

**【資料】**

1. 調査団員・氏名
2. 調査行程
3. 関係者(面会者)リスト
4. 討議議事録(M/D)
5. 討議議事録(M/D)誤記修正
6. 参考資料／入手資料リスト

## 1. 調査団員・氏名

### (1) 協力準備調査

三角 幸子 【団長】 国際協力機構南アジア部 参事役

鈴川正之 【技術参与】 自治医科大学医学部 救急医学教授

石田 祐子 【計画管理】 国際協力機構人間開発部保健第二グループ  
保健第三課 ジュニア専門員

東條 重孝 【業務主任／救急医療機材計画】 (株) 国際テクノ・センター

比留間 安弘 【機材計画／調達積算】 (株) 国際テクノ・センター

### (2) 概略設計概要説明調査

仁田 知樹 【団長】 国際協力機構ブータン事務所 所長

加藤 誠治 【計画管理】 国際協力機構人間開発部保健第二グループ  
保健第三課 企画役

東條 重孝 【業務主任／救急医療機材計画】 (株) 国際テクノ・センター

## 2. 調査行程

### (1) 協力準備調査

	月日	官団員	技術参与	業務主任/救急医療機材計画	機材計画/調達積算	
1	5/29	土	成田→ バンコク →			
2	5/30	日	→ パロ	同左		
3	5/31	月	JICA 会議、保健省表敬 JDWNRH 調査 バジヨ BHU 調査	同左		
4	6/1	火	ダンプ病院調査 サルパン病院調査	成田→ バンコク →	ダンプ病院調査 サルパン病院調査	
5	6/2	水	ゲレプ地域病院調査 ティンプ着	→ パロ	レプ地域病院調査 ティンプ着	
6	6/3	木	ギダコム病院調査 団内会議	団内会議	ギダコム病院調査 団内会議	
7	6/4	金	JICA にて協議、その後、保健省にて協議			成田→ バンコク →
8	6/5	土	団内会議			→ パロ
9	6/6	日	JICA にて団内協議、その後、保健省にてミニッツ協議			
10	6/7	月	JICA にてミニッツ案、2時保健省ミニッツ協議、その後再委託で現地コンサル会社 5 社に書類説明、			
11	6/8	火	AM 9時半ホテル発、JICA にて、再委託関連業務作業 PM 3時保健省にてミニッツ協議・署名、その後、JICA 事務所報告			
12	6/9	水	AM JICA にて、再委託関連業務作業 PM 3時保健省にてミニッツ協議・署名、その後、JICA 事務所報告			
13	6/10	木	パロ → バンコク →	10時、JICA にて入札開封、11時、結果発表、 2時契約交渉、3時保健省にて、3者協議		
14	6/11	金	→ 成田	AM:国立病院にて統一調査 PM:再委託契約、調査日程調整		
15	6/12	土		地方調査、移動、ジャカール泊		
16	6/13	日		AM:ジャカール発、PM:モンガル着		
17	6/14	月		AM:モンガル病院調査開始、周辺の農道視察、		
18	6/15	火		AM:モンガル発、PM: ジャカール着		
19	6/16	水		9時半: プムタン病院調査、BHU-2 までの道路視察 PM: ワンデュポダンへ向け移動、20時20分着		
20	6/17	木		AM:バジヨ BHU1 調査 PM: プナカ病院調査、18時ティンプ着		
21	6/18	金		AM:保健省 PPD にて資料整理、DMS にて車両仕様協議、16時: 車両代理店、修理工場調査		
22	6/19	土		資料整理		
23	6/20	日		資料整理		
24	6/21	月		AM:ティンプ発、16時半: プンツォリン着		
25	6/22	火	AM: プンツォリン病院調査、トヨタ代理店、輸送・通関業者調査その後、パロへ移動。			
26	6/23	水	AM: パロ病院調査、ORC まで道路状況視察。 15時ティンプ着			
27	6/24	木	AM: JICA にて中間報告。			
28	6/25	金	AM: 保健省協議、 PM: ローカルコンサルの調査報告、資料回収			
29	6/26	土	資料整理			
30	6/27	日	資料整理			
31	6/28	月	終日、保健省にて資料整理			

32	6/29	火		AM:保健省テクニカルノート打合せ PM:保健省 DG 打合せ
33	6/30	水		AM:テクニカルノート作成 PM:保健省にて協議、テクニカルノート署名、その後、JICA 報告
34	7/1	木		資料整理
35	7/2	金		パロ発→バンコク発 (機中泊)
36	7/3	土		成田着

(2) 協力準備調査 (概略設計) 概要説明調査

	月日		官団員	業務主任/救急医療機材計画
1	10月9日	金曜	成田→バンコク	
2	10月10日	土曜	バンコク→パロ	
3	10月11日	日曜	休日	
4	10月12日	月曜	AM:JICA 表敬、その後保健省表敬、調査日程説明、ドラフト手交	
5	10月13日	火曜	AM:JICA、その後保健省会議室 (3階ホール) ドラフト内容説明、ブータン側からヘルスヘルプラインの説明、ミニッツ案を提示 PM:JICA にて作業	
6	10月14日	水曜	AM:保健省にてミニッツ協議	
7	10月15日	木曜	11時ミニッツ署名	
8	10月16日	金曜	パロ→バンコク	
9	10月17日		バンコク→成田	

### 3. 関係者（面談者）リスト

#### 保健省（Ministry of Health Royal Government of Bhutan）

- |  |   |
|--|---|
| ・ Zangley Dukpa<br>ザングレイ デュクパ          | Minister, Ministry of Health<br>保健大臣  |
| ・ Dasho(Dr.) Gado Tshering<br>ガドー チェリン | Secretary, Ministry of Health<br>事務次官   |
| ・ Ugen Dophu M.D.<br>ウゲン ドプー           | Officiating Secretary, Ministry of Health<br>事務次官   |
| ・ Dr. Dorji Wangchuk<br>ドルジ・ワンチュク      | Director General, Department of Medical Service<br>局長、医療サービス部   |
| ・ Mr. Nawang Dorji<br>ナワン・ドルジ          | Chief Program officer, Department of Medical Service<br>主任、医療サービス部  |
| ・ Mr. Pema Lethro<br>ペマ・レスロ            | Assistant Planning officer, Policy and Planning Division Department of Medical Service.<br>事務官、計画担当、医療サービス部   |
| ・ Mr. Leki Norbu<br>レキ・ノルブ             | Motor Transport officer Administration and Finance Division Department of Medical Service<br>事務官、運送担当、医療サービス部 |

#### モンガル病院（Mongar Hospital）

- |                                     |                                      |
|-------------------------------------|--------------------------------------|
| ・ Dr. Kesang Naegyel<br>ケサン・ナエギル    | Medical Specialist<br>専門医            |
| ・ Mr. Dorji Wangchuk<br>ドルジ・ワンチュク   | Motor Transport officer<br>車両主任      |
| ・ Mr. Dorji Thinley<br>ドルジ・ティンレイ    | Senior Administration officer<br>事務官 |
| ・ Mrs. Neelima Chhetri<br>ニーリマ・チェトリ | Nursing Superintendant<br>主任看護師      |
| ・ Mr. Phub Tshering<br>パブ・チェリン      | Administration officer<br>事務官        |
| ・ Mr. Bro K.B. Rai<br>ブロ・K.B.・ライ    | Male Nurse<br>看護師                    |
| ・ Mr. Tshering Dorji<br>チェリン・ドルジ    | District Health Officer<br>地方保健担当者   |
| ・ Mr. Jigue Tshewaing<br>ジゲ・チェワン    | Driver<br>運転手                        |



チョエダ・ギャルツメン	地方医務官長
• Mr. Kinley Dorji	Driver
キンレイ・ドルジ	運転手

#### サムツェ病院 (Samtse Hospital)

• Mr. Tshering Wangchuk	Senior District Health Officer
チェリン・ワンチュク	地方保健担当者
• Mr. Chandralala Bhujel	Medical Record Technician
チャンドララ・ブージェル	カルテ係
• Ms. Dechen Wangmo	Senior Nurse
デチャン・ワングモ	看護師
• Mr. Ganesh Pradhan	Senior Driver
ガネシュ・プラダン	運転手

#### ゴムツ病院 (Gomtu Hospital)

• Dr. R.I Patil	Chief Medical Officer
R.I.パティル	主任医務官
• Mr. Lodey Rabten	Senior Chief Nurse
ロデエイ・ラブテン	主任看護師
• Mr. Namgay Dorji	Store In charge
ナムガイ・ドルジ	倉庫係
• Ms. Krishna Maya	Receptionist
クリシュナ・マヤ	受付

#### ダガ BHU (Daga BHU)

• Mr. Dorji Gyeltshen	Assistant District Health Officer
ドルジ・ゲルテェン	地方保健担当者
• D.C Acharya	Assistant Clinical Officer
D.C.アチャルヤ	医務官

#### ラモイジンガ BHU (Lhamoyzingkha BHU- 1)

• Dr. Ugyen Wangdi	Medical officer
ユーゲン・ワンディ	医務官
• Mr. Ugyen Wangdi	General Nurse Midwife
ユーゲン・ワンディ	助産婦長

**イエベレツァ病院 (Yebilaptsa Hosptal)**

- |                         |                                  |
|-------------------------|----------------------------------|
| • Mr. B.N. Sharma       | Administration officer           |
| B.N.・シャルマ               | 事務官                              |
| • Mr. Bikram Gurung     | General Nurse Midwife            |
| ビクラム・グルン                | 助産婦長                             |
| • Mr. Thala Pati Phuyel | Administration Assistant         |
| タラ・パティ・プーエル             | 事務官補                             |
| • Mr. Lhelki Pharup     | Assistant Nursing Superintendent |
| レルキ・パループ                | 看護師                              |

**ルンツェ病院 (Lhuentse Hospital)**

- |                        |                          |
|------------------------|--------------------------|
| • Mr. Tenzin           | District Health Officer  |
| テンジン                   | 地方保健担当者                  |
| • Dr. Kuenzang Chhezom | District Medical Officer |
| クエンザン・チェゾム             | 地方医務官                    |
| • Mrs. Tashi Lhamo     | Administration Assistant |
| タシ・ラーモ                 | 事務官補                     |

**タシガン病院 (Trashigang Hospital)**

- |                       |                              |
|-----------------------|------------------------------|
| • Mr. Tshewang Dorji  | District Health Officer      |
| チェワン・ドルジ              | 地方保健担当者                      |
| • Dr. Santiram Dhakal | Chief Medical Officer        |
| サンティラム・ダカール           | 主任医務官                        |
| • Mr. Tashi Jamtsho   | Medical Record Technician- I |
| タシ・ジャムチョ              | カルテ係                         |

**タシ・ヤンツェ病院 (Trashiyangtse Hospital)**

- |                        |                                     |
|------------------------|-------------------------------------|
| • Mr. Sonam Chopel     | Officiating District Health Officer |
| ソナム・チョペル               | 地方保健担当者                             |
| • Mr. Yeshe Dorji      | Administration Assistant            |
| エシ・ドルジ                 | 事務官補                                |
| • Mr. Sither Gyeltshen | Assistant Nurse                     |
| シター・ゲルチェン              | 看護師補                                |

**レゼブ病院 (Riserboo Hospital)**

- |                    |                       |
|--------------------|-----------------------|
| • Dr. Dorji Penjor | Chief Medical Officer |
|--------------------|-----------------------|



ドルジ・ペンジョール 主任医務官  
• Mr. Karchung Administration officer  
カルチュン 事務官

**ペマガツェル病院 (Pema Gatshel Hospital)**

• Dr. Thukten Chopel Chief Medical Officer  
チュクテン・チョペル 主任医務官

**デワタン病院 (Dewathang Hospital)**

• Dr. Dendup Gyeltshen Chief Medical Officer  
デンダプ・ゲルチョン 主任医務官

**サンドロップ・チョリン BHU 1 (Samdrupcholing BHU I)**

• Mr. Choney Dorji Health Assistant  
チョニー・ドルジ 保健補助

**サンドロップ・ジョンカル病院 (Samdrup Jongkhar Hospital)**

• Mr. Tshering Chhogyel Administration officer  
チェリン・チョジェル 事務官

**国立病院 (JDWNRH: Jigme Dorji Wangchuk National Referral Hospital)**

• Mr. Tashi Phw PRO / Administration officer JDWNRH  
タシ・ポー 事務官  
• Mr. Wangchuk Assistant Procurement officer JDWNRH  
ワンチュク 事務官、購買担当  
• Mr. Q.Pandup Tsheuy Medical System JDWNRH  
Q.パンダップ・チェウイ 事務官、医療システム  
• Mr. Dorji Dukpa Head Accountant Section  
ドルジ・デュクパ 経理主任  
• Mr. Keucho Dorji Region officer Referral section  
ケウチョ・ドルジ 事務官  
• Mr. Passang Dorji Nurse in charge emergency department  
パサン・ドルジ 看護師

**Ministry of Economic Affairs (経済省)**

• Mr. Tshering Senior Program officer  
チェリン シニア企画担当者

#### 4. 討議議事録 (M/D)

**MINUTES OF DISCUSSIONS  
ON PREPARATORY SURVEY  
ON THE PROJECT FOR REPLACEMENT OF AMBULANCES  
IN KINGDOM OF BHUTAN**

In response to a request from the Royal Government of Bhutan (hereinafter referred to as "RGoB"), the Government of Japan decided to conduct a Preparatory Survey on the Project for Replacement of Ambulances in Bhutan (hereinafter referred to as "the Project") and entrusted the survey to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Bhutan a Preparatory Survey Team (hereinafter referred to as "the Team"), which is headed by Ms. Sachiko Misumi, Senior Advisor to Director General, South Asia Department of JICA, and is scheduled to stay in the country from 30th May to 2nd July, 2010.

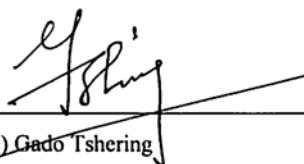
The Team held discussions with the officials concerned from the RGoB and conducted a field survey.

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 Preparatory Survey Report.

Thimphu, 9th June, 2010

三浦 幸子

\_\_\_\_\_  
Sachiko Misumi  
Leader, Preparatory Survey Team  
Senior Advisor to Director General  
South Asia Department  
Japan International Cooperation Agency



\_\_\_\_\_  
Dasho (Dr.) Gado Tshering  
~~Secretary~~  
Ministry of Health  
Royal Government of Bhutan

## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to replace the decrepit ambulances in Bhutan, by identifying adequate car specification and inner equipment sets, for better patient transport and emergency medical care in the country.

### 2. Confirmation of the final request

After discussions between the RGoB and the Team, replacement of the ambulances described in Annex-1 (a list of facilities) and Annex-2 (a list of equipment) were requested by the RGoB. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for its approval.

### 3. Project sites

The sites of the Project are the districts where the facilities listed in Annex-1 are located.

### 4. Responsible and implementing agency

The responsible and implementing agency is the Ministry of Health. Organization chart of the Ministry is shown in Annex-3.

### 5. Japan's Grant Aid scheme

- 5-1. The RGoB understands the Japan's Grant Aid scheme explained by the Team, as described in Annex-4.
- 5-2. The RGoB confirms to take the necessary measures, as described in Annex-4, for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.
- 5-3. The Team explained that a competitive tendering for procurement of vehicles and equipment sets, as described in the "Procurement Guidelines of the Japanese Grant Aid for General Projects", must be conducted to select a manufacturer of the ambulances, and this was agreed by the RGoB.

### 6. Schedule of the survey

- 6-1. The Team will proceed to further studies in Bhutan until 2nd July, 2010.
- 6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents from late September to early October, 2010.
- 6-3. After the contents of the report is accepted, in principle, by the RGoB, JICA will complete the final report and send it to the RGoB.
- 6-4. The Team documents a technical note (for detailed specification and procedure of procurement), which is to be signed by the RGoB and the Team before all the team members leave Bhutan.



Schedule of the survey is shown in Annex-5.

## 7. Other relevant issues

### 7-1. Scope of the Preparatory Survey

#### 7-1-1. Coherence with the National Policy

The Team understands that the final request was made by the RGoB based on the active guideline, "National Policy Guidelines for Ambulance Services," which was dated on 25 March, 2009.

#### 7-1-2. Consideration for Donor Community

The Project takes into consideration of the current and potential cooperation with other donor agencies to avoid any duplication.

### 7-2. Criteria for Decisions

Based on the result of the Preparatory Survey, the number and locations of ambulance cars will be decided. Criteria for making decisions are age and mileage of ambulance cars, with considerations for condition of the vehicle, frequency of transportations, times spent for the ambulance service, road condition, climate, and other factors to be noted in each area.

### 7-3. Clarifications of Present System

The Team needs to clarify (1) the organizational structure, budgeting, human resource allocation, and technical skills of service providers, as well as (2) the overall maintenance system of ambulance cars and equipment inside, and (3) how the above structure and resources are incorporated into practice to maintain ambulance service in each area, for the determination of appropriateness of the Project. The facilities which have responded with the precise answers to the questionnaire will be taken into account for the formulation of the Project.

### 7-4. Design of Specification (including Equipment)

The Team needs to clarify the current usage of ambulance cars as well as the equipment inside, in order to design the specification of ambulance cars for effective and efficient use in Bhutan.

### 7-5. Effectiveness of Systematic Approach

The RGoB and the Team discussed the effectiveness of systematic approach to the emergency medical service (the overall activities from the Village Health Workers to the medical personnel at a top referral) for the lives and well-beings of people in Bhutan. Viewpoints of (1) appropriate allocation and mobilization of medical staff and resources, (2) proper implementation of Health Help Line, and (3) statistics and evidence-based analyses were raised to strengthen the system further.

Taking account of the above issues, contents of the Project will be decided through the forthcoming survey and analysis in Japan.

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- Annex-I List of the facilities requested by the RGoB
- Annex-II List of the equipment requested by the RGoB
- Annex-III Organization chart of the Ministry of Health
- Annex-IV Japan's Grant Aid scheme
- Annex-V Schedule of the Survey



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Updated Proposal (Grant expected from JICA)  
Ministry of Health  
Royal Government of Bhutan

Sl.#	Hospital Name	Requirement /or replacement	Reasons for Replacement	Baseline	Target	Specification	Remarks
1	Samdrup Jongkhar	1	Replacement for 10yrs old ambulance	2	8 ambulances for JDWNRH,5 for Mongar and Gelephu RRH, 3 for Paro RRH, 2 for all District Hospitals and one for BHU-I		
2	Deothang Hospital	1	Replacement for 12 years old	1			
3	Riserboo Hospital	1	Replacement of 11 years old ambulance	2			
4	Mongar Regional Referral Hospital	3	Replacement of 12years, 10years, 9 years old ambulance	5			
5	Pemagatshel Hospital	1	Replacement for 10 years old ambulance.	2			
6	Yeblapisa Hospital	1	Replacement of 11years old ambulance	2			
7	Bajo BHU I	1	Replacement of 9 years old ambulance	2			
8	Santse Hospital	2	Replacement of 10 years old ambulance	3			
9	Trashigang Hospital	1	Replacement of 9 years old ambulance	2			
10	Punakha Hospital	1	Replacement of 10 years old ambulance	2			
11	JDWNRH	2	Replacement of one 14 years & 10 years model ambulances	5			Toyota Land Cruiser
12	Trashiyangtse hospital	1	Replacement of 10 years old ambulance	2			
13	Paro	2	12 & 9 years old ambulances	3			
14	Gomtu hospital	1	Replacement of 11years old ambulance	2			
15	Samdrupcholing BHU I	1	Replacement of 10 years old ambulance	1			
16	Phuentsholing hospital	2	Replacement of 10years old ambulance	3			
17	Dagana BHU I	1	Replacement of 11years old ambulance	1			
18	Bumthang hospital	1	Replacement of 11 years old ambulance	2			
19	Imaizolingkha BHU I	1	Replacement of 9 years old ambulance	1			
20	Lhuentse hospital	1	Replacement of 9 years old ambulance	2			
	Total	26		40			

Criteria-10 years and above

Note: The ambulance 9 year old is reflected on understanding that at the time of JICA Aid implementation will 10 years old.

Date: 09/06/2010

**Department of Medical Services  
Ministry of Health  
Thimphu:Bhutan.**

**Specifications/options required in addition to the standard options.**

1. Toyota (ex-factor) Land Cruiser Ambulance Hard top (LWB 4.21 DIESEL, 6) Cylinder, 3 doors, 8 seat, 5-speed manual transmission, ordering code, HZJ78R- RJMRS Steering orientation: RHD)
2. Exterior Colour: White
3. Curtain (506 BV) or Frosted Window
4. First Aid Kit Plastic Type (244 EE)
5. Hand lamp & connector 55W (516 BO)
6. Intravenous feeding hook,2 pcs (519 BD)
7. Main stretcher W/suspension bed instead of STD (521 CM)
8. Medicine Box (532 BB)
9. Oxygen Resuscitator Automatic Type + demand Type including oxygen cylinder W/O oxygen (263 AA)
- 10.Oxygen cylinder, without oxygen (532 BB)
- 11.Patient lamp,10 W, flexible type (534 AW)



12. Roof sign board, English (543 BU)
13. Roof ventilator W/electric fan (544 BV)
14. Room Lamp, 10 W (additional ) (545 AH)
15. Ambulance decals, back (Red Cross) (537 EZ)
16. Ambulance Decals, both sides (Red Cross) (538 EQ)
17. Beacon lamp, multi flashing red, instead of STD, electric siren amp and speaker 2 tone type W/microphone, (N/A with std Beacon lamp red and optional Beacon lamp blue and multi flashing blue) (525 BQ, 508 CT)
18. Sub stretcher (folding type) N/A with Cabinet stool with wash basin (549 BB) reconfirm in Japan.
19. Electric sucker (509 BJ)
20. Double fuel tank

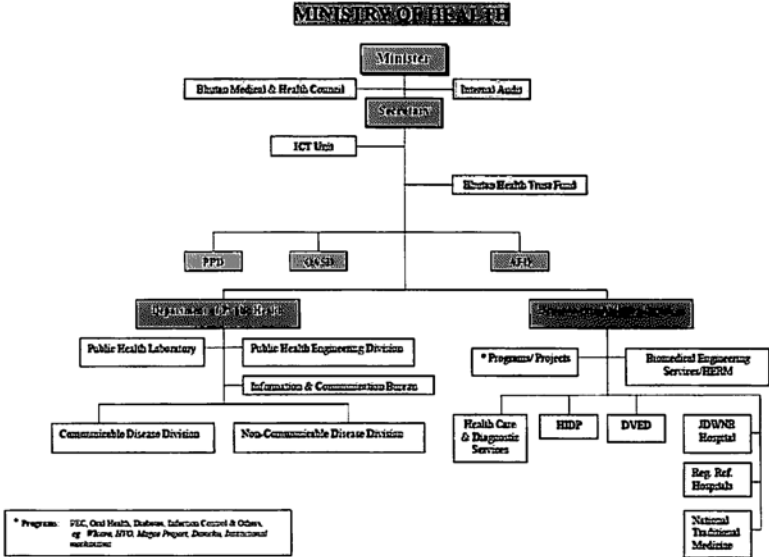
Reviewed and finalised by Dr. Masayuki Suzukawa, Mr. Shigetaka Tojo, Mr. Yasuhiro Hiruma, Japanese mission team members and Mr. Nawang Dorji, Chief Program Officer, HC&DD on the 8<sup>th</sup> June, 2010 and deleted items from the original list is shown below.

1. Ambulance decals, front (Red Cross) (539 EN)
2. Ambulance decals roof (Red Cross) (540 EP)  
**Reason:** too many cross is un-necessary
3. One year spare parts kit  
**Reason:** not permissible under Grant Aid Policy of Japan.

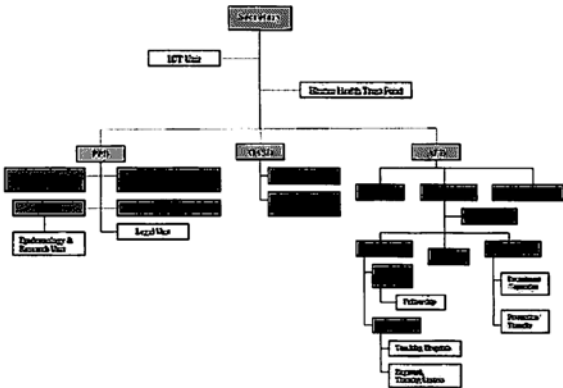




Organization Chart of the Ministry of Health



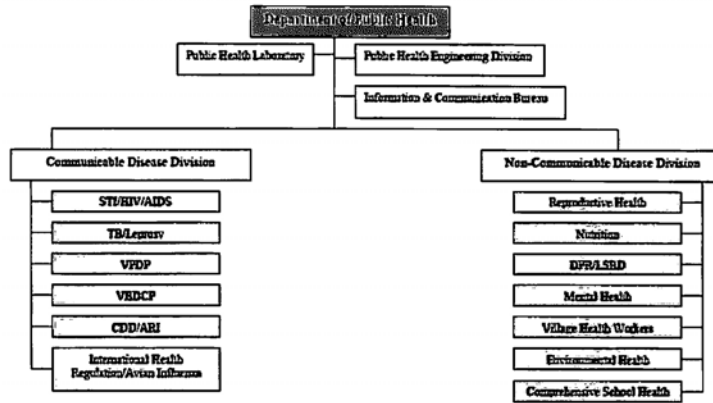
MINISTRY OF HEALTH  
Secretariat



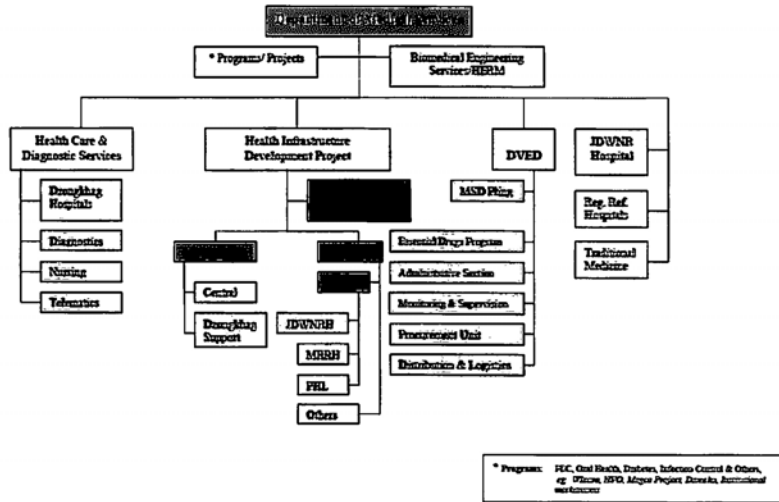
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**MINISTRY OF HEALTH  
Department of Public Health**



**MINISTRY OF HEALTH  
Department of Medical Services**



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## Japan's Grant Aid scheme

The Government of Japan (hereinafter referred to as "the GOJ") is implementing the organizational reforms to improve the quality of operations of the Official Development Assistance (ODA), and as a part of this realignment, a new JICA law was entered into effect on October 1, 2008. Based on this law and the decision of the GOJ, JICA has become the executing agency of the Grant Aid for General Projects, for Fisheries and for Cultural Cooperation, etc.

The Grant Aid is non-reimbursable fund provided to a recipient country to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for its economic and social development 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

The Japan's Grant Aid is supplied through following procedures:

- Preparatory Survey
  - The Survey conducted by JICA
- Appraisal & Approval
  - Appraisal by the GOJ and JICA, and Approval by the Japanese Cabinet
- Authority for Determining Implementation
  - The Notes exchanged between the GOJ and a recipient country
- Grant Agreement (hereinafter referred to as "the G/A")
  - Agreement concluded between JICA and a recipient country
- Implementation
  - Implementation of the Project on the basis of the G/A

### 2. Preparatory Survey

#### (1) Contents of the Survey

The aim of the preparatory Survey is to provide a basic document necessary for the appraisal of the Project made by the GOJ and JICA. The contents of the Survey are as follows:

- Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of relevant agencies of the recipient country necessary for the implementation of the Project.
- Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, financial, social and economic point of view.
- Confirmation of items agreed between both parties concerning the basic concept of the Project.
- Preparation of a basic design of the Project.



- Estimation of costs of the Project.

The contents of the original request by the recipient country are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the Project is confirmed based on the guidelines of the Japan's Grant Aid scheme.

JICA requests the Government of the recipient country to take whatever measures necessary to achieve 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 of the recipient country which actually implements the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country based on the Minutes of Discussions.

(2) Selection of Consultants

For smooth implementation of the Survey, JICA employs (a) registered consulting firm(s). JICA selects (a) firm(s) based on proposals submitted by interested firms.

(3) Result of the Survey

JICA reviews the Report on the results of the Survey and recommends the GOJ to appraise the implementation of the Project after confirming the appropriateness of the Project.

### 3. Japan's Grant Aid scheme

(1) The E/N and the G/A

After the Project is approved by the Cabinet of Japan, the Exchange of Notes(hereinafter referred to as "the E/N") will be signed between the GOJ and the Government of the recipient country to make a pledge for assistance, which is followed by the conclusion of the G/A between JICA and the Government of the recipient country to define the necessary articles to implement the Project, such as payment conditions, responsibilities of the Government of the recipient country, and procurement conditions.

(2) Selection of Consultants

In order to maintain technical consistency, the consulting firm(s) which conducted the Survey will be recommended by JICA to the recipient country to continue to work on the Project's implementation after the E/N and G/A.

(3) Eligible source country

Under the Japan's Grant Aid, in principle, Japanese products and services including transport or those of the recipient country are to be purchased. When JICA and the Government of the recipient country or its designated authority 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, constructing and procurement firms, and the prime consulting firm are limited to "Japanese nationals".

(4) Necessity of "Verification"

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

(5) Major undertakings to be taken by 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 shown in the table on page 4 of this report.

(6) "Proper Use"

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

(7) "Export and Re-export"

The products purchased under the Grant Aid should not be exported or 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 under the name of the Government of the recipient country in a bank in Japan (hereinafter referred to as "the Bank"). JICA 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 JICA 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 paid to the Bank.

(10) Social and Environmental Considerations

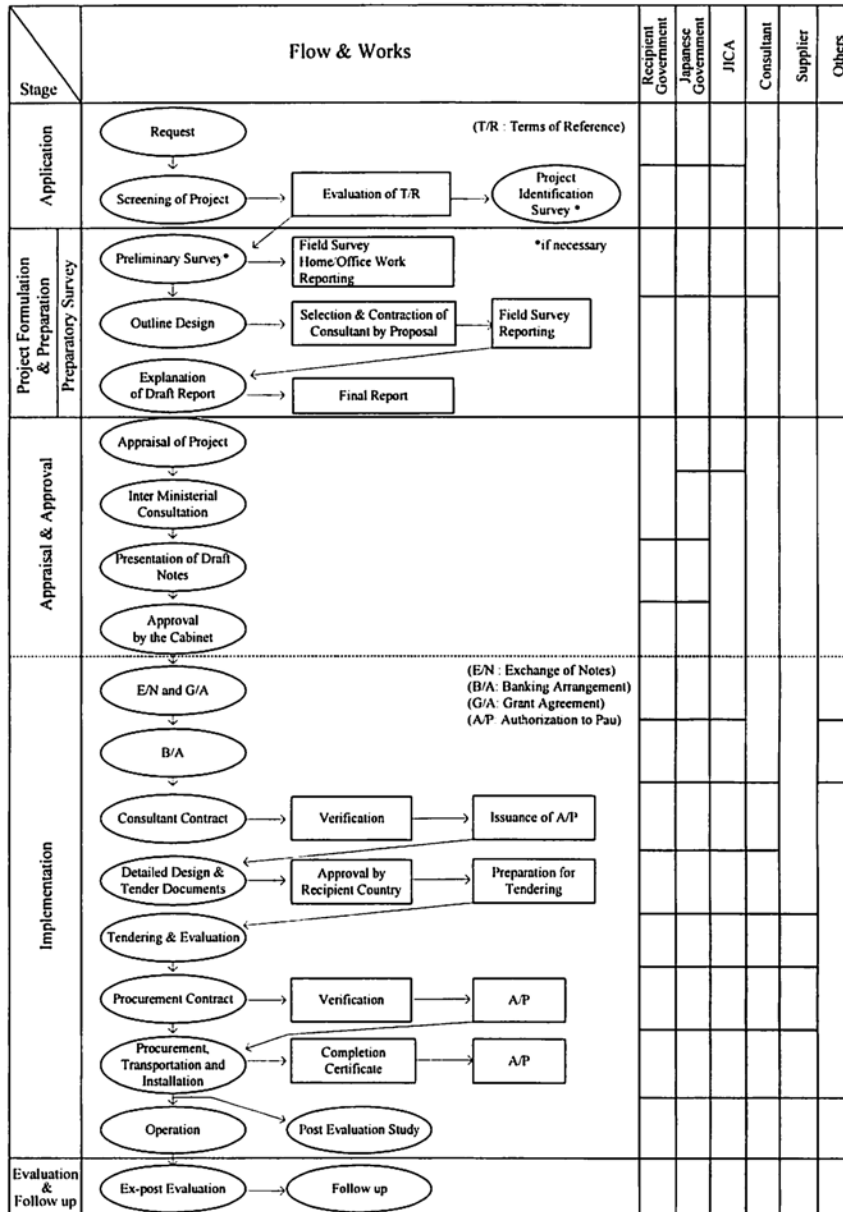
A recipient country must carefully consider social and environmental impacts by the Project and must comply with the environmental regulations of the recipient country and JICA socio-environmental guidelines.



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

No.	Items	To be covered by the Grant Aid	To be covered by the Recipient Side
1	To bear the following commissions to the Japanese bank for banking services based upon the B/A		
	1) Advising commission of A/P		•
	2) Payment commission		•
2	To ensure prompt customs clearance of the products and to assist internal transportation of the products in the recipient country		
	1) Marine(Air) transportation of the products from Japan or third countries to the nearest country of recipient country	•	
	2) Tax exemption and custom clearance of the products		•
	3) Internal transportation from the bond warehouse 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 contract, 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 utilize the equipment provided under the Grant Aid properly and effectively		•
6	To bear all the expenses, other than those to be borne by the Grant Aid, necessary for the transportation and installation of the equipment		•

### Flow Chart of Japan's Grant Aid Procedure



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**Schedule of Survey**

The survey will be carried out as follows:

	2010							
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Preparation of Survey in Japan	<input type="checkbox"/>							
Field Survey in Bhutan		■	■					
Analysis in Japan (Preparation of draft final report)			▬	▬	▬			
Explanation of draft final report in Bhutan					■			
Preparation and submission of final report						▬	▬	▼

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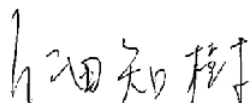
**MINUTES OF DISCUSSIONS  
ON THE BASIC DESIGN STUDY  
ON THE PROJECT FOR REPLACEMENT OF AMBULANCES  
IN KINGDOM OF BHUTAN  
(EXPLANATION OF DRAFT REPORT)**

In May and June 2010, Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a Preparatory Survey team on the Project for the Project for Replacement of Ambulances in Bhutan (hereinafter referred to as "the Project") to the Royal Government of Bhutan (hereinafter referred to as "RGoB"), and through discussion, field survey, and technical examination of the study results in Japan, JICA prepared a draft report of the study. .

In order to explain and to consult the RGoB on the components of the draft report, JICA sent to Bhutan the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Tomoki Nitta, Resident Representative, JICA Bhutan Office and is scheduled to stay in the country from 9 to 15 October, 2010.

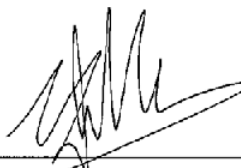
In the course of explanation of draft report, both parties confirmed the main items described on the attached sheets. The Team will proceed to further works to implement the Project.

Thimphu, 14 October, 2010



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Tomoki Nitta  
Leader, Draft Report Explanation Team  
Resident Representative  
JICA Bhutan Office  
Japan International Cooperation Agency



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Ugen Dophu M.D.  
Officiating Secretary  
Ministry of Health  
Royal Government of Bhutan

## ATTACHMENT

### 1. Components of the Draft Report

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

### 2. Japan's Grant Aid scheme

The RGoB understands the Japan's Grant Aid scheme and the necessary measures to be taken by the RGoB as explained by the Team and described in Annex-4 of the Minutes of Discussions signed by both parties on 9<sup>th</sup> June, 2010.

### 3. Schedule of the Study

JICA will complete the final report in accordance with the confirmed items and send it to the RGoB by December 2010.

### 4. Other Relevant Issues

#### 4-1. Confidentiality of the Project Cost Estimation

The Team explained the cost estimation of the Project as described in Annex-1. Both sides agreed that the Project Cost Estimation should never be duplicated or released to any outside parties before signing of all the Contract(s) for the Project. The RGoB understands that the Project Cost Estimation described in Annex-1 is not final and is subject to change.

#### 4-2. Undertakings by the RGoB

The RGoB promised to take every necessary measure to conduct the undertakings, the registration and the insurance for the ambulances to be donated, according to the tentative schedule described in Annex-3.

##### 4-2-1. Introduction of Health Help Line

The RGoB explained to the Team on the project of the Health Help Line system. The Health Help Center has been contracted to Indian companies for its establishment in September 2010. The RGoB mentioned the system would function by January 2011. The Team received the document, in Annex-5, regarding the present situation of the Health Help Line.

##### 4-2-2. Upgrade of Log Book

The RGoB will upgrade the form of the ambulance driver's log book nationwide, so that it contains: (1) Record of service check, repair and exchange of parts of each vehicle, in order for the appropriate maintenance cost to be secured through each district government; and (2) Information on patient diagnosis, casualty, or ante/postnatal conditions of pregnant women as well as the information on any medical attendance, to be managed and monitored with the record of hospitals/facilities which provide emergency medical care.

Upon the renewal of log book form, guidelines for its use are provided, and the context is also incorporated in the training curriculum for ambulance drivers. The RGoB will show the renewed log book and the guidelines for its use to the Japanese side at the time of the delivery.

1

- Annex-1 Project Cost Estimation
- Annex-2 Operation and Maintenance Cost for the Equipment
- Annex-3 Tentative Schedule of the Project
- Annex-4 The Minutes of Discussions signed on 9<sup>th</sup> June, 2010
- Annex-5 The Health Help Line system

*Tom*

*[Signature]*

#### Annex-1 Project Cost Estimation

The estimated project cost, if this plan is to be implemented, is about 162 million yen, under the conditions described below. This estimation cost is provisional and would further be examined by the Government of Japan for approval of the grant.

##### (1) Project Cost borne by the Japanese side

Project cost borne by the Japanese side is estimated to be Japanese Yen 161.306 million. Table below shows the contents of the project cost.

item	Estimated Cost (million Yen)
(1) Equipment Fee	145.306 million Yen
(2) Consultant Fee	16 million Yen
Total	161.306 million Yen

##### (2) Expense Obligations for the Kingdom of Bhutan

Project cost borne by the Bhutan side is estimated to be 362,500 Ngultrums (Japanese Yen 0.73 million).

Item	Estimated costs	
(1) Insurance Fee	39,000 Ngultrums	78,000 yen
(2) Car Registration fee	73,320 Ngultrums	148,106.4 yen
(3) Passenger Fees	19,500 Ngultrums	39,390 yen
(4) Bank commissions	362,500 Ngultrums	730,000 yen
Total	494,320 Ngultrums	998,526.4 yen

The exchange rate of 1 ngultrum = 2.02 yen was used.

##### (3) Estimation Conditions

- ① Time of estimation : September 2010
- ② Foreign exchange rates : US\$ 1 = 92.35 yen, 1 Nu = 2.02 yen
- ③ Implementation period : Approx. 12 months
- ④ Other conditions : Cost is estimated within the framework of Japan's Grant Aid scheme

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## Annex-2 Operation and Maintenance Cost for Equipment

### (1) Operation and maintenance costs

MOH and the Department of Health of each *Dzongkhag* will operate the ambulances with the operation and maintenance expenses appropriated for each ambulance from their budgets.

Table Estimation of the operation and maintenance costs for Ambulance (unit: ngultrums)

	Institution	S/W	Box	Total	Maintenance costs ('09-'10)	Estimate
1	San drop Jolunkar Hospital	1		1	215,000	215,000
2	Deothang Hospital	1		1	218,000	218,000
3	Riserboo Hospital	1		1	255,500	255,500
4	Mongar (ERR) Hospital	2	1	3	515,000	1,545,000
5	Pema gatshe Hospital	1		1	20,200	20,200
6	Yebilaptsa Hospital	1		1	515,000	515,000
7	Bejo BHU-I		1	1	400,000	400,000
8	Samtse Hospital	2		2	512,961	1,025,921
9	Trashigang Hospital	1		1	293,500	293,500
10	Punakha Hospital	1		1	400,000	400,000
11	JDWNRH		2	2	515,000	1,030,000
12	Trashiyangtse Hospital	1		1	237,000	237,000
13	Paro Hospital	1	1	2	400,000	800,000
14	Gomtu Hospital		1	1	233,818	233,818
15	Sandrop chozling BHU-I	1		1	209,000	209,000
16	Phuensholing Hospital	1	1	2	400,000	800,000
17	Bunthang Hospital		1	1	515,000	515,000
18	Degana BHU-I	1		1	240,832	240,832
19	Lhamoizlingkha BHU-1	1		1	474,000	474,000
20	Lhuntse Hospital	1		1	170,000	170,000
Total (Nu)						9,597,771

Exchange rate: 1Nu =2.02JPY.

9,597,771Nu ≈ 19,387,497¥

Source: Responses to the questionnaire

Toru

**Annex-3 Tentative Schedule of the project**

The implementation schedule of this project consists of two stages, tender-related works and equipment procurement and installation.

The table below shows the processes in the project from the conclusion of E/N to completion.

Table Tentative schedule of the Project

Month	1	2	3	4	5	6	7	8	9	
Subject										
Tender Preparation	Final confirmation of project	(Around 4 months)								
	Works in Japan: (Tender documents)									
	Confirmation of Tender documents									
	Tender notice									
	Tender open and evaluation of tender, contract									
Supervision	Manufacturing						(Around 8 months)			
	Transportation, custom						Installation, Test operation			

*Tom*

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**MINUTES OF DISCUSSIONS  
ON PREPARATORY SURVEY  
ON THE PROJECT FOR REPLACEMENT OF AMBULANCES  
IN KINGDOM OF BHUTAN**

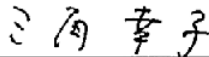
In response to a request from the Royal Government of Bhutan (hereinafter referred to as "RGoB"), the Government of Japan decided to conduct a Preparatory Survey on the Project for Replacement of Ambulances in Bhutan (hereinafter referred to as "the Project") and entrusted the survey to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Bhutan a Preparatory Survey Team (hereinafter referred to as "the Team"), which is headed by Ms. Sachiko Misumi, Senior Advisor to Director General, South Asia Department of JICA, and is scheduled to stay in the country from 30th May to 2nd July, 2010.

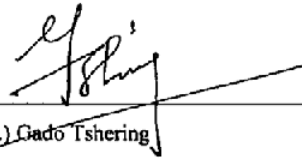
The Team held discussions with the officials concerned from the RGoB and conducted a field survey.

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 Preparatory Survey Report.

Thimphu, 9th June, 2010



Sachiko Misumi  
Leader, Preparatory Survey Team  
Senior Advisor to Director General  
South Asia Department  
Japan International Cooperation Agency



Dasho (Dr.) Gado Tshering  
~~Secretary~~  
Ministry of Health  
Royal Government of Bhutan





## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to replace the decrepit ambulances in Bhutan, by identifying adequate car specification and inner equipment sets, for better patient transport and emergency medical care in the country.

### 2. Confirmation of the final request

After discussions between the RGoB and the Team, replacement of the ambulances described in Annex-1 (a list of facilities) and Annex-2 (a list of equipment) were requested by the RGoB. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for its approval.

### 3. Project sites

The sites of the Project are the districts where the facilities listed in Annex-1 are located.

### 4. Responsible and implementing agency

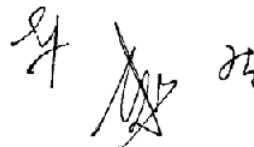
The responsible and implementing agency is the Ministry of Health. Organization chart of the Ministry is shown in Annex-3.

### 5. Japan's Grant Aid scheme

- 5-1. The RGoB understands the Japan's Grant Aid scheme explained by the Team, as described in Annex-4.
- 5-2. The RGoB confirms to take the necessary measures, as described in Annex-4, for smooth implementation of the Project, as a condition for the Japan's Grant Aid to be implemented.
- 5-3. The Team explained that a competitive tendering for procurement of vehicles and equipment sets, as described in the "Procurement Guidelines of the Japanese Grant Aid for General Projects", must be conducted to select a manufacturer of the ambulances, and this was agreed by the RGoB.

### 6. Schedule of the survey

- 6-1. The Team will proceed to further studies in Bhutan until 2nd July, 2010.
- 6-2. JICA will prepare the draft report in English and dispatch a mission in order to explain its contents from late September to early October, 2010.
- 6-3. After the contents of the report is accepted, in principle, by the RGoB, JICA will complete the final report and send it to the RGoB.
- 6-4. The Team documents a technical note (for detailed specification and procedure of procurement), which is to be signed by the RGoB and the Team before all the team members leave Bhutan.





Schedule of the survey is shown in Annex-5.

## 7. Other relevant issues

### 7-1. Scope of the Preparatory Survey

#### 7-1-1. Coherence with the National Policy

The Team understands that the final request was made by the RGoB based on the active guideline, "National Policy Guidelines for Ambulance Services," which was dated on 25 March, 2009.

#### 7-1-2. Consideration for Donor Community

The Project takes into consideration of the current and potential cooperation with other donor agencies to avoid any duplication.

### 7-2. Criteria for Decisions

Based on the result of the Preparatory Survey, the number and locations of ambulance cars will be decided. Criteria for making decisions are age and mileage of ambulance cars, with considerations for condition of the vehicle, frequency of transportations, times spent for the ambulance service, road condition, climate, and other factors to be noted in each area.

### 7-3. Clarifications of Present System

The Team needs to clarify (1) the organizational structure, budgeting, human resource allocation, and technical skills of service providers, as well as (2) the overall maintenance system of ambulance cars and equipment inside, and (3) how the above structure and resources are incorporated into practice to maintain ambulance service in each area, for the determination of appropriateness of the Project. The facilities which have responded with the precise answers to the questionnaire will be taken into account for the formulation of the Project.

### 7-4. Design of Specification (including Equipment)

The Team needs to clarify the current usage of ambulance cars as well as the equipment inside, in order to design the specification of ambulance cars for effective and efficient use in Bhutan.

### 7-5. Effectiveness of Systematic Approach

The RGoB and the Team discussed the effectiveness of systematic approach to the emergency medical service (the overall activities from the Village Health Workers to the medical personnel at a top referral) for the lives and well-beings of people in Bhutan. Viewpoints of (1) appropriate allocation and mobilization of medical staff and resources, (2) proper implementation of Health Help Line, and (3) statistics and evidence-based analyses were raised to strengthen the system further.

Taking account of the above issues, contents of the Project will be decided through the forthcoming survey and analysis in Japan.

- Annex-I List of the facilities requested by the RGoB
- Annex-II List of the equipment requested by the RGoB
- Annex-III Organization chart of the Ministry of Health
- Annex-IV Japan's Grant Aid scheme
- Annex-V Schedule of the Survey

*Team*

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Updated Proposal (Grant expected from JICA)

Ministry of Health

Royal Government of Bhutan

Sl.#	Hospital Name	Requirement for replacement	Reasons for Replacement	Baseline	Target	Specification	Remarks
1	Samdruk Jongkhar	1	Replacement for 10yrs old ambulance	2			
2	Dzothang Hospital	1	Replacement for 12 years old ambulance	1			
3	Rashepo Hospital	1	Replacement of 11 years old ambulance	2			
4	Mongar Regional Referral Hospital	3	Replacement of 12years, 10years, 9 years old ambulance	5			
5	Penagatshel Hospital	1	Replacement for 10 years old ambulance.	2			
6	Yehilapsa Hospital	1	Replacement of 11years old ambulance	2			
7	Bajo BHU I	1	Replacement of 9 years old ambulance	2			
8	Suntse Hospital	2	Replacement of 10 years old ambulance	3			
9	Treshigang Hospital	1	Replacement of 9 years old ambulance	2			
10	Punakha Hospital	1	Replacement of 10 years old ambulance	2			
11	JDWNRH	2	Replacement of one 14 years & 10 years model ambulances	5			
12	Treshiyangse hospital	1	Replacement of 10 years old ambulance	2			
13	Paro	2	12 & 9 years old ambulances	3			
14	Comtu Hospital	1	Replacement of 11 years old ambulance	2			
15	Samdrupchoing BHU I	1	Replacement of 10 years old ambulance	1			
16	Phuentsholing hospital	2	Replacement of 10 years old ambulance	3			
17	Dagana BHU I	1	Replacement of 11 years old ambulance	1			
18	Bumthang hospital	1	Replacement of 11 years old ambulance	2			
19	Imanolingkha BHU I	1	Replacement of 9 years old ambulance	1			
20	Lhuentse hospital	1	Replacement of 9 years old ambulance	2			
	Total	26		40			

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8 ambulances for JDWNRH, 5 for Mongar and Gelephu RRH, 3 for Paro RRH, 2 for all District Hospitals and one for BHU-I

Toyota Land Cruiser

Criteria: 10 years and above

Note: The ambulance 9 year old is reflected on understanding that at the time of JICA Aid implementation will 10 years old.

Date: 09/06/2010