1) Conducting a Workshop (First Stage)

In organizing the workshop, the director of each hospital, chief maintenance personnel, repair engineers, doctors, technicians, and head nurse will be encouraged to participate in the workshop so that their diverse viewpoints will be reflected in the outcome (using a participatory approach). In line with prearranged agendas, participants will have free discussions to identify necessary actions and inputs to achieve desired results, based on which specific measures to systematically improve the control and maintenance of the equipment will be defined.

Table 2.7 Design Matrix to be used in Workshop (example)

Outline of Soft Components	Indices of Achievement	Contingent Factors
〈Overall Goal〉 The number of incidents which hider daily medical services due to failed equipment will decrease.		Accidents caused by human errors (not by acts of God) are prevented
〈Objective〉 Equipment procured by this Project will be properly maintained and controlled.	**〈Index〉** The number of equipment items that are left broken has decreased.	Spare parts become obtainable continuously.
〈Outcome〉 ① Personnel in charge of controlling each item is clearly defined ・Person responsible for the equipment is clear to everyone. ・If the above person is absent, everyone knows who takes over his/her responsibilities. ② Workflow and chain of command with regard to the practice of preventive maintenance work are established. ・Inspections become easier to conduct. ・Checkpoints and frequencies are clearly defined. ・Personnel responsible for inspection is clear to everyone. ・If the above person is absent, everyone knows who takes over his/her responsibilities. ・Information concerning equipment is shared among medical staff and maintenance engineers. ② Well-designed maintenance log for each item is prepared. ・The log is so designed that the reader can easily find out when and who used which equipment for how long. ・The log is so designed that the reader can easily find out which equipment failed when and how.	**〈Index〉** ・Personnel in charge of equipment control is specifically assigned. ・Personnel to take over the above is specifically assigned. ・ Preventive maintenance inspection manual ・Personnel in charge of inspection is specifically assigned ・Personnel to take over the above are specifically assigned. ・Information flow chart ・Equipment control log	Personnel in charge of equipment maintenance and inspection (and their substitutes) do not leave their duties at the same time.
〈Actions needed to achieve desired Outcome〉 - To be identified during the workshop -	**〈Personnel/Material Input by Hospital〉** - To be identified during the workshop -	

Based on the elements and factors identified at the workshop, the outline of new systems and necessary material input will be formulated. This outline will provide groundwork for the preparation of the "**management guideline for equipment**" and "**maintenance logs/ledgers**". Then, the consultant will present the summarized above-mentioned two (2) documents to each hospital, for practice of "equipment maintenance" as trial, before the start of second stage on the soft component program.

(2) Conducting a Seminar (Second Stage)

Based on the outline would be done by each hospital as trial, the consultant will confirm the convenience about draft documents, such as "**management guideline for equipment**" and "**maintenance logs/ledgers**" through a seminar at each target hospital. Through seminars, the consultant tries to confirm that the all staff members at each hospital involved and incorporated in

the maintenance system and make them understand, is there systematic or not, and all staff members could entire system smoothly, and so on. Based on the reconsideration of draft documents, the consultant will be summarized final documents, such as "**management guideline for equipment**" and "**maintenance logs/ledgers**" for submission to each hospital.

2-6-6 Resources of Soft Components

The Japanese consultant will provide the soft components through direct assistance.

2-6-7 Work Schedule

Two engineers will be sent on each stage. Details of work schedule of the Soft Component Program at each stage are described below figure.

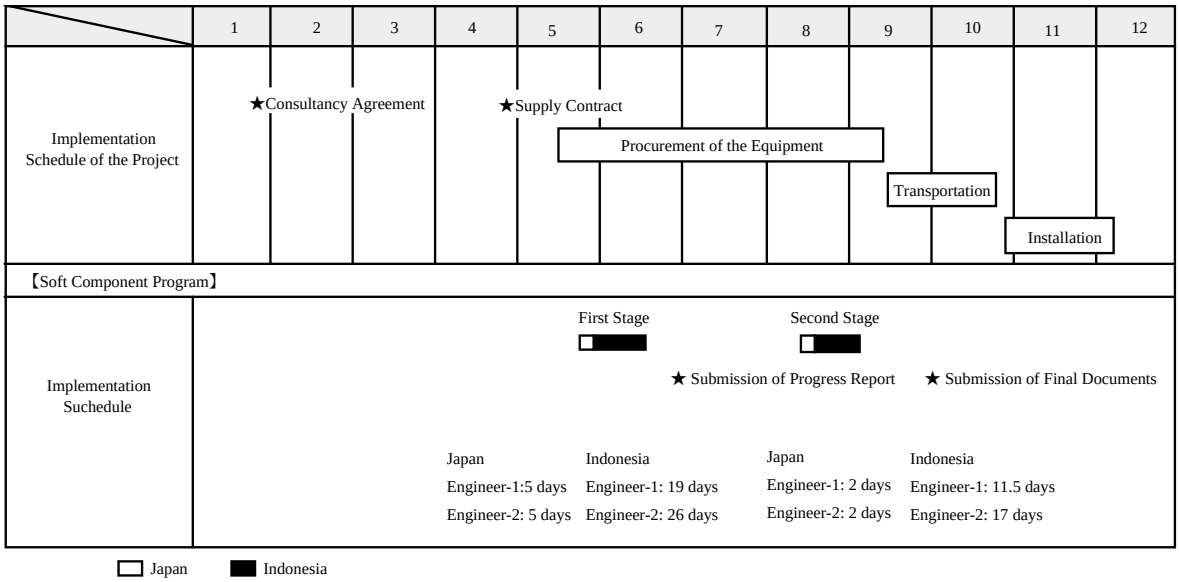

Figure 2.3 Work Schedule of the Soft Component Program

2-6-8 Result (Findings) through theSoft Component Program

(1) First Stage

- Workshop Report
  (names of participants, all elements achieved during the workshop and how they were achieved, etc.)
- Maintenance Logs/Ledgers (draft)
- Maintenance Guideline for Equipment (draft)
  (decisions made at the workshop and the outline of specific improvement measures)

(2) Second Stage

- Seminar Report
  (names of participants, all elements achieved during trail period, etc.)
- Maintenance Logs/Ledgers (Final)
- Maintenance Guideline for Equipment (Final)

Chapter 3 Project Evaluation and Recommendations

Chapter 3 Project Evaluation and Recommendations

3-1 Project Effect

Implementation of this Project will benefit the residents of mother and child in West Kalimantan Province, approx 143 million mother and child directly, and approx. 390 million provincial residents indirectly. This Project, by improving the medical equipment that provide clinical/medical services for the target hospitals, is expected to bring the following benefits:

(1) Direct Effect

Present Status and Problems	Solutions to be Provided by the Project	Effects / Improvement
Due to undeveloped facility infrastructure, it is difficult to provide the proper EOC in the target hospitals.	① Japanese Assistance ・Procurement of medical equipment ・Implementation of the Soft Component Program ② Indonesian Government ・Allocation of appropriate clinical/medical staff members as well as maintenance staff for the equipment ・Secure the operation and maintenance costs for the equipment	① Improving of clinical/medical infrastructure and allocation of appropriate hospital staff will improve the mentioned-below items: ・ Increasing the numbers of out-patient ・ Increasing the numbers of caesarean operation ・ Decreasing the ratio of stillbirth ・ Decreasing the death rate in hospital (especially, IMR and MMR) ② Residents living in West Kalimantan Province including the poor, will be received more appropriate EOC, in other words, the accessibility to EOC for residents will be improved in West kalimantan Province.

(2) Indirect Effect

・ **Enhancement of the Reliability of Target 11 Hospitals**

Improve the clinical/medical services of the target 11 hospitals, will help the local residents build confidence in health care network, especially between the health center (Puskesmas) and target 11 hospitals.

・ **Improvement of Infant Mortality Rate (IMR) and Maternal Mortality Rate (MMR) in West Kalimantan Province**

Implementation of this Project will be contributed to the improvement of IMR and MMR in West Kalimantan Province.

3-2 Recommendations

To improve the functionality of each target hospital, their overall clinical/medical activities, including the operations/management of hospitals, contents of clinical/medical services provided by each department, fostering of clinical/medical staff, and coordination with other medical facilities, need to be improved in a systemic manner to achieve the maximum result. To facilitate the effective improvement of the service functions of the target hospitals, the Indonesian side needs to sincerely work on the following issues and suggestions.

(1) Operation and Maintenance of the Equipment

Daily inspection of medical equipment by the operators is essential if the equipment provided by Japan is to be used to best effect. In the case of equipment that cannot be easily maintained or serviced by non-specialists, or equipment that requires regular replenishment of consumable supplies, each medical facility should work together with the local agent of the equipment manufacturer in order to ensure the proper maintenance and the provision of supplies. While this Project plans to strengthen and support the operating and maintenance system of each medical facility through implementation of the Soft Component Program, it is important for each facility to designate and assign personnel who will conduct continuous supervision of the equipment management register and the operating manuals, in line with support based on the Soft Component Program.

(2) Raising of Awareness for Facility Operations

Due to progress in administrative decentralization, control of the budget and personnel management of hospitals has been transferred to the local governments. The personnel of the target hospitals need to work in close cooperation with the local governments and run each facility on their own initiative.

Appendices

1. Member List of the Study Team
2. Study Schedule
3. List of Parties Concerned in Suriname
4. Minute of Discussions

Appendix-1 Member List of the Study Team

(1) Basic Design Study

Shinji TOTSUKA	Leader	Deputy Resident Representative, JICA, Indonesia Office
Noriaki IKEDA	Technical Advisor	International Medical Center of Japan, Ministry of Health, Labor & Welfare
Shinobu YOSHIZAWA	Project Coordinator	Health Team, Project Management Group III, Grant Aid Management Department, JICA
Tamotsu NOZAKI	Chief Consultant/ Equipment Planner I	Fujita Planning Co., Ltd.
Takashi YOZA	Equipment Planner II/ Facility Planner	Fujita Planning Co., Ltd
Izumi ATSUTA	Community Health Care System	Fujita Planning Co., Ltd.
Ryoji YAMAGUCHI	Cost & Procurement Planner	Fujita Planning Co., Ltd

(2) Explanation of Draft Basic Design

Shinji TOTSUKA	Leader	Deputy Resident Representative, JICA, Indonesia Office
Ryoko MIYASHITA	Project Coordinator	JICA Indonesia Office
Tamotsu NOZAKI	Chief Consultant/ Equipment Planner I	Fujita Planning Co., Ltd.
Takashi YOZA	Equipment Planner II/ Facility Planner	Fujita Planning Co., Ltd

Appendix-2 Study Schedule

2-1 Basic Design Study (October 7 to November 7, 2004)

No.	Date	Schedule
1	Oct. 7 (Thu.)	Lv. Narita→Jakarta (JK) (Nozaki, Yoza)
2	Oct. 8 (Fri.)	Meeting with JICA Indonesia Office (Nozaki, Yoza) Meeting with Directorate General for Medical Care,MOH Meeting with Mr. Kiyohara, EOJ in Indonesia
3	Oct. 9 (Sat.)	Lv. JK→Pontianak (PNT) Meeting with Soedarso Hospital (Nozaki, Yoza)
4	Oct. 10 (Sun.)	Documentation (Nozaki, Yoza) Lv. Narita→JK (Yamaguchi)
5	Oct. 11 (Mon.)	Meeting with Health Office in West Kalimantan Province (Nozaki, Yoza) Survey in Soedarso Hospital (Nozaki, Yoza) Procurement Survey (Yamaguchi, at JK), Lv. Narita→JK (Atsuta)
6	Oct. 12 (Tue.)	Survey in Soedarso Hospital (Nozaki, Yoza) Meeting with MOH (Atsuta, at JK) Lv.JK→PNT (Yamaguchi)
7	Oct. 13 (Wed.)	Lv. PNT→Singkawang, visit Abdul･Azis Hospital (Nozaki) Lv. PNT→Ketapang, visit Ketapang Hospital (Yoza) Meeting with Donor Organization (Atsuta, at JK) Lv. Procurement Survey in PNT (Yamaguchi)
8	Oct. 14 (Thu.)	Lv. Singkawang→Pemangkat, visit Pemangkat Hospital (Nozaki) Survey on Ketapang Hospital (Yoza), Procurement Survey (Yamaguchi, at PNT) Lv. JK→PNT (Atsuta)
9	Oct. 15 (Fri.)	Lv. Singkawang→PNT, Meeting with Health Office in PNT (Ikeda, Nozaki) Lv. Ketapang→PNT (Yoza), Health research in PNT (Atsuta) Procurement survey (Yamaguchi, at PNT)
10	Oct. 16 (Sat.)	Visit Abdul･Azis Hospital (Ikeda, Nozaki) Documentation, meeting with team members
11	Oct. 17 (Sun.)	Documentation, meeting with team members Lv. PNT→JK (Yamaguchi)
12	Oct. 18 (Mon.)	Lv. PNT→Pemangkat, visit Pemangkat Hospital (Ikeda, Nozaki) Lv. PNT→Mempawah、Rubini･Mempawah Hospital, Lv. Landak (Yoza) Health research in PNT (Atsuta), Procuement survey (Yamaguchi, at JK)
13	Oct. 19 (Tue.)	Lv. PNT→Landak, visit Landak Hospital (Ikeda, Yoshizawa, Nozaki) Visit Landak Hospital (Yoza), Lv. for Sintang Health research in PNT (Atsuta), Procurement survey (Yamaguchi, at JK)
14	Oct. 20 (Wed.)	Lv. PNT→Singkawang, visit Abdul･Azis Hospital, Lubini･Mempawah Hospital (Ikeda, Yoshizawa, Nozaki) Visit Sintang Hospital (Yoza), Lv. for Sanggau Health research in PNT (Atsuta), Procurement survey (Yamaguchi, at JK)
15	Oct. 21 (Thu.)	Visit Soedarso Hospital (Totsuka, Ikeda, Yoshizawa, Nozaki) Visit Sanggau Hospital (Yoza), Lv. for Sintang Health research in PNT (Atsuta), Procurement survey (Yamaguchi, at JK)
16	Oct. 22 (Fri.)	Visit Soedarso Hospita, meeting with Health Office, Mr. Fujimoto JICA Expert (Totsuka, Ikeda, Yoshizawa, Nozaki) Lv. Sintang→Landak→PNT (Yoza) Health research in PNT (Atsuta), Procurement survey (Yamaguchi, at JK)
17	Oct. 23 (Sat.)	Meeting with Team Members Lv. JK→Narita (Yamaguchi)

No.	Date	Schedule
18	Oct. 24 (Sun.)	Lv. PNT→JK, Totsuka, Ikeda, Yoshizawa, Nozaki, Atsuta Av. Narita (Yamaguchi)
19	Oct 25 (Mon.)	Meeting with JICA Indonesia Office, Mr. Ito JICA Expert (Totsuka, Ikeda, Yoshizawa, Nozaki, Atsuta) Lv. PNT→Mempawah, Rubini・Mempawah Hospital (Yoza)
20	Oct. 26 (Tue.)	Discussion on Minute of Discussions (M/D) at MOH (Totuska, Ikeda, Yoshizawa, Nozaki, Atsuta) Lv. PNT→Bengkayang、visit Bengkayang Hospital (Yoza)
21	Oct. 27 (Wed.)	Signing on M/D, report to JICA Office and EOJ (Totsuka, Ikeda, Yoshizawa, Nozaki, Atsuta) Lv. JK→Narita (Ikeda, Yoshizawa) Lv. PNT→Putussibau, visit Putussibau Hospital (Yoza)
22	Oct. 28 (Thu.)	Av. Narita (Ikeda, Yoshizawa) Lv. JK→PNT, meeting with Health Office (Nozaki, at PNT) Survey on Putussibau Hospital (Yoza), Health research at JK (Atsuta)
23	Oct. 29 (Fri.)	Lv. PNT→Bengkayan, Bengkayan Hospital (Nozaki), Lv. for Singkawang Survey on Putussibau Hospital (Yoza), Health research at JK (Atsuta)
24	Oct. 30 (Sat.)	Lv. Singkawang→Sambas, visit Sambas Hospital (Nozaki), Lv. for Singkawang Lv. Putussibau→PNT (Yoza), Lv. JK→Narita (Atsuta)
25	Oct 31 (Sun.)	Av. Narita (Atsuta) Lv. Singkawang→Sambas, Sambas Hospital (Nozaki), Lv. for PNT (Nozaki) Documentation
26	Nov. 1 (Mon.)	Discussion with Health Office (Nozaki, at PNT) Survey on Soedarso Hospital (Yoza)
27	Nov. 2 (Tue.)	Meeting with Health Office, survey on Soedarso Hospital (Nozaki, Yoza)
28	Nov. 3 (Wed.)	Meeting with Health Office, Signing of Memorandum (Nozaki, Yoza), Lv. for JK
29	Nov. 4 (Thu.)	Meeting with MOH, Mr. Ito JICA Expert (Nozaki, at JK) Survey on Manufacturers agents in JK (Yoza)
30	Nov. 5 (Fri.)	Meeting with MOH, Signing of Memorandum, report to JICA Office and EOJ (Nozaki, Yoza)
31	Nov. 6 (Sat.)	Survey on Manufacturers agents in JK (Yoza) Lv. JK→Narita (Nozaki, Yoza)
32	Nov. 7 (Sun.)	Av. Narita (Nozaki, Yoza)

2-1 Explanation of Draft Basic Design (January 10 to January 19, 2005)

No.	Date	Schedule
1	Jan. 10 (Mon.)	Lv. Narita→Jakarta (JK), (Nozaki, Yoza)
2	Jan. 11 (Tue.)	Meeting with JICA Indonesia Office, MOH
3	Jan. 12 (Wed.)	Lv. JK→Pontianak (PNT), (Nozaki, Yoza) Meeting with Health Office (Nozaki) Lv. PNT→Landak (Yoza)
4	Jan. 13 (Thu.)	Visit Rubini・Mempawah Hospital and Soedarso Hospitral (Nozaki) Visit Landak Hospital and Sanggau Hospital (Yoza)
5	Jan. 14 (Fri.)	Meeting with Health Office (Nozaki, Yoza)
6	Jan. 15 (Sat.)	Documentation
7	Jan. 16 (Sun.)	Lv. PNT→JK
8	Jan. 17 (Mon.)	Meeting with JICA Indonesia Office, MOH, with the members from Health Office of West Kalimantan Province and Soedarso Hospital
9	Jan. 18 (Tue.)	Meeting with MOH for technical specifications of medical equipment, Signing of Minute of Discussions (M/D), report to EOJ Lv. for Narita
10	Jan. 19 (Wed.)	Av. Narita (Nozaki, Yoza)

Appendix-3 List of Parties in Indonesia

(1) Ministry of Health, Jakarta

Dr. Sri Astuti S. Suparmanto, MSc. PH	Director General for Medical Care
Dr. G. Pandu Setiawan, SpKj.	Director for Specialists and Dentists
Dr. Untung Suseno Sutarjo, M. Kes.	Director for Medical Care
Mr. Tugijono, MKes.	Director for Facility and Equipment

(2) Provincial Office for Health, West Kalimantan Province

Dr. Oscar Primadi	Director for Health Office
Dr. Honggo Simin	Planning Department
Dr. Supriyadi	Planning Department
Dr. Djunardi Haroen	Statistics Department

(3) Municipal Health Office, Singkawang

Dr. Nurmansyah M. Kes.	Director
Mr. Effendi Djunaidi	Director for Administration
Ms. Suzana Darti	Director for Medical Care
Ms. Lulasasi	Medical Care Department

(4) Local Government, Landak

Drs. Cornelis	Mayor

(5) District Health Office, Landak

Dr. Abang Chaervdin	Director
Ms. Sophia Tjakre	Medical Care Department
Ms. Suswanti, SKM	Administration Department

(6) District Health Office, Bengkayang

Dr. Achmad Zaim	Director

(7) Soedarso Hospital, Pontianak (Class B Hospital)

Dr. H. M. Subuh	Director
Dr. Badarvi Muchrar	Vice Director
Dr. Munzir Purba	Director for Medical Care
Mr. Tony. H, S. Sos	Director for Planning Department
Mr. Sumarwan, SIP	Director for Statistics Department
Ms. Jumrah SPd	Director for Administration Department

(8) Abdul・Azis Hospital, Singkawang (Class C Hospital)

Dr. Noerbassyah Siregar	Director
Mr. Bambang. S.	Director for Administration

Ms. Itasnawali	Administration Department
Mr. Ns, Mularso, SKp	Medical Services Department
Mr. Iwan	Procurement Department

(9) Rubini・Mempawah Hospital, Mempawah (Class C Hospital)

Dr. Armini Dr, MPH	Director
Mr. Ateng Abdurrahman	Director for Administration
Dr. David. Di	Administration Department
Mr. Budianto, BE, S. IP	Procurement Department

(10) Pemangkat Hospital, Pemangkat (Class C Hospital)

Dr. Berli Hamdani GS	Director
Mr. H. Abrar	Administration Department
Mr. Nurhadi	Procurement Department
Mr. Buyung Samsi	Maintenance Department

(11) Sambas Hospital, Sambas (Class D Hospital)

Dr. Buduhardjo, M. Kes	Director
Ms. Serli, SE	Administration Department
Ms. Damaihati	Procurement Department
Mr. Rifannur Surya	Nutrition
Mr. Syamsudin H	Nurse, Out-patient Department
Mr. Supardi	Nurse, Emergency Department
Mr. Suyoto	Nurse, Pediatrics Department
Ms. Rosneli	Nurse, Internal Medicine
Ms. Risma. RH	Nurse, Surgical Department
Ms. Siwi Handayani	Nurse, Obstetrics Department

(12) Bengkayang Hospital, Bengkayang (Class D Hospital)

Mr. Yusli	Director for Administration Department
Mr. Henry H.I. Kalis	Administration Department
Mr. Yoseph G. S. Kep	Director for Nursing Department

(13) Landak Hospital, Landak (Class D Hospital)

Dr. Sunardi Wahyuni	Director

(14) Sanggau Hospital, Sanngau (Class C Hospital)

Dr. Andijap	Director

(15) Sintang Hospital, Sintang (Class C Hospital)

Dr. Markus Gatot Budi P. M. Kes	Director

(16) Putussibau Hospital, Kapuas Hulu (Class C Hospital)

Dr. Alit. Suryadinata, M. Kes	Director
Mr. Abdurrahman	Administration Department
Dr. Ranny Imoarto	General Practitioner
Dr. Deni	General Practitioner
Dr. Deni	General Practitioner
Dr. . Ratri Dini Prasiwi	Dentist
Mr. Efrianto	Nurse, Internal Medicine
Mr. Suprapto	Nurse, Surgical Department
Mr. Ervina EB	Nurse, Obstetrics Department
Ms. Andida	Nurse, Pediatrics Department

(17) Ketapang Hospital, Ketapang (Class C Hospital)

Dr. Heri Yulistio, M. Kes	Director

(18) World Bank, Jakarta

Ms. Juliawati Untoro	Operation Officer

(19) United Nations Population Fund, UNFPA, (Pontianak Office)

Ms. Nana	Program Planner

(20) Embassy of Japan, Indonesia Office

Koshin KIYOHARA	Second Secretary

(21) JICA Expert

Takashi ITO	Expert (Policy Advisor for MOH)
Noboru FUJIMOTO	Expert (Social Development, West Kalimantan Province)

(22) Japan International Cooperation Agency (JICA), Indonesia Office

Keiichi KATO	Representative
Shinji TOTSUKA	Deputy Representative
Hideharu TACHIBANA	Representative
Ryoko MIYASHITA	Representative

Appendix-4 Minutes of Discussions (M/D)

4-1 Basic Design Study

MINUTES OF DISCUSSIONS
ON THE BASIC DESIGN STUDY
ON THE PROJECT FOR IMPROVEMENT OF MEDICAL CARE OF PUBLIC HOSPITALS IN WEST KALIMANTAN PROVINCE IN THE REPUBLIC OF INDONESIA

In response to a request from the Government of the Republic of Indonesia (hereinafter referred to as "the Indonesia"), the Government of Japan decided to conduct a Basic Design Study on the Project for Improvement of Medical Care of Public Hospitals in West Kalimantan Province (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to the Indonesia the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Shinji TOTSUKA, Deputy Resident Representative, Indonesia Office, JICA, and is scheduled to stay in the country from October 8 to November 6, 2004.

The Team held discussions with the officials concerned of the Government of Indonesia and conducted a field survey at the study area.

In the course of discussions and field survey, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Jakarta, October 27, 2004

Shinji TOTSUKA
Leader
Basic Design Study Team
Japan International Cooperation Agency

Dr. Sri Astuti S. Suparmanto, MSc. PH
Director General for Medical Care
Ministry of Health
Republic of Indonesia

Drg. OSCAR Primadi
Head of Provincial Office for Health
West Kalimantan Province
Republic of Indonesia

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve the quality of Emergency Obstetric Care in each target facility by providing basic medical equipment.

The objective of this study is to formulate the project according to the present situation of target facilities.

2. Project Sites

The sites of the Project are

- RSUD Dr. Sudarso Pontianak Hospital
- RSUD Dr. Abdul Azis Hospital
- RSUD Dr. Rubini Mempawah Hospital
- RSUD Sambas Hospital
- RSUD Pemangkat Hospital
- RSUD Sanggau Hospital
- RSUD Ade Mohmmad Djoen Sintang Hospital
- RSUD Dr. A Diponegoro Putussibau Hospital
- RSUD Dr. A Goesdjan Ketapang Hospital
- RSUD Bengkayang Hospital
- RSUD Landak Hospital

3. Responsible and Implementing Agency

3-1. The responsible agency is the Ministry of Health of the Republic of Indonesia.

3-2. The implementing agency is Health Office of West Kalimantan Province.

4. Items Requested by the Government of Indonesia

After discussions with the Team, the items described in Annex-1 were finally requested from the Indonesian side and the detail of this request will be confirmed by the technical memorandum signed between the Indonesian side and consultant.

JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

5. Japan's Grant Aid Scheme

5-1. The Indonesian side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-2.

5-2. The Indonesian side will take the necessary measures, as described in Annex-3, for smooth implementation of the Project, as a condition for the Japanese Grant Aid to be implemented.

6. Schedule of the Study

6-1. The consultants will proceed to further studies in the Indonesia until November 6, 2004.

6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents early in January 2005.

6-3. In case that the contents of the report are accepted in principle by the Government of Indonesia, JICA will complete the final report and send it to the Government of Indonesia by the end of March 2005.

7. Other Relevant Issues

7-1. The Indonesia side agreed to secure the building, water supply/ drainage, electric supply and to allocate the enough budgets/sufficient staff to operate and maintain the medical equipment procured under the Project properly and effectively.

7-2. The team requested to secure the building and/or water supply/ drainage, electric supply and/or to allocate sufficient staff to the following hospitals as soon as possible.

The team mentioned these facilities will be evaluated whether it is suitable for the target of this project or not according to the progress of these arrangements at the draft explanation delegation.

- RSUD Dr. Sudarso Pontianak Hospital
- RSUD Dr. Rubini Mempawah Hospital
- RSUD Landak Hospital
- RSUD Sanggau Hospital

7-3. The team requested the Indonesian side to make the middle or long-term plan for appropriate allocation of health facilities in West Kalimantan Province.

7-4. To secure transparency and equity of the tendering procedure, both sides promised not to disclose information related to the Project to the third parties until tender opening.

Annex-1: Equipment List
Annex-2: Japan's Grant Aid Scheme
Annex-3. Major Undertakings to be taken by Each Government

Annex-1

Equipment List

No.	Department	Name of Equipment
1	Outpatient	Infant Scale, Neonate
2		Weighing Scale, Adult
3		Examination Light
4		Medical Refrigerator
5		High Pressure Steam Sterilizer, Table Top
6		Electrocardiograph
7		Ultrasound Apparatus
8		Dental Unit
9		Treatment Instrument Set for Dental
10		Examination Instrument Set for Ophthalmology
11	Emergency	Instrument Set for Minor Surgery
12		Stretcher
13		Examination Light
14		Suction Unit
15		Defibrillator
16		Pulse Oximeter
17	Obstetrics	Doppler Fetus Detector
18		Examination Light
19		Vacuum Extractor
20		Delivery Table
21		Cardiotocograph
22	Neonatal Unit	Infant Incubator
23		Infant Warmer
24		Transcutaneous
25		Phototherapy Unit
26	Operating Theatre	Anesthesia Machine with Ventilator
27		Patient Monitor
28		Suction Unit
29		Electrosurgical Unit
30		Surgical Instrument Set
31		High Pressure Steam Sterilizer, Table Top
32		Drying Oven
33		Infusion Pump
34		Syringe Pump
35		Operating Light with Battery, Mobile
36		Operating Light, Ceiling
37		Operating Table
38		Defibrillator
39	ICU	Bedside Monitor
40		Defibrillator
41		Infusion Pump
42		Syringe Pump
43		Suction Unit
44	Laboratory	Blood Bank Refriegrator
45		Drying Oven
46		High Pressure Steam Sterilizer, Table Top
47		Autoclave, Vertical
48		Centrifuge, Table Top
49		Water Distilling Apparatus
50		Binocular Microscope
51		Hematocrit Centrifuge
52		Spectrophotometer
53		Water Bath
54	X-ray	X-ray Fluoroscopic Diagnostic Unit
55		X-ray Diagnostic Unit
56		Mobile X-Ray Unit
57		X-ray Film Processor
58		Ultrasound Apparatus
59	Others	Patient Bed
60		Baby Cot

Japan's Grant Aid

The Grant Aid scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials as such.

1 . Grant Aid Procedures

Japan's Grant Aid Scheme is executed through the following procedures.

Application	(Request made by a recipient country)
Study	(Basic Design Study conducted by JICA)
Appraisal & Approval	(Appraisal by the Government of Japan and Approval by Cabinet)
Determination of Implementation	(The Notes exchanged between the Governments of Japan and the recipient country)

Firstly, the application or request for a Grant Aid project submitted by a recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for the Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA (Japan International Cooperation Agency) to conduct a study on the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Scheme, based on the Basic Design Study report prepared by JICA, and the results are then submitted to the Cabinet for approval.

Fourthly, the project, once approved by the Cabinet, becomes official with the Exchange of Notes (E/N) signed by the Governments of Japan and the recipient country.

Finally, for the smooth implementation of the project, JICA assists the recipient country in such matters as preparing tenders, contracts and so on.

2 . Basic Design Study

(1) Contents of the Study

The aim of the Basic Design Study (hereafter referred to as "the Study"), conducted by JICA on a requested project (hereafter referred to as "the Project") is to provide a basic document necessary for the appraisal of the Project by the Government of Japan. The contents of the Study are as follows:

- Confirmation of the background, objectives, and benefits of the requested Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.

- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.

- Confirmation of items agreed upon by both parties concerning the basic concept of the Project.

- Preparation of a Basic Design of the Project

- Estimation of cost of the Project

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even though they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Study, JICA uses (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the Study is(are) recommended by JICA to the recipient country to also work on the Project's implementation after the Exchange of Notes, in order to maintain technical consistency.

3 . Japan's Grant Aid Scheme

(1) Exchange of Notes (E/N)

Japan's Grant Aid is extended in accordance with the Notes exchanged by the two Governments concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid, etc., are confirmed.

(2) "The period of the Grant Aid" means the one fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedures such as exchanging of the Notes, concluding contracts with (a) consulting firm(s) and (a) contractor(s) and final payment to them must be completed.However, in case of delays in delivery, installation or construction due to unforeseen factors such as natural disaster, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

(3) Under the Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When the two Governments deem it necessary, the Grant Aid may be used for the purchase of the products or services of a third country. However, the prime contractors, namely, consulting, constructing and procurement firms are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

(4) Necessity of "Verification"

The Government of recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. The "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

(5) Undertakings required to the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

a) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction,

b) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,

c) To secure buildings prior to the procurement in case the installation of the equipment,

d) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,

e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products

and services under the Verified Contracts,

f) To accord Japanese nationals, whose services may be required in connection with the supply of the products and services under the Verified contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(6) "Proper Use"

The recipient country is required to operate and maintain the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for this operation and maintenance as well as to bear all the expenses other than those covered by the Grant Aid.

(7) "Re-export"

The products purchased under the Grant Aid should not be re-exported from the recipient country.

(8) Banking Arrangements (B/A)

a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by the Government of the recipient country or its designated authority under the Verified Contracts.

b) The payments will be made when payment requests are presented by the Bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

(9) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To bear the following commissions to the Japanese bank for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
2	To ensure prompt unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	
3	To accord Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contact, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		●
4	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		●
5	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant		●
6	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment		●

(B/A: Banking Arrangement, A/P: Authorization to pay)

MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY ON THE PROJECT FOR IMPROVEMENT OF MEDICAL CARE OF PUBLIC HOSPITALS IN WEST KALIMANTAN PROVINCE IN THE REPUBLIC OF INDONESIA (EXPLANATION ON DRAFT REPORT)

In October 2004, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Basic Design Study Team on the Project for Improvement of Medical Care of Public Hospitals In West Kalimantan Province (hereinafter referred to as "the Project"), and through discussion, field survey and technical examination of the results in Japan, JICA prepared draft report of the Study.

In order to explain and to consult the Government of the Republic of Indonesia (hereinafter referred to as "the Indonesia") on the components of the draft report, JICA sent to the Indonesia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Shinji TOTSUKA, Deputy Resident Representative, Indonesia Office, JICA, from 10th January to 18th January, 2005.

As a result of discussions, both sides confirmed the main items described on the attached sheets.

Jakarta, January 18, 2005

Shinji TOTSUKA
Leader
Draft Explanation Study Team
Japan International Cooperation Agency

Dr.Sri Astuti S.Suparmanto, MSc.PH
Director General for Medical Care
Ministry of Health
Republic of Indonesia

Witnessed by:

Drg.OSCAR Primadi
Head of Provincial Office for Health
West Kalimantan Province
Republic of Indonesia

ATTACHMENT

1. Components of the Draft Report

The Indonesian Side agreed and accepted in principle the components of the draft report explained by the Team.

2. Japan's Grant Aid Scheme

2-1. The Indonesian Side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Indonesia as explained by the Team and described in Annex-2 of the Minutes of Discussions (M/D) of the Basic Design Study signed by both sides on October 27, 2004.

2-2. The Indonesian side shall allocate the budget for undertakings to be done by the Indonesian Side as described in Annex-1 in the fiscal year 2005 by October,2005.

3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed item and send it to the Indonesia by the end of March 2005.

4. Other Relevant Issues

4-1. The Indonesian Side promised to allocate the enough budget and personal staff at each targeted hospitals for the operation and maintenance of the equipments provided by the Project.

The team requested to submit the commitment letters from each responsible authority, and the Indonesian Side agreed to submit these letters by the end of February 2005.

4-2. The Indonesian Side promised to secure the building and/or water supply/ drainage, electric supply and/or to allocate sufficient staff to the following hospitals by the end of December 2005.

- RSU Dr.Soedarso Pontianak Hospital
- RSUD Dr.Rubini Mempawah Hospital
- RSUD Landak Hospital
- RSUD Sanggau Hospital

With regard to RSU Dr.Soedarso Pontianak Hospital in particular, both sides agreed and reconfirmed that the Indonesian side will complete the construction of the new out-patient and emergency building at RSU Dr.Soedarso Hospital by the above agreed date.

4-4. To secure transparency and equity of the tendering procedure, both sides promised not to disclose information related to the Project to the third parties until tender opening.

4-5. The Indonesian Side promised to make the middle or long-term plan for appropriate allocation of health facilities in West Kalimantan Province and submit this plan to the Embassy of Japan in Indonesia through JICA Indonesia office by the end of March 2005.

Major Undertakings to be taken by Each Government

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To bear the following commissions to the Japanese bank for the banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
2	To ensure prompt unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan to the recipient	•	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		•
	3) Internal transportation from the port of disembarkation to the project site	•	
3	To accord Japanese nationals, whose services may be required in connection with the supply of the products and the services under the verified contact, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		•
4	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		•
5	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant		•
6	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment		•

(B/A: Banking Arrangement, A/P: Authorization to pay)