

**THE REPUBLIC OF INDONESIA**

**THE PROJECT FOR  
NEONATAL TETANUS ELIMINATION  
AND MEASLES CONTROL**

**Basic Design Study Report**

**October 2004**

**Japan International Cooperation Agency  
Grant Aid Management Department**

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## PREFACE

In response to a request from the Government of the Republic of Indonesia, the Government of Japan decided to conduct a basic design study on the Grant Aid for The Project for Neonatal Tetanus Elimination and Measles Control, and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA sent a study team to the Republic of Indonesia between September and October 2004.

The team held discussions with the officials concerned of the Government of the Republic of Indonesia, and conducted a field study at the study area. After returning to Japan, the study team conducted further studies and, as a result, is presenting this final report.

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

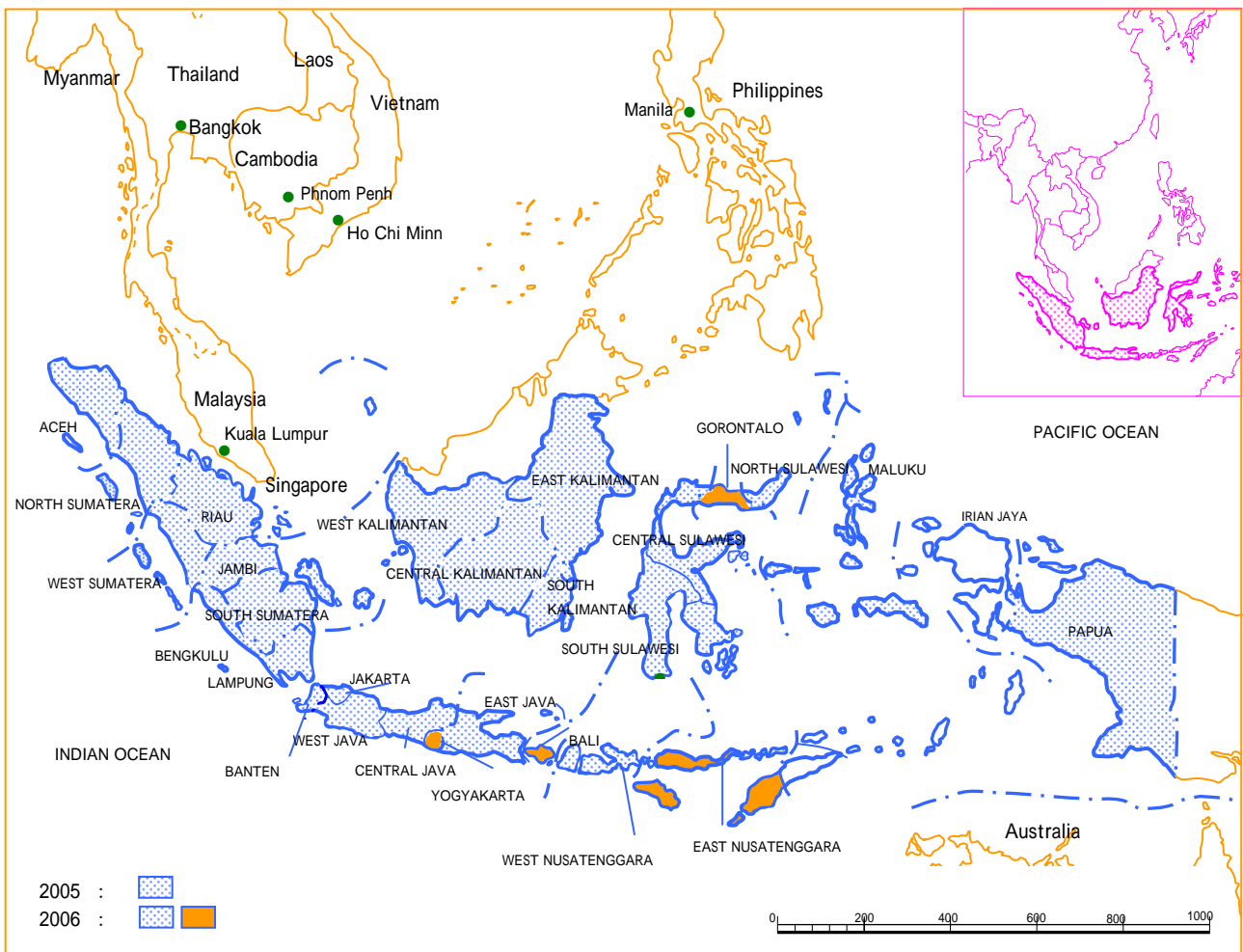
I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Indonesia for their close cooperation extended to the team.

October 2004

Seiji Kojima

Vice-President

# Location map



## Abbreviations

ADB	Asia Development Bank
BCG	Bacille de Calmette et Guerin
BHN	Basic Human Needs
CBAW	Child bearing aged women
CDC	Communicable Diseases Control and Environmental Health
CDC Atlanta	Centers for Disease Control and Prevention
DPT	Diphtheria-Pertusis-Tetanus Vaccine
EPI	Expanded Program on Immunization
GAVI	Global Alliance for Vaccines and Immunization
GDP	Gross Domestic Product
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
NADFC	National Agency of Drugs and Foods Control
PAHO	Pan American Health Organization
PATH	Program for Appropriate Technology in Health
PPM	Post-Programme-Monitoring
PROPENAS	PROgram PEmbangunan NASional
SEARO	South East Asia Regional Office
UNICEF	United Nations Children's Fund
WB	World Bank
WHO	World Health Organization

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# Chapter 1 Background of the Project

## (1) Neonatal Tetanus Elimination

In the Republic of Indonesia (hereinafter referred to as “Indonesia”), all districts and villages have been classified into high-, medium-, and low-risk areas according to the evaluation criteria based on WHO guidelines<sup>1</sup>. Using assistance from UNICEF, CDC Atlanta, provincial governments, etc., a campaign has been launched to provide the second doses of tetanus vaccine to child bearing aged women (CBAW) in high-risk villages. The assistance from UNICEF and CDC Atlanta is targeted at high-risk villages in high-risk districts. Second dose tetanus vaccination is given to CBAW in these villages, and the elimination of tetanus will be declared if the annual occurrence of neonatal tetanus decreases down to 4,500 cases or less by the end of 2005. UNICEF is implementing a campaign to administer the second doses of tetanus vaccine to schoolchildren, targeted at CBAW in high-risk villages (9,324 villages) in high-risk districts as identified by the risk assessment in 2000 (62 districts in 18 provinces). This campaign is planned to be completed by the end of 2004.

However, the plan made by the Ministry of Health of Indonesia is employing the criteria of achieving 90% or more TT3 (tetanus toxoid 3 doses) vaccination coverage and the occurrence of 1 or less tetanus cases per 1,000 neonates, as stated in the original proposal of WHO. Accordingly, the country intends to conduct TT3 targeted at CBAW in high-risk villages not only in high-risk districts but also in medium- and low-risk districts. Consequently, the country strongly emphasizes the need for expanding tetanus-free areas through improvement of routine vaccination coverage in high-risk villages, continued introduction of safe childbearing methods,

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<sup>1</sup> Risk classification: Because the risk in each area is assessed by the sum of the score for tetanus vaccine coverage and the achievement rate of safe childbirth, a district containing many high-risk villages is automatically considered as a high-risk district and a district containing many low-risk villages is considered as a low-risk district. Therefore, a high-risk village in a low-risk district has the same level of risk for the occurrence of tetanus as a high-risk village in a high-risk district.

and strengthening of surveillance even after the declaration of tetanus elimination by the UNICEF-supported program. However, because of limitations of budgets, there are no prospects for the procurement of needed equipment.

## (2) Measles Control

The Measles Strategic Plan (2002-2005) by the South East Asia Region Office (SEARO) of WHO aims to reduce the mortality rate from measles by half by 2005 as compared with the mortality rate in 2000. This plan recommends the implementation of the following 4 strategies: (i) strengthening of surveillance activities, (ii) facilitating the response to measles epidemics, (iii) increasing the coverage of first-dose routine vaccination against measles to 90% in 80% of districts, and (iv) completing second-dose vaccination against measles in 90% of children. In particular, the second-dose vaccination against measles is considered important, because the single administration of vaccine to 9-month-old infants is reported to result in the appearance of blood antibodies in 85% of children on average, and second doses are expected to protect the children who did not acquire antibodies after the first doses and those who could not receive the first doses. Thus, the administration of the second doses is strongly desired.

Among the above strategies, Indonesia commenced a second-dose vaccination campaign in 2000, aiming at the achievement of strategies (iii) improvement of the coverage of routine first-dose vaccination to 90% and (iv) second-dose vaccination against measles in 90% of children. A measles vaccination campaign targeted at elementary school children has been implemented since 2002. Up to the present, the goal was achieved in 2 provinces in 2002, 4 in 2003, and 8 in 2004: 14 provinces in total. If the campaign would be implemented in the remaining 16 provinces in 2005, second-dose vaccination would be completed in all elementary school children in the country. However, the implementation of an additional campaign is

presently impossible because of limitations of budgets.



## **Chapter 2 Contents of the Project**

### **2-1 Basic Concept of the Project**

To support neonatal tetanus elimination and measles control based on the EPI 5-year plan, this Project intends to procure vaccines, syringes, and safety boxes that are needed for the implementation of the campaign in elementary schools in the areas where the risk of neonatal tetanus is the highest among the parts of Indonesia and vaccination has not been conducted sufficiently, and in the areas where no measles campaign has been conducted.

The implementation of this Project will support the achievement of the goals of the country's national plans and the National Development Plan (overall plan of this Project), and contribute to the improvement of health indices in the nation and health enhancement of local inhabitants.

### **2-2 Basic Design of the Requested Japanese Assistance**

#### **2-2-1 Design Policy**

##### **(1) Basic Policy**

While this grant aid assistance intends to provide the fund for procuring vaccines and related equipment to support the implementation of measles campaign and neonatal tetanus campaign in Indonesia, the Indonesian side has requested 2-year assistance to the neonatal tetanus campaign. Because Indonesia's national plan aims to conduct second-dose vaccination for tetanus and declare elimination of tetanus in all areas with a high risk of neonatal tetanus during the 2 years of 2005 and 2006, it is considered appropriate for us to provide equipment support for 2 years. Therefore, the period of assistance will be 2 years.

## 1) Target Areas and Facilities

### ① Neonatal Tetanus Elimination

UNICEF conducted a neonatal tetanus campaign in 2003 and 2004, targeting at high-risk villages in high-risk districts. UNICEF conducted vaccination aiming at elimination of tetanus with a plan to declare elimination of tetanus the annual occurrence of neonatal tetanus is reduced to 4,500 cases or less. Based on its estimation that Indonesia has already achieved 270 cases per year, UNICEF expects that elimination can be declared by the end of 2005.

On the other hand, the Ministry of Health aims at mortality reduction targeted at the reduction to 1 case in 1,000 persons. For this sake, the Ministry has set a goal of achieving TT3 vaccination of CBAW in high-risk villages in the high-risk districts not covered by the UNICEF campaign (the districts reevaluated from medium or low risk in 2002), medium-risk districts, and low-risk districts during the 2 years of 2005 and 2006.

Based on the above background, the target areas for FY 2005 will be 6,602 villages in 58 districts in 19 provinces, which is the sum of the high-risk villages in the districts reevaluated newly as having high risk in 2002 (23 districts) and the high-risk villages in medium-risk districts (35 districts). The target areas for FY 2006 will be 4,460 high-risk villages in the 139 districts evaluated as having low risk in 2002 in 26 provinces.

### ② Measles Control

The Ministry of Health of Indonesia has been planning second-dose measles vaccination campaigns since 2000. Up to the present, the campaign was implemented in 2 provinces in 2002, 4 in 2003, and 8 in 2004: 14 provinces in total. If second-dose vaccination would be conducted in the remaining 16 provinces covered by the grant aid assistance in 2005, the country would have completed the administration of the first doses to more than 95% of elementary school children and second doses to about 90%. The completion of second-dose vaccination would achieve the prerequisite for introducing routine second dose against

measles, where vaccination is given at the age of 9 months and at the entrance to elementary schools, as recommended by WHO.

While the original request demanded the coverage of elementary school children in 23 provinces, the Basic Design Study has revealed that an additional campaign has already been implemented covering the elementary school children in 14 provinces as of 2004. Therefore, this Project will be targeted at the elementary school children in the remaining 16 provinces.

## 2) Item to be Procured

The original request included 5 items: the vaccines for the neonatal tetanus campaign and measles campaign planned for 2005, disposable syringes used for injecting the diluent for measles vaccine, autodisable syringes (AD syringes<sup>2</sup>) for vaccination, and safety boxes used for collection and incineration of used syringes. The Indonesian side submitted additional request including needle cutters to remove needles from used syringes and the equipment for the neonatal tetanus campaign in 2006 during our survey. However, needle cutters were excluded from the scope of this Project because (i) the method for disposal of used injection needles removed using needle cutters was not clarified, (ii) the proposed melting treatment of syringe barrels after removal of needles is in the stage of pilot study and the final conclusion is pending, and (iii) WHO currently recommends incineration and does not officially support the use of needle cutters and the shift to melting treatment.

Other items are standard equipment for the implementation of EPI program and safe injection recommended by WHO, and hence considered appropriate. The lists of equipment in the original request and at the time of the Minutes are compared in Table 2-1.

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<sup>2</sup> Autodisable syringe (AD syringe): A disposable syringe which, once used, is rendered unusable by the action of a clasp or a filter to prevent HIV, hepatitis B, and other diseases transmitted by the re-use of syringes contaminated with blood.

Table 2-1 List of Equipment

List of equipment in original request	This Project
1 Tetanus vaccine (for 2005)	1 Tetanus vaccine (for 2005 and 2006)
2 Measles vaccine (for 2005)	2 Measles vaccine (for 2005)
3 AD syringes (for 2005)	3 AD syringes (for 2005 and 2006)
4 Disposable syringes (for 2005)	4 Disposable syringes (for 2005)
5 Safety boxes, 5 L (for 2005)	5 Safety boxes, 5 L (for 2005 and 2006)

### 3) Quantities to be Procured

The quantities to be procured in this Project were calculated based on the equipment procurement guidelines formulated by the Ministry of Health of Indonesia.

The method of calculation used is as shown below.

#### [Method of Calculation]

The population to be covered by vaccination against tetanus was calculated by multiplying provincial population by the official estimate for the percentage of CBAW in Indonesia (22%). The target population in 2005 is 3,649,112 persons, which is the number of CBAW in high-risk villages (6,602 villages) in high- and medium-risk districts (59 districts in 19 provinces in total). The target population in 2006 is 3,828,202 persons, which is the number of CBAW in high-risk villages (more than 4,460) in low-risk districts (139 districts in 27 provinces).

The target of measles control is all elementary school children (grades 1 to 6) on the register of elementary schools in 16 provinces, totaling 16,625,958 persons.

The quantities of equipment needed for the target population in each province were calculated

as follows, and the numbers were rounded up to the smallest packaging unit (10 vials for vaccines and 100 pieces for syringes and safety boxes).

- Tetanus vaccine (product containing 10 doses per vial)

$$\text{Quantity (vials)} = \text{target population (CBAW)} \times 2 \text{ doses}^3 \times \text{loss factor}^4 (1.3) / 10$$

- Measles vaccine (product containing 10 doses per vial)

$$\text{Quantity (vials)} = \text{target population (elementary school children)} \times 1 \text{ dose} \times \text{loss factor} \\ (1.176) / 10$$

- AD syringes (rounded up to units of 100)

$$\text{(Tetanus) Quantity} = \text{target population (CBAW)} \times 2 \text{ doses} \times \text{reserve factor}^5 (1.1)$$

$$\text{(Measles) Quantity} = \text{target population} \times \text{reserve factor} (1.1)$$

- Disposable syringes (for measles only)

$$\text{Quantity} = \text{Number of measles vaccine vials (rounded up to the smallest packaging unit} \\ \text{of 100)}$$

- Safety boxes (each for containing 100 syringes)

$$\text{Quantity} = \{\text{AD syringes (tetanus + measles)} + \text{disposable syringes}\} / 100$$

The processes of these calculations are shown in Tables 2-2, 2-3, and 2-4.

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<sup>3</sup> Because children receive 1 dose each of DT and TT in elementary schools, on the assumption that all children are at least TT1, 2 doses of TT vaccine would be required to achieve TT3.

<sup>4</sup> Loss factor: The percentage of extra supply to allow for the loss during use, inactivation due to cold chain failure, disposal due to damage, inadvertent loss, etc. The loss rate for tetanus vaccine has been estimated to be 23%, and the Ministry of Health of Indonesia employs the loss factor of 1.3, according to the WHO formula  $100/(100-23)=1.31$ . Similarly, the loss rate for measles vaccine is 15%, and the loss factor is  $100/(100-15)=1.175$ .

<sup>5</sup> A reserve rate is included in the quantity of syringes procured, so that vaccines can be used efficiently when the actual loss rate turns out to be less than expected. Based on previous performance, the reserve rate is expected to be 10%, and the reserve factor is  $100/(100-10)=1.1$ .

Table 2-2 Calculation of Quantities of Equipment Procured by Province,  
Neonatal Tetanus Campaign in 2005 (Phase I)

No.	Province	Target Population (CBAW)	Vaccine (vials) x2x1.3/10	AD Syringe 0.5ml x2x1.1	Safety Box /100
1	ACEH	191,600	49,816	421,520	4,215
2	NORTH SUMATERA	26,165	6,803	57,563	576
3	WEST SUMATERA	-	-	-	-
4	RIAU	29,519	7,675	64,942	649
5	JAMBI	29,953	7,788	65,897	659
6	SOUTH SUMATERA	-	-	-	-
7	BANGKA BELITUNG	-	-	-	-
8	BENGKULU	96,816	25,172	212,995	2,130
9	LAMPUNG	-	-	-	-
10	WEST JAVA	1,613,251	419,445	3,549,152	35,492
11	BANTEN	110,462	28,720	243,016	2,430
12	CENTRAL JAVA	-	-	-	-
13	EAST JAVA	256,525	66,697	564,355	5,644
14	WEST KALIMANTAN	206,619	53,721	454,562	4,546
15	CENTRAL KALIMANTAN	34,199	8,892	75,238	752
16	SOUTH KALIMANTAN	8,994	2,338	19,787	198
17	EAST KALIMANTAN	122,250	31,785	268,950	2,690
18	NORTH SULAWESI	6,076	1,580	13,367	134
19	CENTRAL SULAWESI	208,125	54,113	457,875	4,579
20	SOUTH SULAWESI	313,365	81,475	689,403	6,894
21	SOUTH EAST SULAWESI	116,010	30,163	255,222	2,552
22	WEST NUSATENGARA	21,364	5,555	47,001	470
23	MOLLUCAS	103,181	26,827	226,998	2,270
24	PAPUA	154,638	40,206	340,204	3,402
	Total	3,649,112	948,769	8,028,046	80,280

Table 2-3 Calculation of Quantities of Equipment Procured by Province  
Measles Campaign in 2005 (Phase I)

No.	Province	①Target Population (Elementary School Children)	②Vaccine (vials) ②×1.176/10	③AD Syringe 0.5ml ①×1.1	④Disposable Syringe 5ml =②	⑤Safety Box (③+④)/100
1	ACEH	497,077	58,456	546,785	58,480	6,053
2	NORTH SUMATERA	2,359,909	277,525	2,595,900	277,636	28,735
3	WEST SUMATERA	719,041	84,559	790,945	84,593	8,755
4	RIAU	625,114	73,513	687,625	73,543	7,612
5	JAMBI	-	-	-	-	-
6	SOUTH SUMATERA	1,260,942	148,287	1,387,036	148,346	15,354
7	BANGKA BELITUNG	164,688	19,367	181,157	19,375	2,005
8	BENGKULU	-	-	-	-	-
9	LAMPUNG	1,303,786	153,325	1,434,165	153,387	15,876
10	WEST JAVA	-	-	-	-	-
11	BANTEN	920,955	108,304	1,013,051	108,348	11,214
12	CENTRAL JAVA	2,393,179	281,438	2,632,497	281,550	29,140
13	EAST JAVA	3,242,409	381,307	3,566,650	381,460	39,481
14	WEST KALIMANTAN	579,414	68,139	637,355	68,166	7,055
15	CENTRAL KALIMANTAN	244,146	28,712	268,561	28,723	2,973
16	SOUTH KALIMANTAN	516,766	60,772	568,443	60,796	6,292
17	EAST KALIMANTAN	305,715	35,952	336,287	35,966	3,723
18	NORTH SULAWESI	-	-	-	-	-
19	CENTRAL SULAWESI	-	-	-	-	-
20	SOUTH SULAWESI	1,322,488	155,525	1,454,737	155,587	16,103
21	SOUTH EAST SULAWESI	-	-	-	-	-
22	WEST NUSATENGARA	-	-	-	-	-
23	MOLLUCAS	-	-	-	-	-
24	PAPUA	170,329	20,031	187,362	20,039	2,074
	Total	16,625,958	1,955,213	18,288,554	1,955,995	202,445

Table 2-4 Calculation of Quantities of Equipment Procured by Province,  
Neonatal Tetanus Campaign in 2006 (Phase II)

No.	Province	①Target Population (CBAW)	②Vaccine (vial) ①x2x1.3/10	③AD Syringe 0.5ml ①x2x1.1	④Safety Box ③/100
1	ACEH	46,432	12,072	102,150	1,022
2	NORTH SUMATERA	153,290	39,855	337,238	3,372
3	WEST SUMATERA	3,577	930	7,869	79
4	RIAU	29,365	7,635	64,603	646
5	JAMBI	3,049	793	6,708	67
6	SOUTH SUMATERA	25,989	6,757	57,176	572
7	BANGKA BELITUNG	13,240	3,442	29,128	291
8	BENGKULU	58,237	15,142	128,121	1,281
9	LAMPUNG	200,369	52,096	440,812	4,408
10	WEST JAVA	608,295	158,157	1,338,249	13,382
11	BANTEN	140,074	36,419	308,163	3,082
12	CENTRAL JAVA	646,862	168,184	1,423,096	14,231
13	YOGYAKARTA	187,466	48,741	412,425	4,124
14	EAST JAVA	718,607	186,838	1,580,935	15,809
15	WEST KALIMANTAN	42,802	11,129	94,164	942
16	CENTRAL KALIMANTAN	41,592	10,814	91,502	915
17	SOUTH KALIMANTAN	48,584	12,632	106,885	1,069
18	NORTH SULAWESI	130,049	33,813	286,108	2,861
19	GORONTALO	8,812	2,291	19,386	194
20	CENTRAL SULAWESI	81,183	21,108	178,603	1,786
21	SOUTH SULAWESI	111,696	29,041	245,731	2,457
22	BALI	88,695	23,061	195,129	1,951
23	WEST NUSATENGARA	212,554	55,264	467,619	4,676
24	EAST NUSATENGARA	87,615	22,780	192,753	1,928
25	MOLLUCAS	134,532	34,978	295,970	2,960
26	PAPUA	5,236	1,361	11,519	115
	Total	3,828,202	995,333	8,422,044	84,220

Based on the above calculation results, the figures were rounded up to the smallest packaging unit to give the final quantities of equipment procured, as shown in Tables 2-5, 2-6, and 2-7.



Table 2-5 Quantities of Equipment Procured by Province,  
Neonatal Tetanus and Measles Campaigns 2005 (Phase I)

No.	Province	Tetanus Vaccine (vials)	Measles Vaccine (vials)	AD Syringe 0.5ml	Disposable Syringe 5ml	Safety Box
1	ACEH	49,820	58,480	968,400	58,500	10,300
2	NORTH SUMATERA	6,810	277,640	2,653,500	277,700	29,400
3	WEST SUMATERA	-	84,600	791,000	84,600	8,800
4	RIAU	7,680	73,550	752,600	73,600	8,300
5	JAMBI	7,790	-	65,900	-	700
6	SOUTH SUMATERA	-	148,350	1,387,100	148,400	15,400
7	BANGKA BELITUNG	-	19,380	181,200	19,400	2,100
8	BENGGULU	25,180	-	213,000	-	2,200
9	LAMPUNG	-	153,390	1,434,200	153,400	15,900
10	WEST JAVA	419,450	-	3,549,200	-	35,500
11	BANTEN	28,730	108,350	1,256,100	108,400	13,700
12	CENTRAL JAVA	-	281,550	2,632,500	281,600	29,200
13	EAST JAVA	66,700	381,460	4,131,100	381,500	45,200
14	WEST KALIMANTAN	53,730	68,170	1,092,000	68,200	11,700
15	CENTRAL KALIMANTAN	8,900	28,730	343,800	28,800	3,800
16	SOUTH KALIMANTAN	2,340	60,800	588,300	60,800	6,500
17	EAST KALIMANTAN	31,790	35,970	605,300	36,000	6,500
18	NORTH SULAWESI	1,580	-	13,400	-	200
19	CENTRAL SULAWESI	54,120	-	457,900	-	4,600
20	SOUTH SULAWESI	81,480	155,590	2,144,200	155,600	23,000
21	SOUTH EAST SULAWESI	30,170	-	255,300	-	2,600
22	WEST NUSATENGARA	5,560	-	47,100	-	500
23	MOLLUCAS	26,830	-	227,000	-	2,300
24	PAPUA	40,210	20,040	527,600	20,100	5,500
	Total	948,870	1,956,050	26,317,700	1,956,600	283,900

Table 2-6 Quantities of Equipment Procured by Province, Neonatal Tetanus Campaign in 2006 (Phase II)

No.	Province	Tetanus Vaccine (vials)	AD Syringe 0.5ml	Safety Box
1	ACEH	12,080	102,200	1,200
2	NORTH SUMATERA	39,860	337,300	3,800
3	WEST SUMATERA	940	7,900	100
4	RIAU	7,640	64,700	800
5	JAMBI	800	6,800	100
6	SOUTH SUMATERA	6,760	57,200	700
7	BANGKA BELITUNG	3,450	29,200	400
8	BENGKULU	15,150	128,200	1,500
9	LAMPUNG	52,100	440,900	4,900
10	WEST JAVA	158,160	1,338,300	14,800
11	BANTEN	36,420	308,200	3,400
12	CENTRAL JAVA	168,190	1,423,100	15,700
13	YOGYAKARTA	48,750	412,500	4,600
14	EAST JAVA	186,840	1,581,000	17,400
15	WEST KALIMANTAN	11,130	94,200	1,100
16	CENTRAL KALIMANTAN	10,820	91,600	1,100
17	SOUTH KALIMANTAN	12,640	106,900	1,200
18	NORTH SULAWESI	33,820	286,200	3,200
19	GORONTALO	2,300	19,400	300
20	CENTRAL SULAWESI	21,110	178,700	2,000
21	SOUTH SULAWESI	29,050	245,800	2,800
22	BALI	23,070	195,200	2,200
23	WEST NUSATENGARA	55,270	467,700	5,200
24	EAST NUSATENGARA	22,780	192,800	2,200
25	MOLLUCAS	34,980	296,000	3,300
26	PAPUA	1,370	11,600	200
	Total	995,480	8,423,600	94,200

Table 2-7 Quantities of Equipment Procured

No.	Item	2005		2006	
		Target provinces	Quantity	Target provinces	Quantity
1	Tetanus vaccine	19	948,870 vials	26	995,480 vials
2	Measles vaccine	16	1,956,050 vials	-	-
3	AD syringes	24	26,317,700 pieces	26	8,423,600 pieces
4	Disposable syringes	16	1,956,600 pieces	-	-
5	Safety boxes	24	283,900 boxes	26	85,400 boxes

## (2) Policy Concerning Natural Conditions

Because there is no central warehouse in Indonesia, the delivery of equipment will take place at the warehouse of the Health Department of each province. Appropriate combinations of land, sea, and air transport should be selected considering geographical situations and the need for

temperature control of equipment.

(3) Policy Concerning the Operation and Maintenance Capabilities of Implementing Agency

Sufficient training concerning the use of each item has been conducted by UNICEF and WHO. No problems are expected with respect to the use and maintenance of equipment.

(4) Policies Concerning the Methods of Work and Procurement and the Period of Work

This Project involves no installation work.

## 2-2-2 Basic Plan

(1) Equipment Plan

The contents and scale of equipment procurement are shown in Tables 2-8 and 2-9.

Table 2-8 Contents and Scale of Procurement in 2005 (Phase I)

No.	Item	Specifications	Purpose of Use	Quality Level	Quantity
1	Measles vaccine	Dry attenuated measles vaccine, 10 doses/vial, 0.5ml/dose	For vaccination campaign	WHO preapproved	1,956,050 vials
2	Tetanus vaccine	Tetanus toxoid vaccine, 10 doses/vial, 0.5ml/dose	For vaccination campaign	WHO preapproved	948,870 vials
3	Auto disable syringe	Auto disable lock, for 0.5ml 23G x 25mm fixed type, with cap	For measles and tetanus vaccination	WHO/UNICEF Standard E8/DS.1	26,317,700 pcs
4	Disposable syringe	Sterilized disposable syringe, for 5 ml 21G x 25mm	For dissolving measles vaccine (lyophilized)	Conform to ISO 9000 Series	1,956,600 pcs
5	Safety box	5 L, carton or recycled cardboard	For disposal and incineration of used syringes	WHO/UNICEF Standard E10/IC.2	283,900 pcs

Table 2-9 Contents and Scale of Procurement in 2006 (Phase II)

No.	Item	Specifications	Purpose of Use	Quality Level	Quantity
1	Tetanus vaccine	Tetanus toxoid vaccine, 10 doses/vial, 0.5ml/dose	For vaccination campaign	WHO preapproved	995,480 vials
2	Auto disable syringe	Auto disable lock, for 0.5 ml 23G x 25 mm fixed type, with cap	For vaccination campaign	WHO/UNICEF Standard E8/DS.1	8,423,600 pcs
3	Safety box	5 L, carton or recycled cardboard	For disposal and incineration of used syringes	WHO/UNICEF Standard E10/IC.2	85,400 pcs

(2) Allocation of Equipment

Because there is no central warehouse in Indonesia, the delivery of equipment will take place at the warehouse of the Health Department of each province. The provincial Health Department will assume responsibility concerning the storage, distribution, and maintenance within the province. Using the established route for distribution of EPI equipment, the equipment procured in this Project will be distributed to the final use sites (vaccination sites). Table 2-10 shows the number of final use sites (health centers and elementary schools).

Table 2-10 Number of Vaccination Sites, by Target Province

(As of 2000)

No.	Province	Districts	Health Centers	Elementary Schools
1	ACEH	13	218	3,814
2	NORTH SUMATERA	19	395	9,828
3	WEST SUMATERA	15	67	4,145
4	RIAU	15	147	3,758
5	JAMBI	10	124	2,484
6	SOUTH SUMATERA	10	272	3,270
7	BANGKA BELITUNG	0	0	0
8	BENGKULU	4	112	1,512
9	LAMPUNG	10	202	4,981
10	WEST JAVA	22	954	23,595
11	BANTEN	6	159	4,345
12	JAKARTA	5	329	3,664
13	CENTRAL JAVA	34	853	25,744
14	YOGYAKARTA	5	126	1,905
15	EAST JAVA	37	928	26,996
16	WEST KALIMANTAN	8	191	4,259
17	CENTRAL KALIMANTAN	6	132	2,408
18	SOUTH KALIMANTA	10	188	3,448
19	EAST KALIMANTAN	7	155	1,762
20	NORTH SULAWESI	5	101	2,198
21	GORONTALO	3	65	836
22	CENTRAL SULAWESI	5	129	1,718
23	SOUTH SULAWESI	24	346	7,821
24	SOUTH EAST SULAWESI	5	130	1,750
25	BALI	9	112	2,712
26	WEST NUSATENGARA	7	121	6,748
27	EAST NUSATENGARA	14	4070	4,195
28	MOLLUCAS	5	112	1,883
29	NORTH MOLLUCAS	3	47	918
30	PAPUA	13	2063	2,093
31	WEST IRIAN JAYA	0	0	0
	Total	329	12,848	164,790

### **2-2-3 Implementation Plan**

#### **(1) Procurement Policy**

The sources of equipment will be Japan, Indonesia, and third countries. Procurement will be conducted using open tender assigning a Japanese corporation as the contractor. While the items procured from third countries are subjected basically to pre-shipment inspections entrusted to an independent inspecting organization, vaccines requiring quality control will be subjected to pre-shipment and pre-delivery inspections by the procurement supervisor.

#### **(2) Considerations Concerning Procurement**

Because the capacity of the cold room in the warehouses of provincial Health Departments is limited, it is customary in Indonesia that the vaccines delivered to district Health Departments or vaccination sites (health centers) are replenished frequently in small quantities. Taking this in consideration, the distribution of vaccines in this Project needs to be made on a weekly basis, as opposed to delivering the whole quantity at a time.

The vaccines used in the preceding campaigns in Indonesia have been domestic products. Imported vaccines need to be tested by the National Agency of Drug and Food Control (NADFC), registered, and approved for use. However, it has been reported that UNICEF could not obtain the approval for the use of vaccines made in a third country for over a year, and a large quantity of vaccines was discarded due to expiration.

In addition, the implementation of the campaign is planned for the period from July to the end of September before the beginning of Ramadan, and delivery to a wide area covering 24 or 26 provinces must be completed in a short period. This necessitates the use of transporters having a thorough knowledge of the geography and transport situations of Indonesia. However, there are no transporters having refrigerator trucks and cold rooms for necessary temperature control, and such facilities cannot be rented in Indonesia. This

situation necessitates the procurement from a local vaccine manufacturer with the ability of temperature control of vaccines, weekly delivery, and a full knowledge of geographic situation.

The measures to avoid deterioration of the quality of vaccines should be taken, such as the facilitation of speedy execution of pre-delivery inspections. The Government of Indonesia is also requested to take measures to speed up customs clearance and delivery to the final destinations (provincial Health Departments) with respect to the items procured from third countries.

### (3) Scope of Works

Table 2-11 shows the scope of procurement works between Indonesia and Japan. No installation work is involved in this Project.

Table 2-11 Scope of Works

Scope	Contents
Japan	Procurement of equipment Transportation of equipment to the sites of delivery (provincial Health Departments)
Indonesia	Distribution of equipment from the sites of delivery (provincial Health Departments) to target facilities

### (4) Procurement Supervision Plan

To conduct the inspections and delivery of the procured equipment in Indonesia, 1 person from the procurement contractor will be sent to Indonesia in the position of on-site procurement supervisor.

(5) Equipment Procurement Plan

Table 2-12 Sources of Materials and Equipment Procured

2005 (Phase I)

Item	Source			Remark
	Local	Japan	3rd country	
[Materials]				
[Equipment]				
1 Measles vaccine	○			
2 Tetanus vaccine	○			
3 AD syringe			○	
4 Disposable syringe		○		
5 Safety box			○	
Percentage	63.90%	5.92%	30.17%	

2006 (Phase II)

Item	Source			Remark
	Local	Japan	3rd country	
[Materials]				
[Equipment]				
1 Tetanus vaccine	○			
2 AD syringe			○	
3 Safety box			○	
Percentage	56.65%	0.00%	43.35%	

(6) Implementation Schedule

The implementation schedule planned in this Project will take 6 months for the detailed design and 6 months for procurement supervision, totaling to 12 months (Table 2-13). The delivery of all items procured from Japan and third countries after unloading at Jakarta Port to the Health Department warehouses of target provinces will be conducted at the expense of the Japanese side, as well as the items procured domestically.

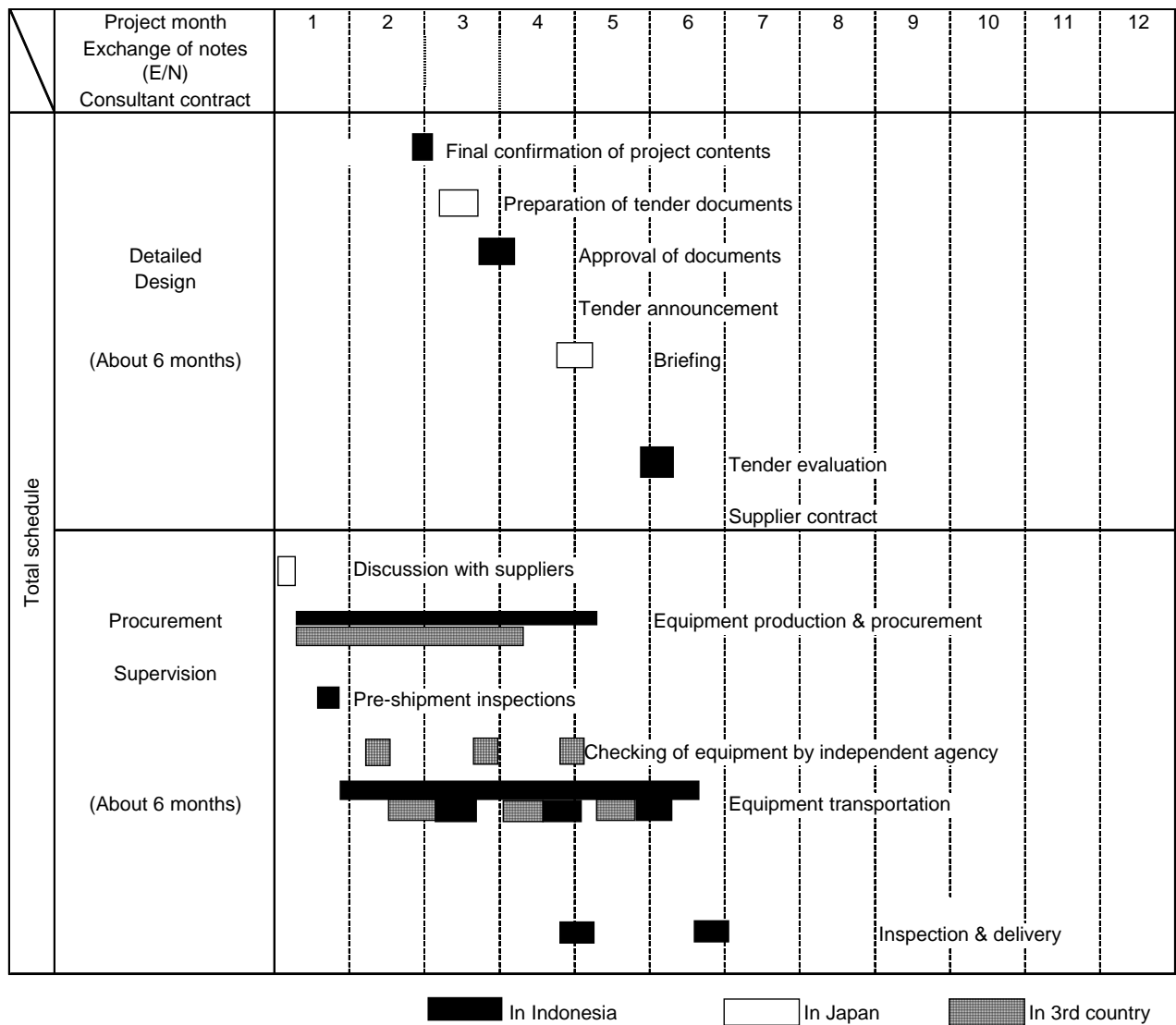
The final destinations of shipment by the Japanese side in this Project are the above-mentioned provincial Health Department warehouses. The subsequent distribution to district Health Departments, health centers and health posts will be conducted as necessary by the Indonesian side.

Table 2-13 Implementation Schedule  
2005 (Phase I)

Total (from E/N to handover) : 12 months

From E/N to contracting : 6 months

Delivery time (from contracting to delivery) : 6 months



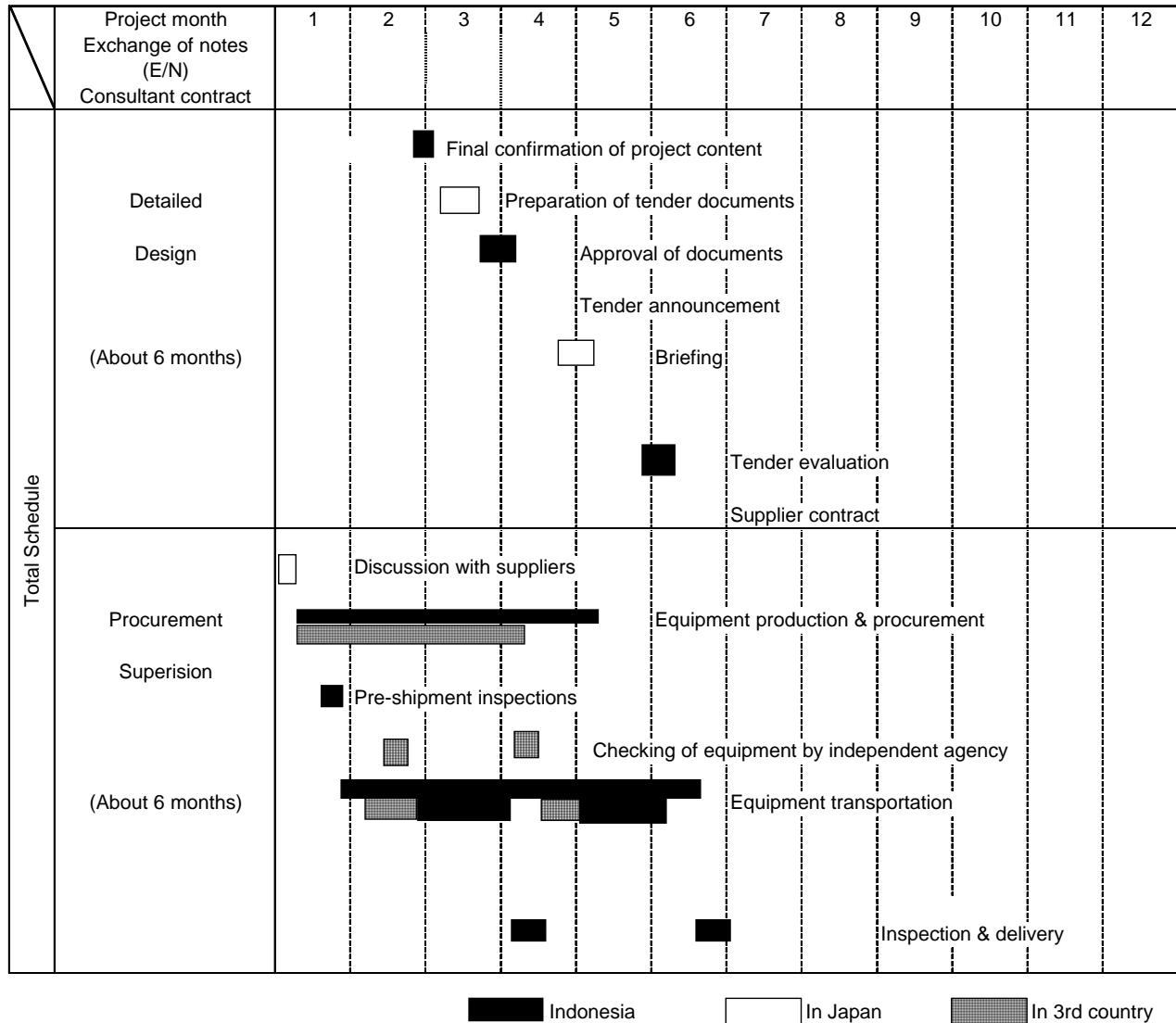


2006 (Phase II)

Total (from E/N to delivery) : 12 months

From E/N to contracting : 6 months

Delivery time (from contracting to delivery) : 6 months



**2-3 Obligations of the Recipient Country**

In the implementation of this Project, the obligations of the Indonesian side are as follows:

- ① To take necessary budgetary measures and secure manpower for appropriate operation and maintenance of the equipment procured.
- ② To secure warehouses needed for the storage of the equipment procured. In particular,

to strive for quality maintenance of vaccines and ensure appropriate storage and management.

- ③ For ensuring appropriate distribution from provincial Health Departments to final destinations, the Ministry of Health should closely cooperate with relevant recipient organizations (district Health Departments and health centers).

#### **2-4 Project Operation Plan**

The Ministry of Health does not have a central warehouse or the cold rooms for storing vaccines. Therefore, provincial Health Department warehouses are in charge of the management of all materials and equipment, as well as the distribution to district Health Departments, hospitals, and health centers.

While the Health Department of each province basically has a cold room, storage of large quantities of vaccines is impossible. A system has been established in which the provincial Health Department first provides specified quantities of vaccines to district Health Departments and subsequently replenish the quantities taken out of storage by placing orders with Vaccine Manufacturer.

With respect to the capabilities for conducting vaccination campaign at health centers and general health posts, the data from the Ministry of Health indicated the consumption of vaccines and syringes procured by Japanese assistance in 2002, as well as the number of persons receiving vaccination, and the site survey showed that the budget for campaign implementation in 2004 were secured and the campaign has already completed. Thus, no problems are expected in the capability for project implementation.

As outlined above, the equipment procured in this Project will be operated and managed making the best use of the current systems in Indonesia. The equipment will be distributed under the supervision of CDC, all facilities have adequate storage systems, and these are used in good conditions. Since the items procured in this Project will also be distributed from provincial

Health Department warehouses to health centers and health posts, there will be no problems in the systems for distribution, maintenance, and management.

## 2-5 Estimated Cost

### (1) Cost born by Japan side

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

#### Estimated total project cost, 2005 (Phase I)

About 898 million yen

Cost item	Estimated cost (million yen)
Equipment cost	882
Detailed design & procurement supervision	16
<b>Total</b>	<b>898</b>

Note) Exchange rates: 1 USD=110.84 yen

1 EUR=134.80 yen

#### Estimated total project cost, 2006 (Phase II)

About 205 million yen

Cost item	Estimated cost (million yen)
Equipment cost	190
Detailed design & procurement supervision	15
<b>Total</b>	<b>205</b>

Note) Exchange rates: 1 USD=110.84 yen

1 EUR=134.80 yen

### (2) Parameters of calculation

As of December 2004

Exchange rate: 1 USD = 110.84 yen,

1 EUR = 134.80 yen

Duration: Durations of the detailed design and procurement are as shown in the implementation schedule

④ Other: This Project will be implemented according to the framework of the grant aid scheme of the Government of Japan.

## Chapter 3 Project Evaluation and Recommendations

### 3-1 Project Effect

#### (1) Direct Effects

- ① About 3,650,000 child bearing aged women (CBAW) (in 2005) and 3,830,000 (in 2006) in high-risk villages will receive vaccination against tetanus, resulting in a decrease in the risk of tetanus in pregnancy and a decrease in the occurrence of neonatal tetanus.
- ② Consecutive implementation in 2 years will enable vaccination of all target persons, achieving the 90% coverage of 3-dose neonatal tetanus (TT3) vaccination.
- ③ About 16,630,000 elementary school children will benefit from vaccination against measles, resulting in a decrease in the risk of measles infection and a decrease in mortality.

#### (2) Indirect Effects

By the elevation of tetanus vaccination rate, which is an index used in the risk assessment of areas, the districts that are currently evaluated as having high and medium risk may be moved to the category of low-risk districts.

Because morbidity among schoolchildren will be reduced by the acquisition of antibodies against measles, transmission to younger brothers and sisters at the age of 5 years or under will be reduced and the infection rate among infants may be decreased.

The completion of the national vaccination campaign will establish a system for 3-dose neonatal tetanus (TT3) vaccination and 2-dose measles vaccination and contribute to the decrease in infection prevalence rate.

The strengthening of vaccination activities will promote health education of inhabitants,

improving their awareness of healthy living.

### **3-2 Recommendations**

Although the capabilities of the Ministry of Health in implementing this Project is considered high, special attention must be paid to the following:

- (1) While large quantities of vaccines for measles and neonatal tetanus are procured at a time in this Project, the capacity of cold rooms in provincial Health Department warehouses is limited and distribution is made with high frequency. Consequently, measures should be taken to ensure appropriate storage and management of vaccines at provincial Health Departments, as well as speedy delivery to health centers.
- (2) At health centers, measures should be taken to ensure reliable implementation of the campaign according to the plan, and to ensure the collection and incineration of used syringes to prevent secondary infection.

[ Appendices ]

1. Member List of the Study Team
2. Study Schedule
3. List of Parties Concerned in the Recipient Country
4. Minutes of Discussions
5. References

## 1. Member List of the Study Team

(1) Mr. Shinji Totsuka	Team Leader	Deputy Resident Representative, Indonesia Office Japan International Cooperation Agency
(2) Ms. Kyoko Gotou	Equipment Planner	Project Management Department Japan International Cooperation System
(3) Ms. Tomoko Onda	Procurement Planner	Project Management Department Japan International Cooperation System



## 2. Study Schedule

No.	Date		Itinerary	Activities	Stay
1	21-Sep	Tue	11:25 Tokyo (JL725) 16:50 Jakarta		Jakarta
2	22-Sep	Wed		10:00 Meeting with WHO 11:30 Visit JICA Indonesia Office 14:30 Courtesy call on Ministry of Health (MOH) 15:30 Courtesy call on Embassy of Japan	Jakarta
3	23-Sep	Thu		09:30 Meeting with MOH 14:30 Meeting with UNICEF	Jakarta
4	24-Sep	Fri		09:00 Meeting with ADB 10:30 Meeting with MOH 16:30 Meeting with WB 17:30 Meeting with JICA	Jakarta
5	25-Sep	Sat		Internal Meeting	Jakarta
6	26-Sep	Sun		Data analysis	Jakarta
7	27-Sep	Mon		09:00 Meeting with JICA 10:00 Discussion of M/D with MOH	Jakarta
8	28-Sep	Tue		10:00 Signing of M/D 15:00 Market survey	Jakarta
9	29-Sep	Wed	08:05 Jakarta 09:15 Semarang	10:30 Central Java Provincial Health Department 11:30 Semarang Municipal Health Department	Semarang
10	30-Sep	Thu		Site survey Pakerongan District Health Department Kajeng Puskesmas Kajeng Posiandu	Semarang
11	1-Oct	Fri		AM Central Java Provincial Health Department PM Central Java Provincial Warehouse	Semarang
12	2-Oct	Sat	09:10 Semarang 10:30 Jakarta	PM Internal Meeting	Jakarta
13	3-Oct	Sun	Move to Bandon		Bandon
14	4-Oct	Mon	PM Go back to Jakarta	09:00 Meeting with Bio Farma	Jakarta
15	5-Oct	Tue		09:00 Meeting with PATH 11:00 Meeting with UNICEF 15:00 Meeting with ECL 17:30 Report JICA	Jakarta
16	6-Oct	Wed		09:00 Meeting with JICA 11:00 Meeting with MOH	Jakarta
17	7-Oct	Thu	22:35 Jakarta (JL726)	AM Internal Meeting 14:00 Report Embassy of Japan 16:00 Report JICA	on board
18	8-Oct	Fri	07:50 Tokyo		

### 3. List of Parties Concerned in the Recipient Country

Directorate General of Communicable Disease Control & Environmental Health, Ministry of Health	Director General	Dr. Umar Fahmi Achmadi, MPH, PH.D
	Director of Epidemiological Surveillance, Immunization & Matra Health	Dr. H. Indriyobo Tantoro, DTMH, MPH
	Medical Epidemiologist	Dr. Jane Soepardi
	Health Epidemiologist	Ms. Asmaniar, SKM
		Dr. Prima Yosephine
Central Java Provincial Health Department	Director of Disease Prevention	Dr. Lily Herawati MKOS
	Chief of EPI	Mr. Saifdin, SKM
		Mr. Budiono, SKM
		Ms. Tri Dour Kristini, SKM
		Mr. Subur Hadi, SKM
Semarang Municipal Health Department	Chief of Disease Prevention	Ms. Uli Basa Sican
	Stuff of Disease Prevention	Mr. Sif Minasari, SKM
		Mr. Siti Minasari, SKM
		Mr. Deny Novani
		Ms. Eko Mujjoro
Pakerongan District Health Department	Chief of EPI	Mr. Setiawan
		Mr. Sugiarto
		Mr. Matori
		Ms. Satna
Kajeng Health Center	Director of Health Center	Dr. Lily Gunawan
WHO	Medical Officer of EPI	Dr. Bardan Jung Rana
	Officer for GAVI	Mr. Sayuti
UNICEF	Health Unit	Mr. Budi Subianto
	Health Sector Department	Dr. Ingrid Hilman
Asian Development Bank	Health Sector Department	Ms Dian Pruomustiko
World Bank	Senior Health Specialist	Ms. Puti Marzoeiki
PATH	Technical Director	Dr. Anton Widjaya
	Technical Officer	Ms. Vanda A. Monlaga
MEDIBEST		Mr. Arief Wibowo
	Director	Mr. Leo Reuben
		Ms. Monita t. Kustini
PT Sahrita Persada		Mr. Sahlan
Bio Farma	President	Drs. Marzuki Abdullah
	Production Director	Drs. ISA Mansyur
	Director of Finance	Mr. Djoharsjah
	Senior Manager	Mr. Juliman
	Director of Marketing	Mr. Surimuddin Sulaeman
	Director of Development & Planning	Drs. Maman Hidayat
		Mr. Takashi Iwamoto
	Mr. AniResmiani	
Eastern Car Liner Ltd.		Mr. Hiroyuki Takahashi

#### 4. Minutes of Discussions

**MINUTES OF DISCUSSIONS  
ON THE BASIC DESIGN STUDY  
ON THE PROJECT FOR NEONATAL TETANUS ELIMINATION AND  
MEASLES CONTROL  
IN THE REPUBLIC OF INDONESIA**

In response to a request from the Government of the Republic of Indonesia (hereinafter referred to as "Indonesia"), the Government of Japan decided to conduct a Basic Design Study on the Project for Neonatal Tetanus Elimination and Measles Control (hereinafter referred to as "the Project" ) and entrusted the study to the Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Indonesia the Basic Design Study Team (hereinafter referred to as "the Team" ), which is headed by Mr. Shinji Totsuka, Deputy Resident Representative, JICA Indonesia Office, and is scheduled to stay in the country from 21<sup>st</sup> September to 8<sup>th</sup> October.

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

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

Jakarta, 28<sup>th</sup> September



Shinji Totsuka  
Leader  
Basic Design Study Team  
Japan International Cooperation Agency  
(Japan)



Indriyono Tantoro  
Secretary of the Directorate General  
Directorate General of CDC & EH  
Ministry of Health  
(Indonesia)

## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to prevent maternal and neonatal tetanus in high risk villages, to prevent school measles outbreak and to interrupt measles transmission from school children to younger age groups through procurement of equipments to support activities of Neonatal Tetanus campaign and Measles catch up campaign.

### 2. Project sites

The sites of the Project are as follows.

2-1. After discussions with the Team, the sites described in Annex-1 were finally requested by the Indonesian side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

Neonatal Tetanus Elimination: 29 provinces

Measles Control: 16 provinces

2-2. The Indonesian side assigned in Annex-1 their own priorities.

### 3. Responsible and Implementing Agency

3-1. The Responsible Agency is the Ministry of Health.

3-2. The Implementing Agency is Directorate General of Communicable Disease Control and Environmental Health, the Ministry of Health.

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

After discussions with the Team, the items described in Annex-2 were finally requested by the Indonesian side. JICA will assess the appropriateness of the request and will recommend to the Government of Japan for approval.

### 5. Japan's Grant Aid Scheme

5-1. Indonesian side understands the Japan's Grant Aid Scheme explained by the Team, as described in Annex-3.

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

### 6. Schedule of the Study

6-1. The consultants will proceed to further studies in Indonesia until October 7<sup>th</sup>.

6-2. Based on the Minutes of Discussions and technical examination of the study results, JICA will complete the final report and send it to the Government of Indonesia by end of January 2005.

7. Other relevant issues

7-1. Both sides mutually understand that the support for the plan of the year 2006 on the Project shall be considered from the viewpoint of the importance of sustainability on the Project of Neonatal Tetanus Elimination Campaign. However, because of the limitation of the budget, JICA Indonesia office will inform Indonesia side on the final decision, after the Government of Japan will discuss and draw a conclusion.

7-2. Both sides agreed that all items including Vaccines shall be delivered by the Japanese side to the warehouse of each Provincial Health Department.

7-3. With regard to the procurement of Needle Cutter, Indonesia side understands that it will be determined after the further study.

7-4. Indonesian side guaranteed to allocate necessary budget for management and operation of the Project.



## Annex-1

## List of Project Site

## 1. for Neonatal Tetanus Elimination

No.	Province	Priority for 2005	Priority for 2006
1	Aceh	A	C
2	North Sumatera	C	A
3	West Sumatera	C	A
4	Riau	B	A
5	Jambi	B	A
6	South Sumatera	C	A
7	Babel	C	A
8	Bengkulu	C	A
9	Lampung	C	A
10	West java	C	A
11	Banten	B	A
12	DI Yogya	C	A
13	Centaral Java	C	A
14	East Java	B	A
15	West Kalimantan	C	A
16	Central Kalimantan	C	A
17	South Kalimantan	C	A
18	East Kalimanta	C	A
19	North Sulawesi	C	A
20	Gorontalo	C	A
21	Central Sulawesi	A	C
22	South Sulawesi	B	A
23	South East Sulawesi	B	A
24	Bali	C	A
25	West Nusa Tenggara	C	A
26	East Nusa Tenggara	C	A
27	Maluku	A	C
28	Mollucas	A	C
29	Papua/Irian	A	C

## 2. for Measles Control

No.	Province	Priority
1	Aceh	A
2	North Sumatera	A
3	West Sumatera	A
4	Riau	A
5	South Sumatera	A
6	Babel	A
7	Lampung	A
8	Banten	A
9	Central Java	A
10	East Java	A
11	West Kalimantan	A
12	Central Kalimantan	A
13	South Kalimantan	A
14	East Kalimantan	A
15	South Sulawesi	A
16	Papua	A

A: First Priority, B: Second Priority, C: Third Priority

## List of Items

Name of Requested Items	Remarks
1. for Neonatal Tetanus Elimination	for the year 2005 and 2006
1-1. Tetanus Toxioid Vaccine	
1-2. Auto Disable Syringe	
1-3. Safety Box for AD Syringe	
2. for Measles Control	for the year 2005
2-1. Measles Vaccine	
2-2. Auto Disable Syringe	
2-3. Safety Box for AD Syringe	
2-4. Disposable Syringe	
3. for Safety Injection	
3-1. Needle cutter	





## Japan's Grant Aid Scheme

### 1. Grant Aid Procedure

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

Application: (Request made by a recipient country)  
Study: (Study conducted by JICA)  
Appraisal & Approval: (Appraisal by the Government of Japan and Approval by Cabinet)  
Determination of (Notes exchanged between the Governments of Japan  
Implementation: 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 (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, 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. Contents of the Study

(1) Contents of the Study

The purpose of the 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 Japanese Government. The contents of the Study are as follows:



- 1) Confirmation of the background, objectives, and benefits of the requested Project and also institutional capacity of the agencies concerned of the recipient country, for the Project's implementation.
- 2) Evaluation of the appropriateness of the Project to be implemented under the Grant Aid Scheme from a technical, social and economic point of view.
- 3) Confirmation of items agreed on by both parties concerning the basic concept of the Project.
- 4) Preparation of a basic design of the Project
- 5) Estimation of cost of the Project

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

The Government of Japan requests the Government of the recipient country to take the measures 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 select (a) firms(s) based on proposals submitted by interested forms. The firm(s) selected carry(ies) out a 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) 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, etc., are confirmed.

(3) "The period of 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"

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) Undertaking 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 following;

1) to secure land necessary for the sites of the Project and to clear 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,



## 5. References

### (1) List of collected material

No.	Document	Publisher	Edition	Original or Copy
1	EPI, CENTRAL LEVEL MULTI YEAR PLAN 2002-2006	CDC, MOH	2001	Copy
2	EVERY CHILD (INDONESIA:Overcoming Challenges to Save Mothers and Babies)	UNICEF	Spring, 2004	Copy
3	ATLAS, INDONESIAN DUNA	cv. INDO BUWANA	2004	Original

### (2) Letter from UNICEF

5 October 2004  
JKMECC-H/2004/220

Dr Kyoko Goto  
Project Management Department  
Japan International Cooperation System  
5<sup>th</sup> floor, Shinjuku East Bldg  
10-5, Tomihisa-Cho, Shinjuku-ku, Tokyo, 162-0067  
Japan

Dear Kyoko,

Answering your query regarding UNICEF's vaccine purchasing for Indonesia, we can inform you that presently we purchase our vaccines through UNICEF's supply Division warehouse in Copenhagen.

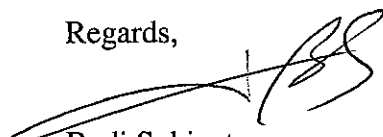
In purchasing vaccine for Indonesia we consider several aspects :

- a. The Ministry of Health in Jakarta has no facility to store large amount of vaccines at central level. Usually the vaccines purchased by the MoH are from PT Biofarma, and PT Biofarma takes care of storage in their cold-rooms and also takes care of the distribution to the provinces.
- b. The cold-rooms in the provinces and the two to five vaccine refrigerators in the districts do not have enough space to store one year's supply of vaccines. They should be asked whether they are ready to store new batch of vaccines.
- c. According to international agreement, the country receiving vaccines from UNICEF's supply division, although the manufacturer may already been certified by WHO, still has the right to do potency testing on these vaccines. We had a bad problem earlier in 2002, when we got Indian vaccine donation from CDC Atlanta, stated as below standard by the laboratory in Indonesia, countered by a statement of good potency by another laboratory in England. Overall it took 18 months to solve the problem.

Unless JICA is prepared to oversee these complicated arrangements, we suggest strongly that you negotiate cheapest price from PT Biofarma.

We warmly welcome your participation in ensuring the implementation of immunization programmes in Indonesia, however please be aware of these aspects before providing the government with vaccines.

Regards,

  
Budi Subianto  
Project Health Officer