Appendix 1. Member List of the Survey Team

(1) Basic Design Survey Team

Mr. Yoshikazu YAMADA Leader Director,

Third Project Management Division, Grant Aid Management Department,

ЛСА

Mr. Koji KUROIWA Technical Advisor Senior Scientific Officer,

Administration Division, Forecast Department,

Japan Meteorological Agency

Mr. Yoshihisa KIMATA Technical Advisor Senior Scientific Officer.

Observation Division, Observation Department,

Japan Meteorological Agency

Mr. Hidenori NAKAMURA Project Coordinator Third Project Management Division,

Grant Aid Management Department,

JICA

Mr. Seiichi SHINOKI Chief Consultant/

Meteorological Observation, Forecast & Warning System Planner

Japan Weather Association

Mr. Takashi SAITO Meteorological Radar Designer

Japan Weather Association

Mr. Hiroaki MIZUKAMI Radar Image System Planner

Japan Weather Association

Mr. Yoshihisa UCHIDA Communication Facility Planner

Japan Weather Association

Mr. Masaharu IDO Procurement Planner/Cost Estimator

Japan Weather Association

(2) Second Basic Design Survey Team

Mr. Katsutoshi MIYAKAWA Leader Grant Aid Division,

Economic Cooperation Bureau, Ministry of Foreign Affaires

Mr. Yoshihisa KIMATA Technical Advisor Senior Scientific Officer,

Observation Division, Observation Department,

Japan Meteorological Agency

Mr. Hidenori NAKAMURA Project Coordinator Third Project Management Division,

Grant Aid Management Department,

JICA

Mr. Seiichi SHINOKI Chief Consultant/

Meteorological Observation, Forecast & Warning System Planner

Japan Weather Association

Mr. Masaharu IDO Procurement Planner/Cost Estimator

Japan Weather Association

Mr. Fuku FUKAWA Interpreter

Japan International Cooperation Center

(3) Explanation of Draft Report

Mr. Yoshikazu YAMADA Leader Director,

Third Project Management Division, Grant Aid Management Department,

JICA

Mr. Katsutoshi MIYAKAWA Advisor Grant Aid Division,

Economic Cooperation Bureau, Ministry of Foreign Affaires

Mr. Koji KUROIWA Technical Advisor Japan Meteorological Agency

Mr. Kunio AKATSU Chief Consultant/

Meteorological Observation, Forecast & Warning System Planner

Japan Weather Association

Mr. Takashi SAITO Meteorological Radar System Planner

Japan Weather Association

Mr. Masaharu IDO Procurement Planner/Cost Estimator

Japan Weather Association

Mr. Fuku FUKAWA Interpreter

Japan International Cooperation Center

Appendix 2. Study Schedule

(1) Basic Design Study

3 April, 2000 - 15 May, 2000

						Study Schedule				
			Governmental Member	al Member				Consultant Member		
	Mr. Yoshik	Mr. Yoshikazu YAMADA	Mr. Hidenori NAKAMURA	Mr. Koji KUROIWA	Mr. Yoshihida KIMATA	Mr. Seiichi SHINOKI	Mr. Takashi SAITO	Mr. Hiroaki MIZUKAMI	Mr. Yoshihisa UCHIDA	Mr. Masaharu IDO
2000		Leader	Project Co ordinator	Technical Advisor	Tech nical Advisor	ChiefConsultant Meteorological Observation, Forecast & Waming System Planner	Meteorological Rader Designer	Reder Image System Planner	Communication Facility Planner	Procurement Plan ner/Cost Estimator
1 3.Apr 1	MON				Tokyo→Hong	Tokyo→Hong Kong→Hanoi				To kyo→Hong Kong→Hanoi
2 4.Apr	TUE			Courtesy call on Embassy		of Japan, JICA office, MPI and HMS				Courtesy call on EOJ
3 5.Apr	WED	Me	Meeting with HMS and CCFSC	2	Site survey at Tamky	Meeting with H	Meeting with HMS and CCFSC	Site survey at Tamky		Site survey at HCM
4 6.Apr	THU	M	Meeting with HMS and VTV		Survey at Nha Trang	Meeting with HMS and VTV	HMS and VTV	Su rv ey at N ha Trang		Survey at Nha Be
	FRI		Discussion on Minutes		Nha Trang→Hanoi	Discussion	Discussion on Minutes	Nha Trang→ Hanoi		Survey at Pleiku
	SAT				Site survey at Phu Lien					Pleiku → Hanoi
7 9.Apr	SUN				Inner meeting				Tokyo→Hong Kong→Hanoi	Inner meeting
	MON				Signing of the Minutes,	Signing of the Minutes, Reporting to Embassy of Japan and JICA office	f Japan and JICA office			
9 11.Apr	TUE		Hanoi→Hong Kong→Tokyo	Kong→Tokyo				Meeting with HMS		
10 12.Apr	WED							Meeting with HMS		
11 13.Apr	THU							Meeting with HMS		
12 14.Apr FRI	FRI						Meeting	Meeting with HMS		Data collection
13 15.Apr SAT	SAT							Inner meeting		
14 16.Apr S	SUN						Site survey	Site survey at Nha Be		Data collection
15 17.Apr	MON						Site survey	Site survey for AWOS		Data collection
16 18.Apr	TUE						Site survey	Site survey for AWOS		Data collection
17 19.Apr	WED						Site survey	Site survey for AWOS		Data collection
18 20.Apr THU	тни						Site survey	Site survey for AWOS		Data collection
19 21.Apr I	FRI						Meeting with HMS	Meeting with HMS Ho Chi Minh Center		Data collection

20 22.Apr SAT	AAT		Data collection	llection		Data collect ion
21 23.Apr SUN	SUN		Ho Chi Min	Ho Ch i Minh → Hanoi		Data collect ion
22 24.Apr MON	NOM		Meeting with 1	Meeting with HMS and MPI		$Hanoi \to HCM$
23 25.Apr TUE	IUE		Meeting with HM	Meeting with HMS, CCFSC & VTV		Survey at Nha Be
24 26.Apr WED	WED	Survey at Vinh	Meeting with HMS	Survey at Vinh	Meeting with HMS	Data collect ion
25 27.Apr THU	н	Data collect ion	llection		Site survey at Pleiku	
26 28.Apr FRI	3RI	Data collection	Meeting with HCM		Site survey at Pleiku	
27 29.Apr SAT	JAS	Survey at Tamky	Tamky		Site survey at Pleiku	
28 30.Apr SUN	NON	Survey at	Survey at Da Nang	Survey fo	Survey for AWOS	Survey at Pleiku
29 1.May	MON	Survey for AWOS	Data collect ion	Survey for AWOS	HCM →Hanoi	Pleiku → Hanoi
30 2.May	TUE	Survey for AWOS	Inner meeting	Survey for AWOS	Inner meeting	eeting
	WED	Meeting with HCM	Survey at Phe Lien	Meeting with HCM	Survey at Phe Lien	Survey at Nha Be
32 4.May	THU	HCM→Hanoi	Meeting with HMS	HCM→Hanoi	Meeting with HMS	Survey at Nha Be
33 5.May I	FRI		Meeting v	Meeting with HMS		Survey at Nha Be
	SAT	Inner meeting	Hanoi→Hong Kong→Tokyo		Inner meeting	
35 7.May S	SUN	Inner meeting			Inner meeting	
36 8.May	MON	Meeting with HMS			Meeting with HMS	
37 9.May	TUE	Meeting with HMS			Meeting with HMS	
38 10.May WED	WED	Meeting with HMS			Meeting with HMS	
39 11.May THU	гни	Meeting with HMS			Meeting with HMS	
40 12.May FRI	3RI	Reporting to EOLJICA		Reporting	Reporting to Embassy of Japan and JICA office	CA office
41 13.May SAT	SAT	Inner meeting			Inner meeting	
42 14.May SUN	NOS	Inner meeting			Inner meeting	
43 15.May MON	MON	Hanoi→Hong Kong→Tokyo		1	Hanoi→Hong Kong→Tokyo	

13 July, 2000 – 20 July, 2000

(2) Second Basic Design Study

					Study Schedule	chedule			
				Governmental Member			Consultant Member		
			Mr. Katsutoshi MIYAKAWA	Mr.Hidenori NAKAMURA	Mr. Yoshihisa KIMATA	Mr. Seiichi SHINOKI	Mr. Masaharu IDO	Mr. Fuku FUKAWA	
	2000		Leader	Project Coordinator	Technical Advisor	Chief Consultant Meteorological Observation, Forecast & Waming System Planner	Procurement Planner/Cost Est imat or	Interpreter	
1	13 Jul.	Thu		Tokyo→Osaka→Ho Chi Minh	ıh		Tokyo→Ho Chi Minh		
2	14 Jul.	Fri			Site Survey at Nha Be	at Nha Be			
3	15 Jul.	Sat			Internal Meeting (Team Meeting)	(Team Meeting)			
4	16 Jul.	Sun			Ho ChiMinh→Hanoi	ıh→Hanoi			
5	17 Jul.	Mon			Discussion with HMS	with HMS			
9	18 Jul.	Tue			Discussion with HMS	with HMS			
7	19 Jul.	Wed		Signin	g of the Minutes of Discussi	Signing of the Minutes of Discussion, Report to EOJ and JICA Office	Ясе		
8	20 Jul.	Thu			Hanoi→Hong Kong→Tokyo	Kong→Tokyo			

25 February, 2001 - 11 March, 2000

(3) Explanation of Draft Basic Design Study Report

Appendix 3. List of Party Concerned in the Recipient Country

Ministry of Planning and Investment

Duogn Duc Ung Director General, Foreign Economic Relations Department

Ho Quang Minh
Le Minh Duc
Deputy Director General, Foreign Economic Relations Department
Deputy Director, Department of Science, Education and Environment

Ministry of Finance

Nguyen Thi Thanh Ha Chief of External Department
Do Thanh Thuy External Finance Department

Vietnam Television

Pham Thanh Thu Reporter, Editor Weather Department

Central Committee for Flood and Storm Control

Nguyen Vanle Deputy General Manager

Nguyen The Luong Deputy Director, Disaster Management Center Bui Thi Bich Section Chief, Disaster Management Center

Le Xuan Truong Disaster Management Center Ngo Van Sinh Disaster Management Center

▶ Ho Chi Minh City Post & Telecommunications

Huynh Quang Liem Telecom Engineer, Telecom Department
Pham Phi Long Telecom Engineer, Telecom Department
Le Chi Son Telecom Engineer, Telecom Department

Ho Chi Minh City Power Company

Do Phu Binh Deputy Manager of Tan Thuan Distribution Department

➤ Ho Chi Minh City Water Supply Company

Ho Huu Tho Chief of Design and Construction Works, Management Division

Gialai Telephone Company (Pleiku)

Nguyen Van Tung Head of Automatic Station

Gialai Power Company (Pleiku)

Nguyen Phu Tuan Head of Management Department

Hydrometeorological Service

Hanoi Head Office

Nguyen Cong Thanh Director General

Phung Ngoc Diep Ex-Director, International Cooperation Department
Tran Duc Hai Director, International Cooperation Department,
Pham Dinh An Expert, International Cooperation Department

Nguyen Van Hai Acting Director, Science and Technology Department

Nguyen Le Tan Expert, Science and Technology Department

Nguyen Huong Ky Personnel Department

Nguyen Ngoc Huan Deputy Director, HMS Office

Tran Binh Tuan Deputy Director, Administrative Department

Nguyen Van Hong Deputy Director, Planning and Finance Department Deputy Director, Planning and Finance Department

Trinh Le Hang Expert, Planning and Finance Department
Tran Van Sap Deputy Director, Station Network Department

Nguyen Thi Binh Manager of Instrument Division, Station Network Department
Vu Van Dinh Vice Manager of Meteorological Division, Station Network Department

Nguyen Dinh Kiem Director, Upper-air Meteorological Observatory

Tran Danh Hoa Deputy Director, Upper-air Meteorological Observatory Nguyen Thi Tan Thanh Deputy Director, Upper-air Meteorological Observatory

Tran Duy Son Manager of Research Division, Upper-air Meteorological Observatory
Ta Van Da Expert, Research Division, Upper-air Meteorological Observatory
Ngo Kim Tuyen Manager of Administration Division, Upper-air Meteorological Observatory

National Center for Hydrometeorological Forecasting (NCHMF)

Le Cong Thanh

Le Bac Huynh

Nguyen Nam Thanh

Deputy Director

Deputy Director

Computer Engineer

Le Qui Tue Chief of Computer Division

Center for Consultancy, Technical Support of Meteorology, Hydrology and Environment (HMEC)

Nguyen Ngoc Huan Director

Tran Thi Diem Ngoc Deputy Director Ngoyen Hoai Project Officer

Hydrometeorological Technical Materials Company (HYMETCO)

Pham Le Binh Director

Nguyen Minh Tam Trading Manager

Institute of Meteo-Hydrology (IMH)

Tran Duy Binh Director

Vu Van Tuan Vice-Director

Hanoi Hydrometeorological College

Dr. Ngo Trong Thuan, Director

Institute of Meteo-hydrology

Dr. Tran Duy Binh Director
Dr. Vu Van Tuan Vice Director

Regional Hydrometeorological Center (HMC), Central of Central Vietnam, Da Nang

Tran Quang Chu Deputy Director
Dr. Vu Dinh Hai Forecasting Division

Nguyen Thai Lan

Nguyen Vinh

Nguyen Tien

Dang Thi Mai

Engineer, Forecasting Division

Engineer, Forecasting Division

Engineer, Network Division

Engineer, Forecasting Division

Regional Hydrometeorological Center (HMC), South of Central Vietnam, Nha Trang

Nguyen Huu Ho Director
Truong Thi Phuong Thao Engineer
Bui Minh Son Engineer
Nguyen Tan Huong Engineer
Dinh Van Mai Engineer

Vo Anh Kiet Nguyen Kim Dong

Regional Hydrometeorological Center (HMC), North of Central Vietnam, Vinh

Nguyen Xuan Sit Director

Dau Dang Thiet Deputy Director

Do Van Long Technical Deputy Director

Nguyen Trong Ai Manager of Forecast Department

Trinh Van Ly
Tran Xuan Quy
Trinh Thong Hoan

Chief of Radar Station
Vice Chief of Radar Station
Chief of Investigation Team

Regional Hydrometeorological Center (HMC), North East Vietnam, Haiphong

Nguyen Duc Vuong Director

Nguyen Tat Hung Chief of Forecast Service Department

Le Duy Dau Chief of Technical Department

Regional Hydrometeorological Center (HMC), Highland in Central Vietnam, Pleiku

Ngo Chi Binh Vice Dirictor Nguyen Minh Tan Director

Regional Hydrometeorological Center (HMC), South Vietnam, Ho Chi Minh City

Pham Van Duc Director

Le Thi Tam Thien Chief of Administration, Personnel and Finance

Nguyen Danh Thuong Vice Director

Vu Quang Hung Chief of Forecasting and Service Division

Le Thi Xuan Lan

Chief of Medium-Longterm Forecasting and Service Division

Phan Thanh Minh

Electronic Engineer, Chief of Telecommunications Division

Appendix 4. Minutes of Discussion

MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY ON THE PROJECT FOR

UPGRADE OF TYPHOON OPERATION OF THE HYDROMETEOROLOGICAL SERVICE IN THE SOCIALIST REPUBLIC OF VIETNAM

In response to a request from the Government of the Socialist Republic of Vietnam (hereinafter referred to as "Vietnam"), the Government of Japan decided to conduct a Basic Design Study on the Project for Upgrade of Typhoon Operation of the Hydrometeorological Service (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Vietnam the Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Yoshikazu Yamada, Director, Third Project Management Division, Grant Aid Project Management Department, JICA, and is scheduled to stay in the country from April 3, 2000 to May 15, 2000.

The Team held discussions with the officials concerned of the Government of Vietnam 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.

Hanoi, April 10, 2000

Mr. Yoshikazu Yamada

Leader

Basic Design Study Team

Japan International Cooperation Agency

Mr. Phung Ngoc Diep-

Director

International Cooperation Department

Hydrometeorological Service

Mr. Duong Duc Ung

Director General

Foreign Economic Relations Department

Ministry of Planning and Investment

ATTACHMENT

1. Objective of the Project

The Project aims to enhance typhoon and storm prediction and warning system of Hydrometeorological Service (HMS) by improvement of meteorological observation equipment. The Project also aims at reduction of damages by natural disaster through consolidating the system of HMS.

2. Project Site

The sites of the Project are National Center for Hydrometeorological Forecasting (NCHMF) in Hanoi, two (2) Regional Hydrometeorological Centers (Play Cu and Ho Chi Minh City), Nha Be in Ho Chi Minh City and the sites of Automatic Weather Observation System (AWOS). The sites locations are shown in Annex-1.

3. Responsible and Implementing Agency

The responsible and implementing agency for the Project is Hydrometeorological Service (HMS). The organization chart of HMS is shown in Annex-2.

4. Items requested by the Government of Vietnam

After discussions with the Team, the items described below were finally requested by the Vietnam side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

- (1) Weather Surveillance Doppler Radar System and Radar Tower in Nha Be and Play Cu
- (2) Radar Image Composition Processor in NCHMF

1 set

(3) AWOS in Southern Part and Central Highland of Vietnam

10 sets

(4) Microwave System between Radar station in Nha Be and the Regional Center in Ho Chi Minh City

1 set

5. Japan's Grant Aid Scheme

- 5-1. The Vietnamese side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-3.
- 5-2. The Vietnamese side will take the necessary measures, as described in Annex-4, 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 Vietnam until May 15, 2000.
- "6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its



contents around August 2000.

6-3. In case that the contents of the report is accepted in principle by the Government of Vietnam, JICA will complete the final report and send it to the Government of Vietnam by November 2000.

7. Other Relevant Issues

7-1. Remarks on the Specifications of Radar System

The Vietnamese side pointed out that it is important to consider the specifications of Radar System homogeneous to the Radar Systems in Tam Ky and Nha Trang to secure effective operation, maintenance and utilization of the Radar System.

7-2. Site of Radar Tower in Southern Part of Vietnam

The Team will conduct further study on geotechnical conditions of Nha Be in order to make appropriate design of Radar tower foundation. The Japanese side will submit the result of analyses to the Vietnamese side in due course.

The Vietnamese side pointed out that there is no candidate site for construction of radar tower for Ho Chi Minh City other than the site in Nha Be

7-3. Site of Radar Tower in Play Cu

Both sides agreed that site of a radar tower in Play Cu can be shifted to the open space belonging to the existing Play Cu Central Highland Regional Center.

7-4. Customs and Taxes Exemption

Vietnamese side promised to exempt Japanese juridical and physical nationals engaged in the Project from customs duties, internal taxes including VAT, and other fiscal levies which may be imposed in Vietnam regarding the supply of products and services under the verified contracts.

7-5. Gorvernment Approval of the Project by Vietnamese Side

Vietnamese side shall obtain a governmental approval of the Project by Vietnamese side through the Ministry of Planing and Investment no later than the end of November based on the Draft Basic Design Study Report.

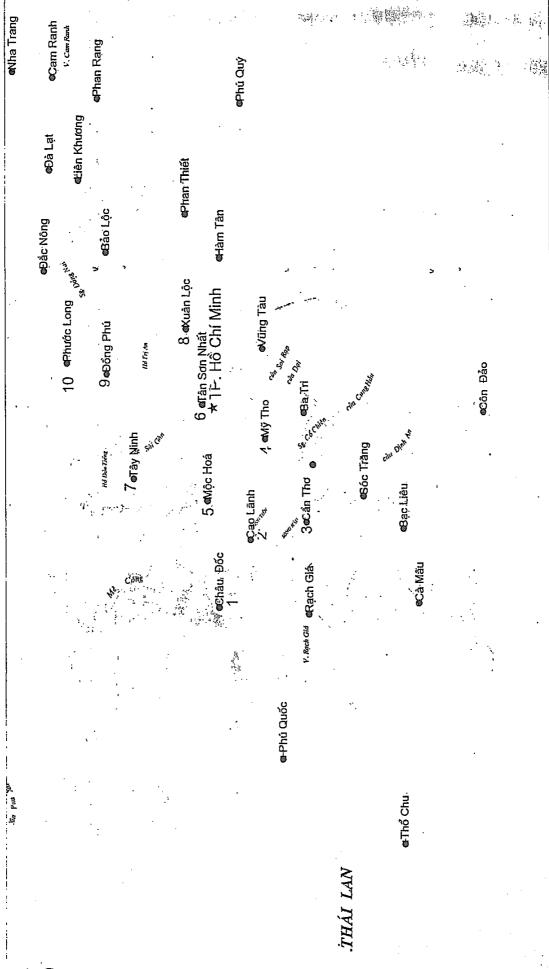
7-6. Necessity of Technical Cooperation

For the sake of technology transfer on nowcasting rainfall by using data from satellites, radars and AWOSs and sustainable operation and maintenance, the Vietnamese side pointed out the need of dispatch of Japanese experts as well as technical training of counterpart personnel in Japan. They also understood that another official request on technical cooperation should be submitted through diplomatic channel.

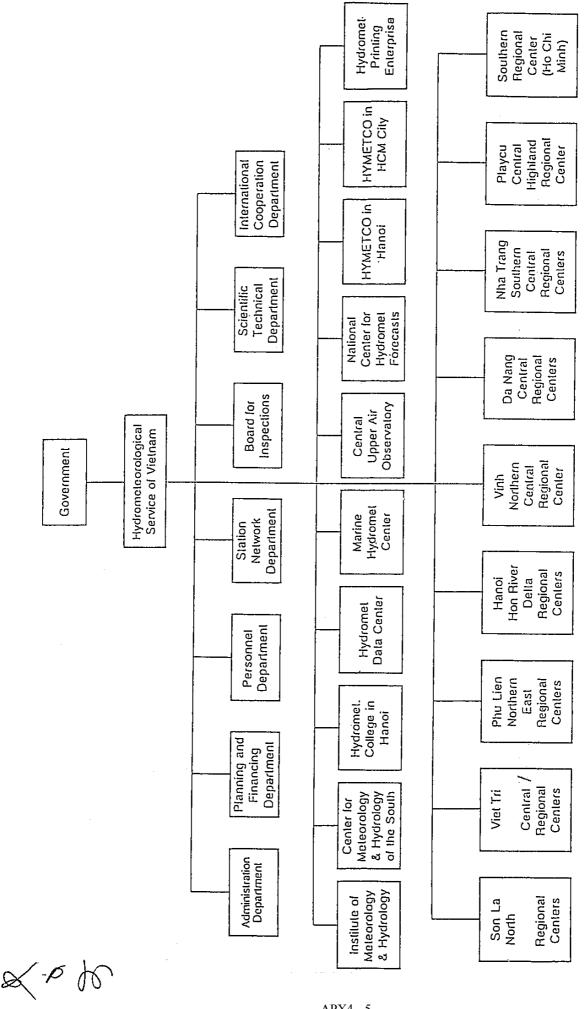
8 p- 400

Legent:
 existing station
 existing station
 tation will be included into the project

METEOLOGICAL STATION NETWORK IN NAMBO REGION



× 0 80°



Organization Mechanism of the Hydrometeorological Service of Vietnam

JAPAN'S GRANT AID SCHEME

1. Grant Aid Procedures

1) Japan's Grant Aid Program is executed through the following procedures.

- Application (Request made by the recipient country)

- Study (Basic Design Study conducted by JICA)

- Appraisal & (Appraisal by the Government of Japan and Approval by the

Approval Cabinet)

- Determination of (The Note exchanged between the Governments of Japan and

Implementation the recipient country)

2) 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 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 Program, 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 signed by the Governments of Japan and the recipient country.

Finally, for the 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:

- a) Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation.
- b) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- c) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- d) Preparation of a basic design of the Project.
- e) Estimation of costs of the Project.

\$ 0- 40

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 the 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 consultant firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms. The selected firm(s) carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA. The consultant 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) What is Grant Aid?

The Grant Aid Program 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. Grant Aid is not supplied through the donation of materials as such.

2) 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, ect., are confirmed.

- 3) "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) consultant 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 weather, 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.
- 4) 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.)

5) Necessity of "Verification"

× 100

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. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

6) Undertakings required of 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:

- (1) To secure land necessary for the sites of the Project and to clear, level and reclaim the land prior to commencement of the construction.
- (2) To provide facilities for the distribution of electricity, water supply and drainage and other incidental facilities in and around the sites.
- (3) To secure buildings prior to the procurement in case the installation of the equipment.
- (4) 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.
- (5) 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.

7) "Proper Use"

The recipient country is required to maintain and use the facilities constructed and the 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.

8) "Re-export"

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

9) 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 issued by the Government of the recipient country or its designated authority.

× 2- 100

M <u>aj</u> o	r Undertakings to be taken by Each Government		Annex-4
No	Items	To be covered by Grant Aid	To be covered by Recipient side
1	To secure land		8
2	To clear, level and reclaim the site when needed		③
	To provide facility for distribution of electricity, water supply, drainage and		
	other incidental facility		
	1) Electricity		
	a. The distributing line to the site		0
	b. The drop wiring and internal wiring within the site	0	
•	c. The main circuit breaker and transformer	. •	
	2) Water Supply		
	a. The city water distribution main to the site		•
	b. The supply system within the site (receiving and/or elevated tanks)	© .	
2	3) Drainage		
3	a. The city drainage main (for storm, sewer and others) to the site		0
	b. The drainage system (for toilet sewer, ordinary waste, storm drainage and	A	
	others) within the site	•	
	4) Gas Supply		
	a. The city gas main to the site		©
	b. The gas supply system within the site	•	<u></u> _
	5) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		0
	b. The MDF and the extension after the frame/panel	8	
	To bear the following commissions to a bank of Japan for the banking services based upon the B/A		
4	1) Advising commission of A/P		0
	2) Payment commission		0
	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country	·	
	Marine(Air) transportation of the products from Japan to the recipient		
5	country	•	
3	Tax exemption and custom clearance of the products at the port of disembarkation	-	0
	3) Internal transportation from the port of disembarkation to the project site		©
	To accord Japanese nationals whose services may be required in connection		
6	with the supply of the products and the services under the verified contract such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work		©
7	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 contract		6
8	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		©
9	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for the transportation and installation of the equipment		•



MINUTES OF DISCUSSIONS ON THE BASIC DESIGN STUDY

ON THE PROJECT FOR UPGRADE OF TYPHOON OPERATION OF THE HYDROMETEOROLOGICAL SERVICE IN THE SOCIALIST REPUBLIC OF VIETNAM

Japan International Cooperation Agency (hereinafter referred to as "JICA") sent to the Socialist Republic of Vietnam (hereinafter referred to as "Vietnam") the Basic Design Study Team on the Project for Upgrade of Typhoon Operation of the Hydrometeorological Service (hereinafter referred to as "the Project") from April 3, 2000 to May 15, 2000.

In order to explain and to consult the Government of Vietnam on the design of radar towers, JICA dispatched a second Basic Design Study Team (hereinafter referred to as "the Team"), which is headed by Mr. Katsutoshi Miyakawa, Official, Grant Aid Division, Economic Cooperation Bureau, the Ministry of Foreign Affairs, from July 13 to July 20, 2000.

The Team held discussions with the officials concerned of the Government of Vietnam 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.

Hanoi, July 19, 2000

Katsutoshi Miyakawa

Leader

Basic Design Study Team

Japan International Cooperation Agency

Japan

Tran Van Sap

Deputy Director

Station Network Department

Hydrometeorological Service

The Socialist Republic of Vietnam

ATTACHMENT

1. Appropriateness of construction of a radar tower at Nha Be site and its design

Both parties confirmed appropriateness of construction of a radar tower at Nha Be as long as an appropriate base design for the tower is adopted and the Team presented and explained the design for the radar tower at Nha Be. Hydrometeorological Service (hereinafter referred to as "HMS") pointed out the importance of appearance of tower, mitigation of noise sound by a generator and installation of a toilet on the first floor. Both parties confirmed that functioning is more important than appearance for minimizing cost while a good appearance can be examined in designing at minimal cost. The Team agreed to mitigation of noise. The Team will examine appropriateness of another toilet requested by the HMS in further analyses.

2. Eligible source countries for procurement of radar system

The Team explained advantages of procurement of Japan's radar system and also pointed out that operation of Japan's radar system is not much different from that of existing, i.e., American and French radar systems.

The HMS pointed out advantages of procurement of American radar system, with the main reasons of (1) homogeneity of the radar system in the Southern part of Vietnam to facilitate the operation, maintenance and common use of spare parts, (2) lack of manpower even in five or ten years and (3) former experience of HMS's engineers to American radar systems. These are important factors for the effectiveness of the Project in the conditions of the HMS.

The Team explained a brand designation for procurement of radar systems in the Project, i. e., procurement of radar systems from Enterprise Electronics Corporation (EEC), an American radar manufacturer, is difficult under procurement principles / tendering procedure of Japan's Grant Aid.

The Team explained that the Government of Japan in principle respects the conclusion by the HMS while the Team pointed out importance of (1) realization of effects by the Project, (2) sustainability of the effects and (3) possibility of utilizing Japan's Official Technical Cooperation supporting the Project.

The conclusion for this matter shall be decided between both parties at explanation of the Draft Basic Design Study Report.

3. Radar Image Composition System to Hanoi Center

The HMS finally requested as a Project component a Radar Image Composition System to Hanoi Center necessary for composition of four radar image data from Nha Trang, Tamky, Nha Be and Pleiku under the following conditions;

- The HMS shall acquire data format (universal format) of EEC radars in Nha Trang and Tamky and send its duplication in Magneto-Optical Disk (MO) or Floppy Disk (FD) to Japan Weather Association (JWA) no later than August 31, 2000.
- Transformation from raw data to product data shall be technically and financially appropriate.

Both parties confirmed that installation of Radar Image Composition System necessary for composition of two radar image data from Pleiku and Nha Be is a requested component to be borne by Japan's Grant Aid while composition of above two radar images and other radar images shall be borne by the HMS in case that the Project cannot provide a Radar Image Composition System necessary for composition of four radar image data. The HMS proposed that special technical consideration should be given to the Radar Image Composition System to enable the HMS to connect this system to a Radar Image Composition System of the existing radar systems to be established by the HMS in the future.

4. Benefits, urgency and indispensability of installation of AWOS

The Team proposed the HMS to justify the benefits, urgency and indispensability of installation of Automatic Weather Observation System (hereinafter referred to as "AWOS") considering appropriateness as components of Grant Aid Project. The Team requested to the HMS (1) concrete social benefits and a cause-and-result relation between inputs of AWOS and outputs of social benefits (e. g., reduction of human and economic damage by flood and storm), (2) overcomes which will not achieved without AWOS and (3) minimal number of AWOS to achieve targeted social benefits.

The HMS explained those points and shall prepare further documents answering above questions and submit them to JICA Vietnam Office no later than August 2, 2000.

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5. Items borne by the HMS regarding radar towers and radar systems in Pleiku and Nha Be

The HMS shall demolish obstacles for construction of radar tower in Pleiku and shall level the site including a construction yard before commencement of construction works.

The HMS shall take necessary measures to extend telephone lines, water supply lines and electric power lines to the sites in Pleiku and Nha Be and shall prepare necessary budget for these works so that installation of radar systems be implemented smoothly. The Team will explain contents of above items in detail including cost estimation at explanation of the Draft Basic Design Study Report. The HMS shall allocate or apply for necessary budget for these works immediately after that explanation by the Team.

6. Schedule of the Study

- 6-1. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents in October 2000.
- 6-2. In case that the contents of the report is accepted in principle by the Government of Vietnam, JICA will complete the final report and send it to the Government of Vietnam by January 2001.

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Appendix. 5. Cost Estimation Borne by the Recipient Country

The following major undertakings to be borne by the Vietnam side (HMS) are necessary for the implementation under Japan's Grant Aid Assistance.

- 1. To secure all the required sites for the Project.
- 2. To clear, level and reclaim the sites prior to commencement of the construction work.
- 3. To undertake incidental outdoor works such as gardening, fencing, gates and exterior lighting in and around the sites.
- 4. To ensure the access road to the sites prior to commencement of the construction and installation work.
- 5. To provide facilities for distribution of electricity, water supply, telephone, drainage, sewage and other incidental facilities to the Project sites.
 - 1) Electricity distributing line to the sites
 - 2) City water distribution main to the sites
 - 3) Drainage city main to the sites
 - 4) Telephone trunk line and the main distribution panel of a building
 - 5) General furniture such as carpets, curtains, tables, chairs and others, if necessary
- 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 the installation of the equipment.
- 7. To provide appropriate frequencies for the meteorological surveillance radar systems to be established under the Project.
- 8. To provide suitable existing telephone links and interfaces for establishing systems.

However, due to the regulation, expected commissions to the Japanese foreign exchange bank to be borne by the Government of the Philippines for the banking services based upon Banking Arrangement may be 0.1% of the total project cost and it shall additionally be borne by the Government of the Vietnam.

Appendix 6. References

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