

# 添 付 資 料

## 資料一 1 調査団員・氏名

## 1. 調査団員氏名、所属

氏名	担当業務	現職
牧野 修	団長	独立行政法人 国際協力機構 国際協力専門員
増田 吉朗	調査企画	独立行政法人 国際協力機構 経済基盤開発部 運輸交通・情報通信第三課
田中 清房	業務主任/運営体制 ラジオ放送計画	八千代エンジニアリング(株)
和田 益雄	機材計画/維持管理計画	八千代エンジニアリング(株)
中村 孝司	建築設計計画	八千代エンジニアリング(株)
車田 輝雄	鉄塔施設/環境	八千代エンジニアリング(株)
小林 辰哉	調達・施工計画/積算	八千代エンジニアリング(株)
中川 義夫	社会状況調査	八千代エンジニアリング(株)

## 資料一 2 調査日程

## 2. 調査日程

### (1) 基本設計調査

No.	月日	曜日	官ベース	コンサルタント						宿泊地
				業務主任/ 運営体制・ ラジオ放送計画	機材計画/ 維持管理計画	建築設計 計画	鉄塔施設 /環境	調達・施工 計画/積算	社会状況調査	
				田中 清房	和田 益雄	中村 孝司	車田 輝雄	小林 辰哉	中川 義夫	
1	3月8日	日		移動 [成田 21:30 → プリスパン 07:10+1, JL761]						機中
2	3月9日	月		移動 [プリズパン 23:40 → ナンディ 05:15+1, FJ920]						機中
3	3月10日	火	移動 [成田 13:55 → ヴル 16:35, KE704]	移動 [ナンディ 07:00 → スパ 07:30, FJ007]						フナフ
			移動 [ソウル 19:20 → ナンディ 08:25+1, KE137]	移動 [スパ 09:15 → フナフ 11:35, FJ281]						
4	3月11日	水	移動 [ナンディ → スパ (陸路)]	・ ツバルメディア局 (TMD) 表敬、調査日程、インベションレポート、質問表等の説明						フナフ
			・ JICA フィジー事務所 打合せ	・ TMD 既設設備状況調査 ・ 現地再委託業者 (社会状況調査) との打合せ						
5	3月12日	木	移動 [ナンディ → スパ (陸路)]	・ サイト調査						フナフ
			・ JICA フィジー事務所 打合せ	・ 公共事業局訪問 ・ 電気通信公社訪問 ・ 教育・スポーツ省訪問 ・ 防災局訪問						
6	3月13日	金	移動 [スパ 09:15 → フナフ 11:35, FJ281]	・ サイト調査						フナフ
			・ TMD との M/D 協議	・ 電力会社との協議 ・ 気象庁訪問 ・ 航空局訪問						
7	3月14日	土	・ 財務・経済計画省及び外務・労働局との協議	・ サイト調査等						フナフ
			・ TMD との M/D 協議							
8	3月15日	日	・ 社会状況調査、港湾施設調査等						フナフ	
9	3月16日	月	・ 社内打合せ及び資料整理						フナフ	
10	3月17日	火	・ TMD との M/D 協議	・ 同左						フナフ
			・ TMD との M/D 署名	・ サイト調査						
11	3月18日	水	移動 [フナフ 12:20 → スパ 14:40, FJ280]	・ 自然条件調査の進捗確認 (業務主任と同じ)						フナフ
			・ 統計局訪問 ・ 土地・測量局訪問	・ 仕様書、図面作成						
12	3月19日	木	・ 在フィジー日本国大使館及びJICAフィジー事務所への報告	・ TMD との協議 (施設・機材計画、研修計画等)						フナフ
			・ AusAID 訪問	・ サイト調査 ・ 仕様書、図面作成 ・ 計画・予算局訪問						
13	3月20日	金	移動 [ナンディ 10:30 → 成田 17:00, FJ302]	・ TMD との協議 (施設・機材計画、維持管理計画等)						フナフ
			・ 事務局訪問	・ 仕様書、図面作成 ・ 教育局訪問 ・ 自然条件調査の進捗確認						
14	3月21日	土	・ TMD との M/D 協議	・ TMD との協議 (施設・機材計画、財務等)						フナフ
			・ TMD との M/D 署名	・ 仕様書、図面作成 ・ 警察署、防災局、保健局訪問 ・ 自然条件調査の進捗確認						
15	3月22日	日	・ フィールドレポート作成						フナフ	
16	3月23日	月	・ フィールドレポート作成	・ 自然条件調査の進捗確認						フナフ
			・ 首相府及びTMD とのフィールドレポート協議	・ 同左 ・ 自然条件調査結果の照査						
17	3月24日	火	・ 首相府及びTMD とのフィールドレポート署名	・ 補足調査						フナフ
			・ 航空局との協議	・ 補足調査						
18	3月25日	水							フナフ	
19	3月26日	木	移動 [フナフ 12:20 → スパ 14:40, FJ280]						スパ	
20	3月27日	金	・ 現地再委託業者 (自然条件調査) との打合せ						スパ	
			・ 現地工事業者訪問及び見積書収集							
21	3月28日	土	・ 市場調査			・ 市場調査			スパ	
			・ 補足調査							
22	3月29日	日	・ 社内打合せ及び資料整理						スパ	
			・ 同上							
23	3月30日	月	・ フィジー放送公社訪問			・ 現地再委託業者 (自然条件調査) より調査報告書入手			スパ	
			・ 市場調査			・ 現地工事業者訪問及び見積書収集				

No.	月日	曜日	官ベース	コンサルタント						宿泊地
				業務主任/ 運営体制・ ラジオ放送計画	機材計画/ 維持管理計画	建築設計 計画	鉄塔施設 /環境	調達・施工 計画/積算	社会状況調査	
				田中 清房	和田 益雄	中村 孝司	車田 輝雄	小林 辰哉	中川 義夫	
24	3月31日	火		・ フィジー-空港公社訪問 ・ 市場調査		・ 現地工事業者訪問及び見積書収集 ・ 市場調査			移動 [ニウキタ着 06:00] ・ 既設FM設備 及びFM受信 レベル調査 ・ 住民ヒヤリング 調査 移動 [ニウキタ発 11:00 船中泊]	スバ
25	4月1日	水		・ 在フィジー-日本国大使館及びJICAフィジー-事務所への報告				移動 [スクラエラエ着 06:00] ・ 既設FM設備 及びFM受信 レベル調査 移動 [スクラエラエ発 18:00 船中泊]	スバ	
26	4月2日	木		移動 [スバ 06:05 → ナンディ 06:35, FJ004] 移動 [ナンディ 09:15 → ブリスベン 11:15, FJ921]				移動 [フナフチ着 06:00]	ブリスベン	
27	4月3日	金		移動 [ブリスベン 08:55 → 成田 16:45, JL762]				・ 補足調査		
28	4月4日	土						・ 資料整理		
29	4月5日	日						・ 資料整理		
30	4月6日	月						・ 補足調査		
31	4月7日	火						移動 [フナフチ 12:20 → スハ 14:40, FJ280] 移動 [スバ 18:30 → ナンディ 19:00, FJ024]		
32	4月8日	水						移動 [ナンディ 20:40 → ブリス ベン 22:55, FJ921]		
33	4月9日	木						移動 [ブリスベン 08:45 → 成田 17:05 JL762]		

## (2) 基本設計概要書説明日程

No.	月日	曜日	官ベース	コンサルタント		宿泊地
				業務主任/ 運営体制・ ラジオ放送計画	調達・施工 計画/積算	
				三国成晃	田中清房 小林辰哉	
1	7月26日	日	移動 [成田 21:10 → ブリスベン 07:05+1, JL761]			機中泊
2	7月27日	月	移動 [ブリスベン 11:30 → ナンディ 17:00, FJ920]			ナンディ
3	7月28日	火	移動 [ナンディ 06:15 → スバ 06:45, FJ005] 移動 [スバ 09:15 → フナフチ 11:35, FJ281] ・ 首相府及びTMD表敬、ドラフトレポート説明・協議			フナフチ
4	7月29日	水	・ 計画内容確認調査 ・ 首相府及びTMDとのM/D署名 ・ 港湾調査			フナフチ
5	7月30日	木	移動 [フナフチ 12:20 → スバ 14:40, FJ280]			スバ
6	7月31日	金	・ 在フィジー-日本国大使館、JICAフィジー-事務所への報告 移動 [スバ 18:00 → ナンディ 18:30, FJ018]			ナンディ
7	8月1日	土	移動 [ナンディ 08:15 → ブリスベン 10:30, FJ921]			ブリスベン
8	8月2日	日	移動 [ブリスベン 08:45 → 成田 17:05, JL762]			

### 資料－3 関係者（面会者）リスト

### 3. 関係者(面会者)リスト

<u>所属及び氏名</u>	<u>職位</u>
首相府 <b>Office of the Prime Minister</b>	
Mr. Solofa Uota	Acting Secretary to Government
外務・労働局(首相府) <b>Department of Foreign Affairs and Labour</b>	
Ms. Corinna Ituaso Laafai	Bilateral and Regional Affairs Officer
航空局(首相府) <b>Department of Civil Aviation</b>	
Mr. Vitoli F. Iosefa	Civil Aviation Officer
Mr. Uinga Paelate	Assistant Civil Aviation Officer
防災局(首相府) <b>Department of Disaster Management</b>	
Mr. Sumeo Silu	Disaster Coordinator
ツバルメディア局(首相府) <b>Tuvalu Media Department</b>	
Mrs. Melali Taape	Director
Mr. Stanley Manao	Chief Engineer
Mr. Telaulini Niuatui	Senior Technician
Mr. Joshua Tui Tapasei	Technician
Mr. Suitupu Setema	Technician
気象庁(首相府) <b>Department of Meteorological Service</b>	
Mr. Niko Iona	Aerology Officer
財務・経済計画省 <b>Ministry of Finance and Economic Planning</b>	
Mr. Amosa Tau	Acting Director of Planning and Budget
Ms. Sunema Simati	Acting Director of Planning and Budget
Mr. Stephen Boland	Budget Management Specialist
税関局(財務・経済計画省) <b>Department of Customs</b>	
Mr. Salesi Safega	Director of Customs
統計課(財務・経済計画省) <b>Central Statistics Division</b>	
Mr. Semu Malona	Government Statistician



教育・スポーツ・青年省

**Ministry of Education and Sports**

Mr. Michel Noa

Senior Education Officer

Mr. Teake Esene

Sport Officer

運輸・観光局(運輸・通信・観光省)

**Department of Transport and Tourism, Ministry of Communication, transportation and Tourism**

Mr. Pusinelli Laafia

Secretary to Communication

公共事業局(公共事業・産業省)

**Public Works Department, Ministry of Public Utilities and Industries**

Mr. Ampelosa Tehulu

Director

Mr. Fakasa Tofinga

Acting Housing Officer

Mr. Greg Wolff

Water and Sanitation Adviser, AusAID (PACTAM)

土地・測量局(資源省)

**Department of Lands & Survey, Ministry of Natural Resources & Lands**

Mr. Faatasi Malologa

Director

プリンセス・マーガレット病院

**Princess Margaret Hospital**

Dr. Puakena Boreham

Medical Superintendent

Dr. Pelesala Kaleia

Physiotherapist

警察署

**Police Office**

Mr. Tipelu Kauani

Superintendent

ツバル電気通信公社

**Tuvalu Telecommunications Corporation**

Mr. Simeti Lopati

General Manager

ツバル電力公社

**Tuvalu Electricity Corporation**

Mr. Mafalu Lotolua

General Manager

ニュージーランド航空

**New Zealand Airways**

Mr. Warwick Daldy

Principal Technician

フィジー空港公社

**Airports Fiji Limited**

Mr. Vula C. Seru

Manager ATM

Mr. Kelepi Dainaki

Aeronautical Technical Officer

フィジー放送公社

**Fiji Broadcasting Corporation Limited**

Mr. Riyaz Sayed - Khaiyum

Chief Executive Officer

Mr. Apisai Bakani

Director Engineering & Technical Services

オーストラリア国際開発庁 在フィジースパ事務所

**AusAID in Fiji - Suva Office**

Ms. Lily-Anne Homasi

Assistant Program Manager (Tuvalu)  
Development Cooperation Section

国立環境研究所 地球環境研究センター

**Center for Global Environmental Research, National Institute for Environmental Studies**

Mr. Hiroya Yamano

Doctor

在フィジー日本国大使館

**Embassy of Japan in Fiji**

Mr. Tatsushi Matsuo

First Secretary  
Economic Cooperation

**JICA フィジー事務所**

**JICA Fiji Office**

Mr. Juichiro Sasaki

Resident Representative

Mr. Nariaki Mikuni

Senior Representative

Ms. Hiroko Sannomaru

Assistant Resident Representative

**JICA 専門家**

**JICA Specialist**

Mr. Kazuyoshi Ogawa

Adviser

## 資料－4 討議議事録 (M/D)

Minutes of Discussions  
On  
Preparatory Survey (for Basic Design)  
on  
the Project for Improvement of Medium Wave Radio Broadcasting Network and Disaster Prevention  
in  
Tuvalu

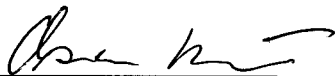
Based on the results of the Preliminary Study, the Government of Japan decided to conduct a Preparatory Survey (for Basic Design) on "The project for Improvement of Medium Wave Radio Broadcasting Network and Disaster Prevention" (hereinafter referred to as "the Project") and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to the Government of Tuvalu the Preparatory Survey Team (hereinafter referred to as "the Team"), headed by Dr. Osamu MAKINO, Senior Advisor, JICA, and is scheduled to stay in the country from March 10 to March 26, 2009.

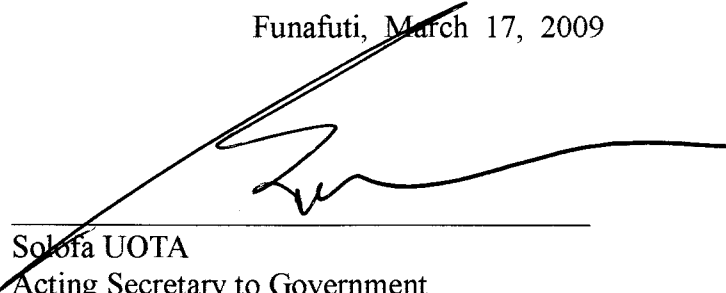
The Team held discussions with the officials concerned of the Government of Tuvalu and conducted the field survey at the study areas.

In the course of the discussions and field survey, both sides have confirmed the main items described in the attached sheets. The Team will proceed to further works and prepare the Preparatory Survey (for Basic Design) report.

Funafuti, March 17, 2009



Osamu MAKINO  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency



Solofa UOTA  
Acting Secretary to Government  
Office of the Prime Minister  
Tuvalu



Melali Taape  
Director  
Tuvalu Media Department (TMD)  
Office of the Prime Minister  
Tuvalu



## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to provide necessary equipment to TMD for reliable and stable Medium Wave radio broadcasting service to all islands in Tuvalu.

### 2. Project Site

The Project site is located in Fogafale Island, Funafuti Atoll shown in Annex-1 and Annex-2

### 3. Responsible and Implementing Organization

The responsible and implementing organization is Office of the Prime Minister which TMD belongs to. The organization chart is shown in Annex-3.

### 4. Items requested by the Government of Tuvalu

The components of the Project requested by the Government of Tuvalu are as follows:

- (1) Radio Station (300m<sup>2</sup>)
- (2) Medium Wave Antenna System
- (3) Medium Wave Transmitting Facilities
- (4) Automatic Voltage Regulator (AVR)
- (5) Master Control Room
- (6) Studio Equipment
- (7) Cable and Spare Parts

The Team explained the Tuvalu side to prioritize the above requested items from the viewpoint of technical and financial viability, sustainability and cost-effectiveness. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

### 5. Japan's Grant Aid Scheme

The Government of Tuvalu side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Tuvalu as explained by the Team and described in Annex-4 and Annex-5.

### 6. Schedule of the Study

- 6-1 The consultants will proceed to undertake further studies in Tuvalu until March 26, 2009.
- 6-2 JICA will prepare a draft report in English and dispatch a mission to Tuvalu in order to explain its contents around the end of July, 2009.
- 6-3 In case that the contents of the report are accepted in principle by the Government of Tuvalu, JICA will complete the final report and send it to the Government of Tuvalu by the beginning of November, 2009.

7. Other Relevant Issues

- 7-1 The Tuvalu Civil Aviation's Non-Directional Beacon (NDB) and Distance Measuring Equipment (DME) are located adjacent to the proposed site for the new Antenna of MW radio. The Government of Tuvalu will inform JICA Fiji Office of final decision of relocation of those two (2) antennas **by 17<sup>th</sup> April 2009**.
- 7-2 The Japanese side explained that the distance between the center of the base of the new Antenna and the center of runway is assumed to be approximately 180m. The distance between the said two (2) points would be confirmed upon a result of Topographic Survey by the Team **by 26<sup>th</sup> March 2009**.
- 7-3 The Government of Tuvalu shall inform Civil Aviation Authority of Fiji Island (CAAFI) of the location and height of the proposed new Antenna at the Project site.
- 7-4 TMD will inform the people in Tuvalu of the role of MW radio for disaster prevention by contributing the new MW radio facilities to Tuvalu through the Project. The Tuvalu side also requests assistance under disaster prevention from the Japanese side. The Team will convey this message to the relevant department of JICA.
- 7-5 The Government of Tuvalu shall submit answers to the questionnaire given by the Team **before 20<sup>th</sup> March 2009**.
- 7-6 The Government of Tuvalu will allocate sufficient budget and qualified staff to properly and effectively operate and maintain the Equipment. The necessary staff and budget will be proposed by the Team after analyzing work based on TMD's reports and plans. It will be a prerequisite for the Project to be implemented that the Government of Tuvalu shall guarantee the staff and budget allocation. The Government of Tuvalu will report the progress of the staff and budget allocation to JICA **by the end of June 2009**.
- 7-7 TMD shall remove the existing equipment before construction works by the Japanese side. In case that existing TMD's equipment is required to be used with the Equipment after the completion of the Project, the TMD shall shift those existing equipment to proper locations.
- 7-8 The Government of Tuvalu indicated, in **Annex-6**, the detailed procedure of exempting customs duties, internal taxes and other fiscal levies which may be imposed in Tuvalu with respect to the supply of the products and services for the Project.
- 7-9 The Government of Tuvalu shall ensure prompt reimbursement of sales tax and any other tax/levies concerning local procurement of goods and services under the Project by a Japanese contractor, provided all necessary documents are submitted by him.
- 7-10 The Tuvalu side and the Japanese side confirmed that the Environmental Impact Assessment is not required for the facilities to be constructed under the Project.
- 7-11 Regarding the sand and gravel to be used for the Project, the Japanese side agreed that from the environmental point of view, a Japanese contractor shall submit necessary analysis data of such materials to the Department of Agriculture for approval during the construction period.
- 7-12 The Government of Tuvalu shall provide power supply from the existing substation to the

new Radio Station Building and the new Transmitter House. Back-up power supply for the new Transmitter House will be provided by the Japanese side while back-up power supply for the new Radio Station Building will be provided by the Tuvalu side.

- 7-13 The Tuvalu side requested OB-Van for the purpose of disaster related media live coverage on the Project. However the Team understands its priority is less than the Radio Station Building and other equipment. JICA will assess the appropriateness of the request according to TMD's activity plan.

(End)

Annex – 1	Map of Tuvalu
Annex – 2	Site of the Project
Annex – 3	Organization Charts
Annex – 4	Japan's Grant Aid Scheme
Annex – 5	Major undertakings to be taken by each Government
Annex – 6	Procedures for Tax Exemption



ツバル国 位置図  
Location map of Tuvalu



ツバル国 全図  
Overall map of Tuvalu

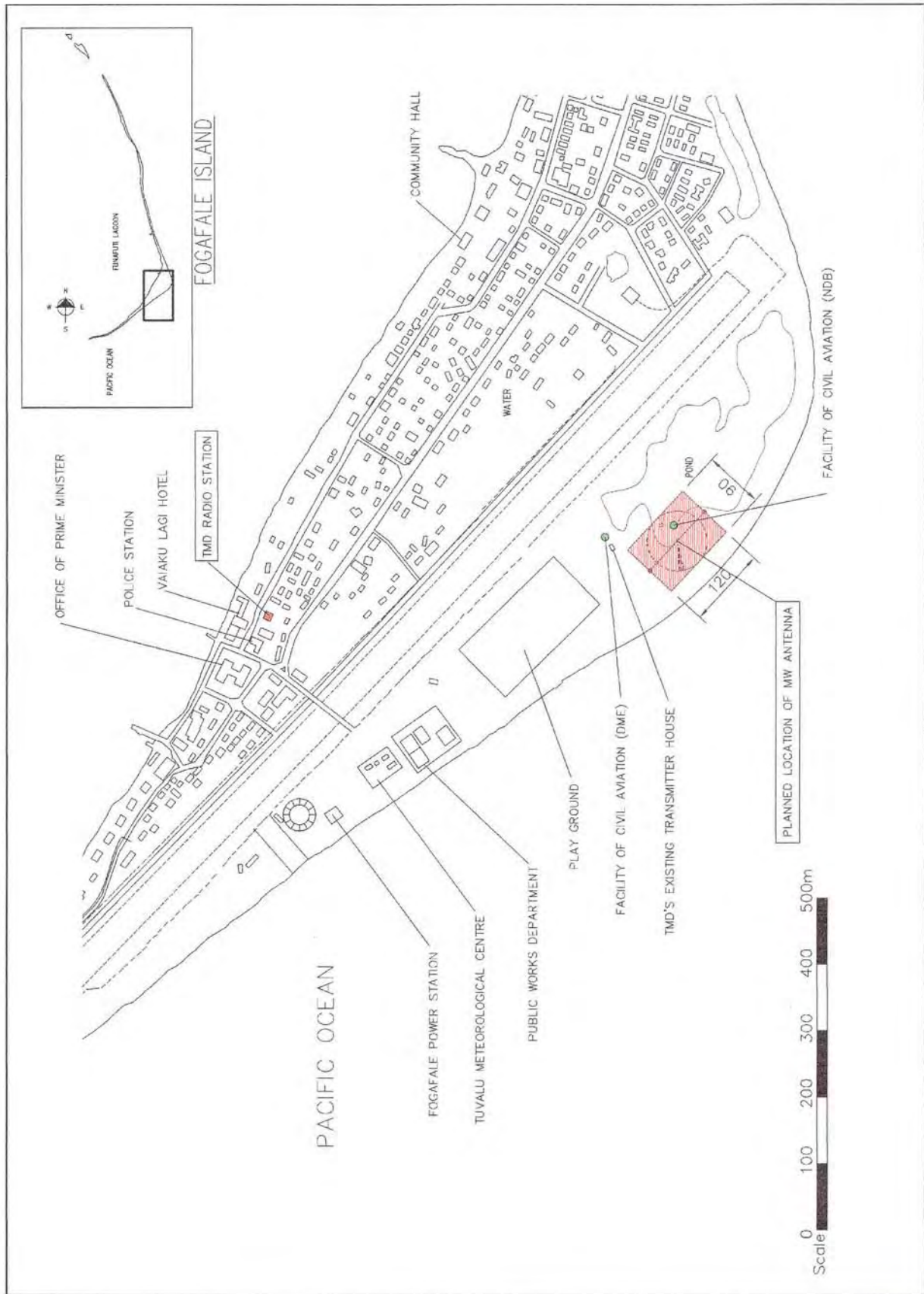


フナフチ環礁全図  
Overall Map of Funafuti Atoll

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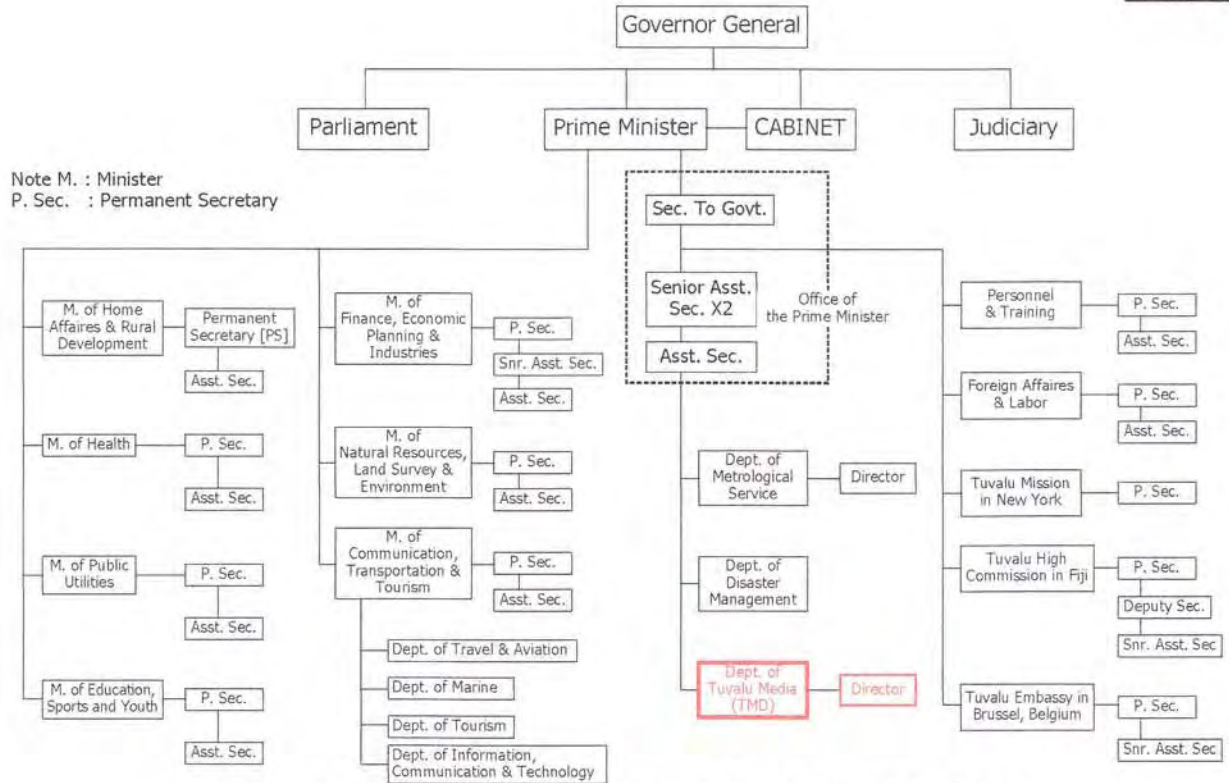
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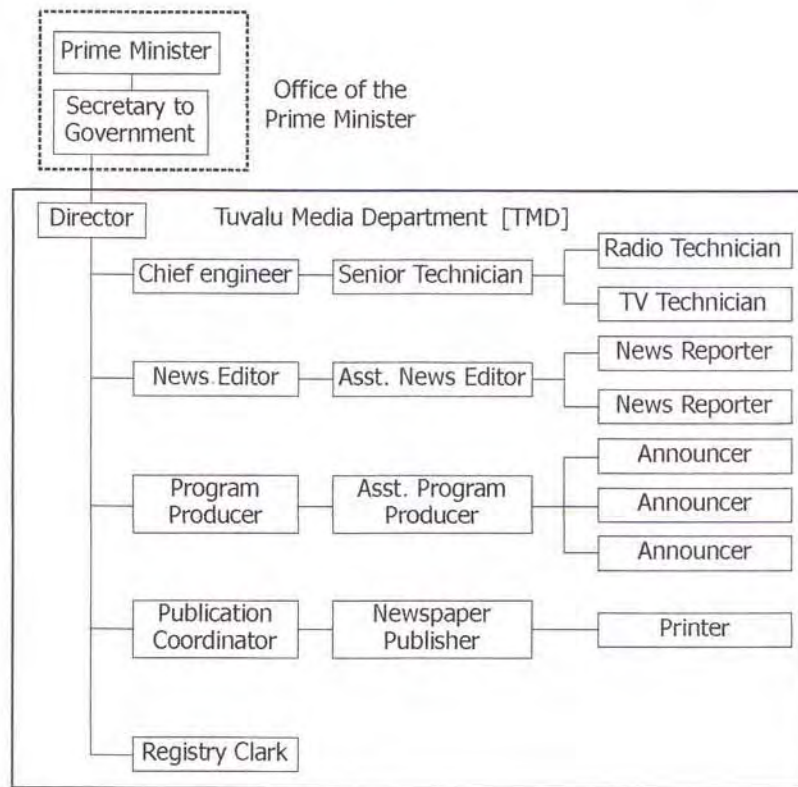


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**Organization Chart of Office of the Prime Minister**



**Organization Chart of TMD**

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Japan's Grant Aid Scheme

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**

(1) Japan's Grant Aid Program 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)

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

- a) 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.
- 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

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 consultant firm(s). JICA selects (a) firms(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) 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.

- (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, contracting 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. This "Verification" is deemed necessary to secure accountability to Japanese taxpayers.

(5) 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 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 ensure all the expenses and prompt execution for customs clearance at the port of disembarkation of the products purchased under the Grant Aid.
- 4) 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.
- 5) 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 maintain and use 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.

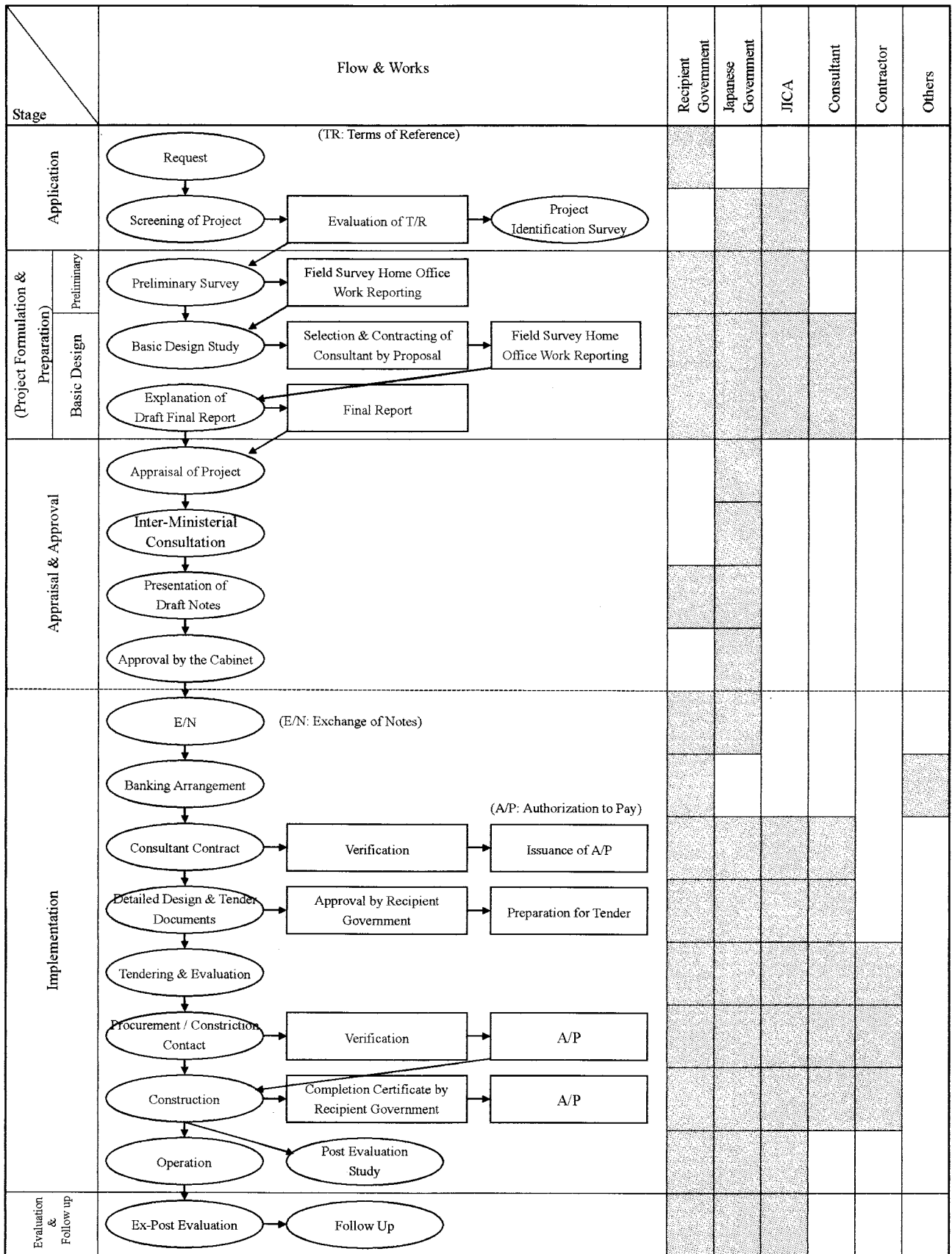
(8) Banking Arrangements (B/A)

- 1) 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.
- 2) 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.

(9) Authorization to Pay (A/P)

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

## Flow Chart of Japan's Grant Aid Procedures



Note: This chart shows the procedures in case of the Basic Design Study will include preparation of detailed specification of equipment

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**Major Undertakings to be taken by Each Government**

No.	Items	To be covered by Grant Aid	To be covered by Recipient Side
1	To secure land		•
2	To clear, level and reclaim the site when needed		•*
3	To construct gates and fences in and around the site		•**
4	To construct the parking lot	•	
5	To construct roads		
	1) Within the site	•	
	2) Outside the site		•
6	To construct the building	•	
7	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity		
	a. The distributing line to the site		•
	b. The drop wiring and internal wiring within the site	•	
	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 elevated tanks)	•	
	3) Drainage		
	The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site	•	
	4) Telephone System		
	a. The telephone trunk line to the main distribution frame/panel (MDF) of the building		•
	b. The MDF and the extension after the frame/panel	•	
5) Furniture and Equipment			
a. General furniture		•	
b. Project equipment	•		
8	To bear the following commissions of the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
9	To ensure 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	•	
10	To accord Japanese nationals, whose service may be required in connection with the supply of the products and the 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		•
11	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		•
12	To maintain and use properly and effectively the facilities contracted and equipment provided under the Grant Aid		•
13	To bear all the expenses, other than those to be borne by the Grant Aid, 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)

\* Demolishing of the existing building that is standing on the same site will be covered by the Grant Aid including leveling work.

\*\* Fence for the new Antenna is necessary for the security reason and will be covered by the Grant Aid.

y/l



**Procedures for Tax Exemption**

1. Before shipment of the Equipment, the Japanese Contractor shall submit a photocopy of the Exchange of Notes to Department of Customs, Ministry of Finance and Economic Planning through the responsible organization of the Tuvalu side on the Project for registration of the Tax exemption.
2. Before arrival of the Equipment at a port in Tuvalu, the Japanese Contractor shall submit i) Original Bill of Lading and ii) Original Invoice for transporting the Equipment to Custom Clearing Agent (CCA) in Tuvalu.
3. CCA prepares custom forms of the Equipment and submit to Department of Customs for approval.
4. After approval by the Department of Customs, Cargos of the Equipment will be released.





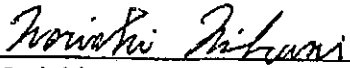
**Minutes of Discussions**  
on  
**Preparatory Survey (for Basic Design)**  
on  
the Project for Improvement of Medium Wave Radio Broadcasting Network and Disaster Prevention  
in  
**Tuvalu**  
**(Explanation of Draft Final Report)**

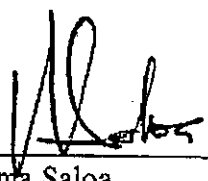
In March 2009, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched the Preparatory Survey (for Basic Design) Team on "The Project for Improvement of Medium Wave Radio Broadcasting Network and Disaster Prevention" (hereinafter referred to as "the Project") to the Government of Tuvalu (hereinafter referred to as "GOT"), and through discussions, field survey, and technical examination of the results in Japan, JICA prepared a draft final report of the Preparatory Survey.

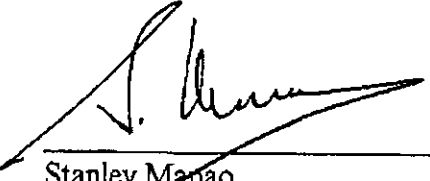
In order to explain and to consult with the concerned officials of the GOT on the components of the draft final report, JICA sent to the GOT the Draft Final Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Nariaki MIKUNI, Senior Representative, JICA Fiji Office from July 28 to 30, 2009.

In the course of the discussions, both sides confirmed the main items described on the attached sheet.

Funafuti, July 29, 2009

  
\_\_\_\_\_  
Nariaki MIKUNI  
Leader  
Preparatory Survey Team  
Japan International Cooperation Agency

  
\_\_\_\_\_  
Kelesoma Saloa  
Acting Senior Assistant Secretary  
Office of the Prime Minister  
Tuvalu

  
\_\_\_\_\_  
Stanley Manao  
Director (Acting)  
Tuvalu Media Department (TMD)  
Office of the Prime Minister  
Tuvalu

## ATTACHMENT

### 1. Components of the Draft Final Report

The GOT side has agreed and accepted in principle the components of the draft final report and the draft detailed specifications of the equipment explained by the Team.

### 2. Japan's Grant Aid Scheme

The GOT side understands the Japan's Grant Aid scheme and the necessary undertakings to be taken by the GOT as explained by the Team and described in the Minutes of Discussions signed by both the sides on March 17, 2009.

### 3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the GOT by the beginning of November, 2009.

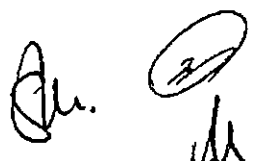
### 4. Other Relevant Issues

- (1) Both sides confirmed that Non-Directional Beacon (NDB) and Distance Measuring Equipment (DME) will be relocated to the place between PWD office and Sports Ground. Therefore there is no problem for location issue of the Project.
- (2) Both sides agreed the components of the Project as shown in Annex-1, especially focusing the following issues:
  - Structural design of the new Radio Station Building by 2 stories will not be considered.
  - 60m<sup>3</sup> of water cistern under the new building will be included in the Project for the sake of disaster prevention.
  - News Car System is replaced to Equipment for News Gathering excluding OB-Van.
- (3) The GOT side agreed to apply for budget allocation from national treasury annually to operate and maintain the equipment described on the draft final report as a part of subsidy to Tuvalu Media Department (hereinafter referred to as "TMD").
- (4) Both sides confirmed that the following undertakings shall be taken by the GOT side at its expense.
  - Tax exemption and custom clearance of the Equipment at the port of disembarkation.
  - Securing store yard for unloading containers of the Equipment near the Project site.
  - Bush clearing and Removal of Obstacles in the Project site for the new Antenna.
  - Removal work of the existing equipment and cables including Shifting work of the existing studios and Master Control System for Temporary broadcasting.

- Securing of yard for rubbish.
  - Provision of Power Supply from the existing substation to the new Radio Station Building and the new Transmitter House including a back-up power supply for the new Radio Station Building.
  - Provision of additional two (2) Telephone Lines to the new Radio Studios and Program line between Studios and Transmitter for back up.
  - Test Broadcasting (On Air).
  - Installation of the existing Satellite Receiving Antenna on the new Radio Station Building.
  - Construction of Fences and Gates around the new Radio Station Building.
- (5) Both sides agreed that the draft detailed specifications of the equipment are confidential and should not be duplicated or released to other parties in order to secure the fairness of the tender of the Project.
- (6) Both sides agreed that the Project Cost Estimation, as attached in **Annex-2**, should never be duplicated or released to other parties before the signing of all the Contract(s) for the Project.
- (7) Both sides agreed that Public Works Department (PWD) shall observe the construction work for information sharing and the maintenance of the buildings and facilities of the Project.

Annexes:

1. Component of the Project
2. Project Cost Estimation

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## Component of the Project

No.	Description	Q'ty	
1	MW Antenna System	1	Lot
2	10 kW Medium Wave Transmitter	1	Lot
3	Power Supply Equipment and Air Conditioning for Transmitter	1	Lot
4	Master Control System	1	Lot
5	ON AIR Studio System	2	Lots
6	Production Studio System	1	Lot
7	Editing System	1	Lot
8	Equipment for News Gathering	1	Lot
9	Maintenance Equipment and Tools	1	Lot
10	Spare Parts	1	Lot
11	Consumable Parts	1	Lot

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### Project Cost Estimation

The cost of the Project will be approximately ¥790 million in total. The content of the project cost are shown separately for the Japanese borne portion and the GOT borne portion in accordance with the conditions in item (3) below.

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

1. Cost to be born by the Japanese side: approximately ¥790 million

#### Approximate Total cost for Japanese Portion

Cost Items	Approximate Cost (million Yen)
Building Construction	295
Equipment Procurement, Installation and Trainings	415
Detailed Design & Consultant's Supervision	80
Total	790

2. Cost to be borne by the GOT side: A\$35,840 (approximately ¥2.35 million)

The above cost includes bank commissions of A\$12,040 (¥0.79 million), which is amount of 0.1% of the total cost for Japanese portion.

3. Conditions for estimation

- (1) Time of estimation: April 2009  
 (2) Foreign exchange rates: 1US\$=¥96.08  
 1A\$=¥65.61

- (3) Others:

The above estimation was carried out in accordance with relevant rules and the guideline of the Japanese Grant Aid.

資料－5 事業事前計画表（基本設計時）

## 5. 事業事前計画表(基本設計時)

<p><b>1. 対象事業名</b></p>
<p>ツバル国 中波ラジオ放送網防災整備計画</p>
<p><b>2. 要請の背景(協力の必要性・位置付け)</b></p>
<p>(1) ツバル国(以下、「ツ」国と称す)の開発は、2005 年に国連本部にて発表された「TE KAKEEGA II」を基本理念として持続的開発計画が進められており、主要課題のうち、保健、教育・人材開発、インフラ開発について、中波ラジオ放送はこれらの情報伝達ツールとして活用が期待されている。特に、離島住民に対する情報格差是正や緊急災害時の安定した国民への情報伝達手段として、国土全体をカバーできる広域な中波ラジオ放送の役割は極めて大きい。</p> <p>(2) 「ツ」国では、1975 年に中波ラジオ放送が開始され、1999 年からは唯一の公共ラジオ放送を担うツバルメディア公社(Tuvalu Media Corporation、以下 TMC と称す)により、離島を含む「ツ」国全域に対しラジオ放送が提供されてきた。しかし、公共事業の民営化の流れの中で公社化された TMC にとって、放送セクターはもともと小さな市場であったため、広告収入等採算に見合う収益を十分に上げることは困難であったことから、TMC は 2008 年 1 月、公社から首相府傘下の直屬機関ツバルメディア局(Tuvalu Media Department、以下 TMD と称す)となった。</p> <p>(3) 「ツ」国の地方部の各環礁島は、首都のフナフチを中心に広域に分布しており、またフナフチと各環礁島を結ぶ連絡船は月に 1 便程度である等の事情から、中波ラジオ放送が全国への唯一の情報伝達手段となっていた。しかし、火災事故による送信機の故障とアンテナマストの倒壊により、2002 年以降、中波ラジオ放送は中断している。その後、TMC は衛星回線を利用した FM ラジオ放送網を整備し、各環礁島に設置した FM 送信機を用いてラジオ放送を実施してきた。しかしながら、衛星を経由した FM 放送方式は複雑であり、送信機及び電源の故障等により放送が数ヶ月停止する等、不安定な運営を余儀なくされていることから、運営・管理の効率化を実現できる中波ラジオ放送網整備に関する無償資金協力が要請された。</p> <p>(4) この要請を受けて我が国は協力準備調査を実施し、無償資金協力事業としての必要性、緊急性、妥当性を確認するとともに、「ツ」国に本計画によって導入される機材の維持管理能力及び地方部の各環礁島におけるラジオ放送の役割や中波ラジオ放送の再開に対する要望が強いことを確認した。</p> <p>(5) 本計画は各環礁島での FM 放送に比較して維持管理が容易で安定したラジオ放送が可能な中波ラジオ放送の整備を行うことを目的としている。これにより、各環礁島を含むツバル国全土に中波ラジオ放送が提供され、公共放送としてニュース、娯楽番組の他、教育、保健衛生、啓蒙普及番組を含む豊かで変化に富む情報を国民に安定して提供できるようになるとともに、災害等が発生した際に、迅速かつ正確に信頼性の高い情報を中波ラジオ放送を通じて全国民に対し提供することが可能となり、妥当性がある。</p>
<p><b>3. プロジェクト全体計画概要</b></p>
<p>(1) <b>プロジェクト全体計画の目標(裨益対象の範囲及び規模)</b>  中波ラジオ放送が再開され、離島の住人に対し信頼性の高い安定した情報が提供される。</p> <p>《裨益対象の範囲及び規模》  TMD のラジオ放送を受信可能である「ツ」国全国民</p> <p>(2) <b>プロジェクト全体計画の成果</b>  <u>ラジオ放送局舎の建設及び中波ラジオ放送機材が調達・据付けされる。</u></p> <p>離島の住人を含む全国民に多様な情報が提供される。</p> <p>(3) <b>プロジェクト全体計画の主要活動</b></p>

<p>1) <u>ラジオ放送局舎、中波ラジオアンテナシステム、送信機材、自動電圧制御装置、主調整室機材、制作スタジオ機材等の整備</u></p> <p>2) 番組制作の迅速化及び効率化</p> <p>3) 運営・維持管理体制を整え、必要な予算措置及び人員の配置</p> <p>4) 上記施設・機材に関する運営・維持管理予算の確保</p> <p><b>(4) 投入(インプット)</b></p> <p>1) <u>日本側(=本案件): 無償資金協力 7.89 億円</u></p> <p>2) 「ツ」国側</p> <p>(ア) 運営維持管理費及び要員の確保</p> <p>(イ) 施設・機材の運営・維持管理に係る経費</p> <p><b>(5) 実施体制</b></p> <ul style="list-style-type: none"> <li>・ 主管官庁: 首相府</li> <li>・ 実施機関: 首相府(ツバルメディア局が担当部局)</li> </ul>
<p><b>4. 無償資金協力案件の内容</b></p>
<p><b>(1) サイト</b></p> <p>ツバル国 フナフチ</p> <p><b>(2) 概要</b></p> <p>TMD のラジオ放送局舎及び送信機建屋の建設と、放送機材(中波アンテナシステム、10 kW 中波送信機、送信機用電源・空調設備、主調整室システム、オンエアスタジオシステム、制作スタジオシステム、編集システム、ニュース取材用機材、保守用測定器・工具及び消耗品)の調達・据付工事</p> <p><b>(3) 相手国側負担事項</b></p> <p>1) プロジェクト・サイト近隣における一時保管場所の提供、2) 新アンテナ用地内の草刈り及び障害物の撤去、3) 既設機材、ケーブル等の撤去工事(既設スタジオ及び主調整室の移設工事含む)、4) 撤去資材の廃棄場所の確保、5) 市内電源の確保(既設変電所からラジオ放送局舎及び送信機建屋までの電力ケーブルの提供、並びにラジオ放送局舎への非常用電源の確保含む)、6) ラジオ放送局舎への電話回線(2 回線)の確保及びスタジオから送信機までのバックアップ用番組伝送回線の確保、7) ラジオ放送局舎屋根への既設衛星受信アンテナの設置、8) ラジオ放送局舎敷地沿いのフェンス及び門扉の設置</p> <p><b>(4) 概算事業費</b></p> <p>概算事業費 7.91 億円(無償資金協力 7.89 億円、「ツ」国側負担 2.35 百万円)</p> <p><b>(5) 工期</b></p> <p>16 ヶ月(各詳細設計、入札期間を含む)</p> <p><b>(6) 貧困、ジェンダー、環境及び社会面の配慮</b></p> <p>なし</p>
<p><b>5. 外部要因リスク</b></p> <p>大きな政治、経済混乱がない。</p>
<p><b>6. 過去の類似案件からの教訓の活用</b></p> <p>なし</p>



## 7. プロジェクト全体計画の事後評価に係る提案

### (1) プロジェクト全体計画の目標達成を示す指標

項目	現状(2009年)	実施後1年後(2012年)
ラジオ放送状況	中波ラジオ放送はアンテナマスト倒壊及び機材の故障のため中断している。またFM放送は維持管理が難しく、頻繁に起こる故障により地方部の環礁島8ヶ所のうち2ヶ所で受信不可、残りの6ヶ所でも不安定な受信状態である。	中波ラジオ放送が復旧し、地方部の環礁島を含む全国民に対して、安定かつ継続してラジオ放送により各種情報が提供される。

### (2) その他の成果指標

特になし

### (3) 評価のタイミング

2012年以降(実施後1年後)