

**THE STUDY REPORT**  
**on**  
**THE PROJECT FOR NEONATAL TETANUS CONTROL**  
**in**  
**THE REPUBLIC OF INDONESIA**

**APRIL 2001**

**JAPAN INTERNATIONAL COOPERATION AGENCY**

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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 study on the Grant Aid for Child Welfare, the Project for Neonatal Tetanus Control and entrusted the Japan International Cooperation Agency (JICA) to conduct the study with the assistance of the Japan International Cooperation System (JICS).

JICA sent to Indonesia a study team from November 13 to December 1, 2000.

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

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

April 2001



Kunihiko SAITO

President

Japan International Cooperation Agency

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## Abbreviations

CBAW	Child Bearing Aged Women
DT	Combined Diphtheria, Tetanus vaccine
DTP	Combined Diphtheria, Tetanus, Pertussis vaccine
EPI	Expanded Programme on Immunization
HB	Hepatitis B
PROPENAS	PROgram Pembangunan NASional
SIP	School Immunization Programme
TT	Tetanus Toxoid (Vaccine)
UNICEF	United Nation Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

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3. List of Parties Concerned in the Recipient Country
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## Chapter 1 Background of the Project

The Ministry of Health and Social Welfare (hereinafter referred to as "MOH") of the Republic of Indonesia (hereinafter referred to as "Indonesia") has been steadily achieving results in its implementation of the Acceleration of Neonatal Tetanus Elimination. However, it was unable to secure a sufficient budget to execute medical administration due to the economic crisis, depreciation of the currency and inflation that started in 1997. For this reason, the government of Indonesia requested the Japanese government to procure the auto-disable (AD) syringes<sup>\* 1</sup> and safety boxes<sup>\* 2</sup> for the safe disposal of used syringes necessary for the Acceleration of Neonatal Tetanus Elimination and Catch-up Campaign for Measles Control planned to be implemented in FY 1999. In FY 1998, 7,472,300 AD syringes were supplied for Neonatal Tetanus Elimination and 6,969,400 AD syringes and safety boxes for the disposal of used syringes for Measles Control.

However, Indonesia has been unable to escape the effects of the economic crisis since 1997, and securing of the necessary amount of vaccines and imported AD syringes is still difficult. For this reason, MOH of Indonesia requested the tetanus toxoid vaccine and AD syringes necessary for continuing the Acceleration of Neonatal Tetanus Elimination to Child Bearing Aged Women<sup>\* 3</sup> (CBAW) and expanding Measles Control to the entire country.

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\* 1 Auto-Disable Syringe: Disposable syringe the re-use of which is physically impossible

\* 2 Safety box: Box for incinerating and safely disposing of used syringes

\* 3 Women capable of becoming pregnant and bearing children. The age group is defined according to the situation of the respective country, and in Indonesia, CBAW refers to women aged 15 to 39.

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

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

In Indonesia, the primary cause of death among infants in 1986 was neonatal tetanus, which accounted for 19.3% of all infant deaths. To counter this, the government of Indonesia assigned midwives with training in safe, hygienic delivery methods to villages throughout the country and started tetanus immunization (TT2) of pregnant women in 1986. As a result of these activities, the infant death caused by neonatal tetanus dropped to fifth place (3.7%) as a cause of infant deaths in 1995.

Of the items mentioned as important items in the health and medical fields in the National Development Plan (PROPENAS 2001 - 2005) for the reduction of the mortality and morbidity rates of infectious diseases including neonatal tetanus, the following 4 policies are closely related to effectiveness:

- Improvement of health and promotion of community participation
- Environmental improvement from the standpoint of health
- Efforts to improve the health and medical services
- Staff education in health and medical fields

MOH of Indonesia formulated the "Acceleration of Neonatal Tetanus Elimination 1998 - 2000" and "Acceleration of Neonatal Tetanus Elimination 2001 - 2008" to further reduce the mortality and morbidity rates of neonatal tetanus. The objectives of these plans are:

- To reduce the morbidity rate of neonatal tetanus to one infant per 1,000 births (1/1,000) by 2000, and
- To reduce immunization using unhygienic syringes.

And the numerical goals of these plans are:

- To achieve an immunization rate of 90% for 3-doses immunization of tetanus (TT3 of CBAW) in all high risk villages by 1999, and
- To achieve an immunization rate of over 90% for 5-doses immunization of tetanus (TT5) of all CBAW by 2008.

The Project is expected to achieve the elimination of neonatal tetanus by promoting immunization of CBAW through the procurement and distribution of the syringes and equipment necessary for immunization by tetanus vaccine for the purpose of achieving the above-mentioned goals.

The requested Japanese assistance shall procure the AD syringes and tetanus vaccines necessary for the tetanus immunization in 2002 which is limited to pregnant women in 12 high priority provinces among all CBAW targeted by the Project throughout Indonesia, and provide internal transportation of the above-mentioned goods to the Provincial Health Offices (DINAS) in the 12 provinces.

The extension of Measles Control to the entire country, which was included in the original request, shall not be covered by the Project and would be examined for grant aid again after confirming its effectiveness by the evaluation report, because the evaluation results of the pilot project implemented by grant aid in 1998 (in DKI Jakarta and West Java) are still being analyzed by the National Institute of Health Research and Development (NIHRD) of Indonesia.



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

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

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

The Neonatal Tetanus Immunization Project implemented in FY 1998 covered 23 provinces. However, from the present field study, the project was found lacking in implementation and monitoring systems in that, for example, the results of implementation were not reported to MOH. For this reason, efforts shall be made to ensure more reliable immunization by covering only provinces with a high capacity for implementation, taking into consideration the immunization rate, as well as limiting the target women of immunization to a group regarding whom data is easy to control.

In order to prevent secondary infection through the re-use of syringes and accidental needle stick injuries, the devices shall be selected to allow for safe immunization. For the smooth implementation of immunization, syringes and vaccines shall be distributed without delay.

In EPI and other programs, MOH of Indonesia concluded contracts with suppliers that included the transportation of the equipment procured, such as vaccines and syringes, to the Provincial Health Offices. Therefore, the requested Japanese assistance shall follow the above-mentioned procurement method in Indonesia.

#### **(2) Policy related to the Specifications of the Equipment**

For the implementation of safe immunization, the specifications and quality of the equipment are required to secure certain standards. Therefore, the specifications and quality of the equipment to be procured shall comply with WHO/UNICEF standards, which are the international standards.

### **2-2-2 Basic Plan (Equipment Plan)**

#### **(1) General Plan**

In the original request, immunization was intended to be targeted at CBAW. However, as a result of the field study, it was found that the immunization (TT1, TT2, and part of TT3) was actually given mainly to pregnant women. This was because, unlike school immunization, it was difficult

to grasp and gain access to those targeted for immunization, as CBAW are so widely scattered.

After holding discussions with MOH of Indonesia, the following 2 points were agreed:

- limiting for the time being those targeted for immunization only to pregnant women facing the risk of infection conforms to the actual situation and enables evaluation and monitoring, and
- Immunization shall be implemented in 12 provinces (approximately 52% of the entire population) which are considered to have higher implementation capability in terms of the immunization system and reporting system because they have a higher immunization rate than the average for the entire country (73% through TT1 and TT2).

The immunization rates of the provinces that constitute the selection standard are shown in Table-1.

The selected 12 provinces are more advanced than at national average level in terms of a decrease in the number of high risk districts and an increase in the districts that have eliminated tetanus (Refer to Table-2). In order to maintain these levels, continuous implementation of immunization is necessary.

As tetanus cannot be infected from person to person, there is no risk of mass infection spreading to the provinces not covered by the Project.

The syringes shall be AD syringes that are physically impossible to re-use because it is necessary to prevent secondary infection through re-use of syringes and to ensure safe injection. Safety boxes necessary for the safe disposal of used syringes shall also be included in the Project.

After decentralization in 2001, the budget shall be distributed by the central government to the Provincial Health Offices, but vaccines shall continue to be procured by the central government. However, the budget of MOH for 2001 is insufficient. Under these circumstances, there is no guarantee that MOH can secure the necessary amount of tetanus vaccines. To enable reliable and smooth immunization, it is necessary to procure not only AD syringes but also tetanus vaccines.

Furthermore, internal transportation from Jakarta to the warehouses of each Provincial Health Office shall be borne by the Japanese government due to the situation in Indonesia where vaccines and syringes are distributed directly from the manufacturers to each Provincial Health Office without going through MOH.

The TT immunization record cards (refer to Photograph-1), requested as one of the components of the Neonatal Tetanus Elimination program, shall be deleted because MOH considers they can procure TT cards by themselves.

Table 1 Immunization rate for each province

Provinces	Immunization coverage to pregnant women (1998/99)			Result
	TT1	TT2	Average of and TT2	
Dista Aceh	56.9	52.6	54.8	exclude
North Sumatra	94.1	88.5	91.3	include
West Sumatra	56.1	69.7	62.9	exclude
Riau	86.2	77.2	81.7	include
Jambi	79.1	73.1	76.1	exclude <sup>(1)</sup>
South Sumatra	77.3	71.0	74.2	exclude <sup>(1)</sup>
Bengkulu	73.4	65.7	69.6	exclude
Lampung	92.7	86.3	89.5	include
DKI Jakarta	81.6	78.1	79.9	include
West Java	77.8	73.1	75.5	exclude <sup>(1)</sup>
Central Java	97.7	89.2	93.5	include
DI Yogyakarta	99.8	93.4	96.6	include
East Java	65.8	61.1	63.5	include <sup>(2)</sup>
West Kalimantan	91.8	90.6	91.2	exclude <sup>(1)</sup>
Central Kalimantan	94.8	94.9	94.9	exclude <sup>(1)</sup>
South Kalimantan	64.8	57.2	61.0	exclude
East Kalimantan	62.4	55.3	58.9	include <sup>(3)</sup>
North Sulawesi	82.4	76.0	79.2	include
Central Sulawesi	81.6	74.9	78.3	include
South Sulawesi	80.6	63.8	72.2	exclude
Southeast Sulawesi	60.0	56.2	58.1	exclude
Bali	81.5	73.1	77.3	include
West Nusa Tenggara	93.5	83.6	88.6	include
East Nusa Tenggara	40.2	38.2	39.2	exclude
Maluku	57.1	51.0	54.1	exclude
Irian Jaya	45.0	33.8	39.4	exclude
Standard (Round of National average)	76 %	70 %	73 %	

Notes;

1. These provinces shall not be included in the Project because the reliability of their reports is low and they are poorly evaluated by MOH although they showed higher immunization rates than the standard.
2. This province shall be included in the Project because they are highly evaluated by MOH for their implementation and monitoring systems although it shows lower immunization rates than the standard.
3. This province shall be added to the Project because it is the pilot province of the 4 Kalimantan provinces although it showed a lower immunization rate than the standard.

Table 2 Changes in the number of high-risk districts  
in the 12 provinces targeted by the Project

Year	Number of Districts (portion to whole districts)		
	high risk	controlled	eliminated
1995	32(22%)	51(35%)	62(43%)
1998	6(4%)	30(19%)	118(77%)

(Source: Acceleration of Neonatal Tetanus Elimination (2001–2008))

(Front)

(Back)

Photograp 1 TT card

The changes from the original request are shown in Table-3.

## (2) Equipment Plan

The equipment to be procured by the requested Japanese assistance shall be the AD syringes, tetanus vaccines, and safety boxes necessary for the tetanus immunization (TT2) of pregnant women in the 12 target provinces in 2002. The necessary amount of each item and the distribution to each province are shown in Table-4.

Table 3 Changes from the original request

	Content of original requested items	Finalized content
Target women	CBAW with the age from 15 to 39 based on High Risk Score Method	All pregnant women
Requested equipment	AD Syringe 28.0 million pcs. Tetanus Vaccine 4.0 million vials TT card 9.6 million sheets	AD Syringe 5,891,800 pcs. Tetanus Vaccine 736,540 vials TT card 59,000 boxes
Target provinces	All provinces (26 provinces)	The following 12 provinces: (North Sumatra, Riau, Lampung, DKI Jakarta, Central Java, DI Yogyakarta, East Java, East Kalimantan, North Sulawesi, Central Sulawesi, Bali, West Nusa Tenggara)

Table 4 Distribution Plan of the Equipment to each province

No.	Provinces	Number of target pregnant women (estimation in 2002)	AD Syringe (pcs.)	Tetanus vaccine (vials)	Safety Box (box)
1	North Sumatra	342,202	684,500	85,560	6,850
2	Riau	129,922	259,900	32,500	2,600
3	Lampung	204,677	409,400	51,180	4,100
4	DKI Jakarta	250,875	501,800	62,720	5,025
5	Central Java	773,463	1,547,000	193,380	15,475
6	DI Yogyakarta	57,032	114,100	14,260	1,150
7	East Java	797,888	1,595,800	199,480	15,975
8	East Kalimantan	74,885	149,800	18,740	1,500
9	North Sulawesi	75,489	151,000	18,880	1,525
10	Central Sulawesi	62,034	124,100	15,520	1,250
11	Bali	62,272	124,600	15,580	1,250
12	West Nusa Tenggara	114,900	229,800	28,740	2,300
合計		2,945,639	5,891,800	736,540	59,000

Syringe : The necessary quantity shall be the number of pregnant women targeted x 2 as there are 2 immunizations, TT1 and TT2. Due to the size of the package, the number of syringes shall be counted in units of 100.

Vial : 10 doses constitute 1 vial. From the empirical value of the loss rate of 20% in Indonesia, the necessary number of doses shall be the number of people to be immunized x 1.25<sup>(\*)</sup>.

(\*)WHO formula for the necessary number of doses: Number of people to be immunized x 100/ (100 - loss rate)

Safety box: One box can dispose of approx. 100 syringes. Due to the size of the package, safety boxes are counted in units of 25.

The use and the specifications of the equipment are shown in Table-5.

Table 5 Contents of the equipment

Equipment	Purpose and Major Specifications	Quantity
AD Syringe	Syringe disable for re-use to prevent blood infection accident vaccine capacity : 0.5ml 100 pcs./box the product meet to WHO/UNICEF standard	5,891,800 pcs.
Tetanus Vaccine	Tetanus Toxoid vaccine 10 dosed/vial the product prequalified by WHO	736,540 vials
Safety Box	Safety disposal for used syringe Net Capacity : at least 100pcs./box (5 litter) the product meet to WHO/UNICEF standard	59,000 boxes

As the products that satisfy the specifications of the equipment are not manufactured in Japan, the suppliers shall be selected from third countries or local manufacturers as shown in Table-6.

Table 6 Classification of Procurement

Equipment to be procured	local	Japan	Third country
AD Syringe			○
Tetanus Vaccine	○		○
Safety Box			○

### 2-2-3 Implementation Plan

#### 2-2-3-1 Implementation Policy

In order to implement safe immunization, it is necessary to use products that satisfy standards specified by WHO/UNICEF. The procurement policy for products that satisfy the said standards for the equipment is as stated below.

#### (1) AD Syringe

The AD syringes to be procured shall satisfy WHO/UNICEF standards and be listed on the Products

Information Sheets (PIS\*<sup>4</sup>). The main specifications of the AD syringes are as follows.

- Vaccine capacity: 0.5 ml
- Material: Polypropylene
- Needle: 23 G x 25 mm

These products are not manufactured in Japan nor in Indonesia. For this reason, the AD syringes shall be procured from third countries where the country of origin is a member of the Development Assistance Committee (DAC).

## **(2) Tetanus Toxoid Vaccine**

WHO requires that the tetanus vaccine is adsorbed tetanus toxoid to which an adjuvant\*<sup>5</sup> has been added. Indonesia has been using this type of vaccine hitherto. In the requested Japanese assistance, similar vaccines with a dosage form of 10 doses/vial shall be procured from manufacturers approved by WHO as PQ manufacturers of the tetanus vaccine taking into consideration the above situation.

The tetanus vaccines to be procured by the requested Japanese assistance are considered to be manufactured in Indonesia having advantage in terms of price and PQ approval of WHO. Therefore, products from third countries shall not be procured.

## **(3) Safety Box**

As with the AD syringes, safety boxes that satisfy WHO/UNICEF standards and are listed on the PIS shall be procured. The main specifications of the safety boxes are as follows.

- Storage capacity: 5 liters (Maximum container capacity of used AD syringes: 110 to 155 syringes)
- Material: Carton

These products are not manufactured in Japan or in Indonesia. Therefore, the safety boxes shall be procured from third countries where the country of origin is a DAC member country.

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\*<sup>4</sup> PIS is a product catalogue listing equipment used for EPI such as cold chain equipment and syringes that satisfy WHO/UNICEF standards. A PIS code is assigned to each product. Edited by the Vaccine and Biology Bureau of WHO Headquarters. The 2000 edition is the latest edition.

\*<sup>5</sup> The substance added for the purpose of increasing the immunogenicity of the antigen and effectively stimulating the immunological system (for example, aluminum salt in vaccines) is generally called an adjuvant. The vaccine to which an adjuvant is added is called an adsorbed vaccine.

### 2-2-3-2 Scope of Work

The requested Japanese assistance shall cover only the procurement of equipment and materials and shall not include the construction of facilities or installation of the equipment. The work to be covered by the Japanese government and the recipient country after the Project is implemented are shown in Table-7.

Table 7 Items undertaken by each party

The items to be undertaken		Japan	Recipient
Items in the process of implementation of the requested Japanese assistance	AD Syringe	○	
	Tetanus Vaccine	○	
	Safety Box	○	
	Transportation of the procured equipment to Provincial Health Office (DINAS)	○	
Items after implementation of the requested Japanese assistance	TT card		○
	Local Cost (Distribution after DINAS, Implementation of Immunization, Monitoring etc.)		○

### 2-2-3-3 Consultant Supervision

As the equipment to be procured by the Project covers only 3 items, AD syringes, tetanus vaccines and safety boxes, it shall be determined by tender from trading companies. Since the Project includes inland transportation to each Provincial Health Office, the procured products shall be divided and packaged separately for each Provincial Health Office. Further the consultant for the Project will conduct pre-shipment inspection of the equipment to be procured in Japan/or the third countries. The inspection will be carried out by an inspection agency assigned by the consultant. Also the consultant will inspect the above mentioned equipment at Jakarta with MOH.

### 2-2-3-4 Procurement Plan

The producers of the equipment to be procured by the Project shall be companies producing the equipment in conformity with WHO/UNICEF standards, or their sales agents. As there is no company that produces the above-mentioned equipment in Japan, the producers shall be in a third county or Indonesia.

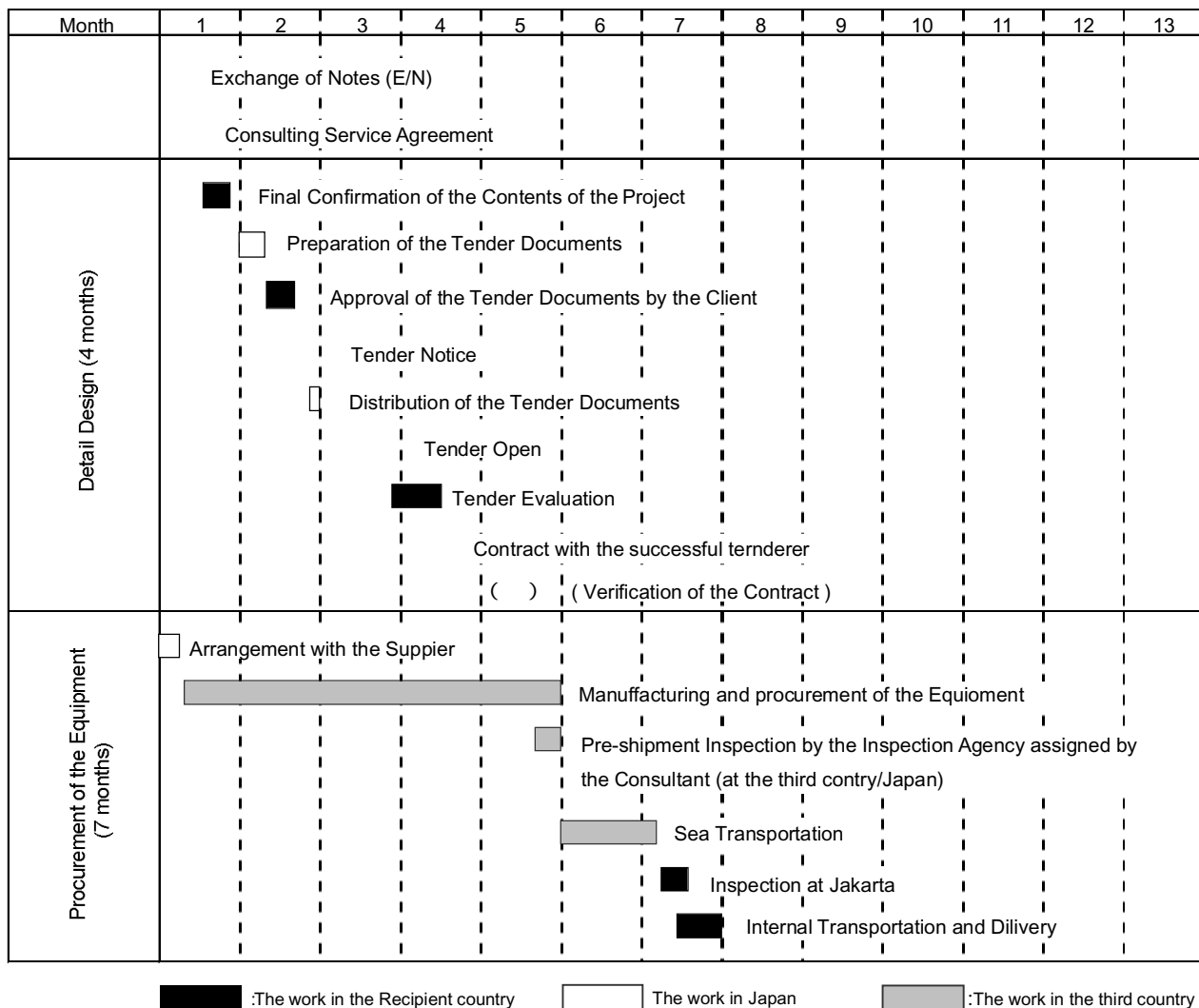


The items to be procured are consumables and do not need repair and maintenance services or spare parts.

### 2-2-3-5 Implementation Schedule

The requested Japanese assistance shall be entirely borne by the Japanese government and the process shall take 4 months for detail design and 7 months for equipment procurement, making a total of eleven months, as shown in Table-8.

Table 8 Table showing the implementation schedule



### **2-3 Obligation of Recipient Country**

The obligations of Indonesia required after implementation of the requested Japanese assistance are as follows.

- Procurement of 2,945,639 sheets of immunization record cards (TT cards) not included in the present procurement
- Distribution of the procured equipment from the Provincial Health Office (DINAS) to Health Centers (PUSKESMAS)
- To bear local costs incurred in implementing the immunization and monitoring costs

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

The provinces to be targeted by the requested Japanese assistance are the 12 provinces evaluated as having high implementation and operating capacity for immunization. As no assignment of new personnel or training of staff is required, there shall be no operating problems at the sites implementing the immunizations.

The items to be procured include only the AD syringes, tetanus vaccines and safety boxes necessary for immunization. No spare parts or consumables are needed. The tetanus vaccines must be kept in the refrigerator. Each Provincial Health Office, District Health Office and Health Center have adequate storage warehouses and cold chain facilities. Therefore, it is not necessary to construct new storage facilities. Consequently, there shall be no special maintenance problems.

However, the syringes and safety boxes which shall be kept at normal temperature require attention regarding storage considering the weather conditions of high temperature and high humidity. The storage conditions necessary for the requested equipment are shown in Table-9.

Table 9 Storage conditions of the equipment

Equipment	Storage conditions	Availability of storage places
AD syringes	There is no problem for storage at normal temperature. However, the blister-packaged syringes* <sup>6</sup> shall not be placed on the floor to avoid being eaten by insects in high temperature and high humidity.	Provincial Health Offices (DINAS), District Health Offices and Health Centers (PUSKESMAS) have storage warehouses.
Safety boxes	Storage of safety boxes does not require special attention, but one safety box shall be assigned for disposal of 100 syringes at the time of delivery.	
Tetanus vaccines	Tetanus vaccines shall be kept in refrigerators. Storage temperature shall be 5°C ± 3°C	Provincial Health Offices (DINAS) and District Health Offices have large refrigerators. Health Centers (PUSKESMAS) have refrigerators.

\*<sup>6</sup> A package form that individual packages syringes on cardboard and is sealed in plastic.

## Chapter 3 Project Evaluation and Recommendation

### 3-1 Project Effect

#### (1) Direct Effect

1) In Indonesia, the budget for procuring syringes and vaccines necessary for immunization is difficult to secure because of the stagnant economy after the economic crisis of 1997. The immunization rate for neonatal tetanus (TT2) among pregnant women in the 12 provinces targeted by the Project averages approximately 80% at present. However, if immunization is interrupted due to the lack of budget for the equipment or insufficient amount of vaccines, the immunization rate will drop drastically. The immunization rate for neonatal tetanus in the same provinces is expected to reach 100% in 2002 through the procurement of the necessary equipment by the Project. Therefore, by preventing a drop in the immunization rate for neonatal tetanus (TT2) among CBAW, the Project is expected to contribute to "achieving an immunization rate of over 90% (TT5 - 5-doses immunization) among CBAW all over Indonesia by 2008", which is the numerical goal of the Acceleration of Tetanus Elimination (2001 - 2008).

2) The direct beneficiaries are the pregnant women to be immunized in the above-mentioned 12 provinces (approximately 2,946,000, estimation for 2002) and the neonates who can avoid the manifestation of tetanus by the acquisition of immunity through their mothers. Approximately 2,350,000 neonates in the 12 provinces (estimated number obtained by multiplying the antigen acquisition rate from TT2 by the number of pregnant women) are expected to have immunity at birth. With the use of safe, hygienic delivery methods, it is possible that the same 12 provinces will soon reach the controlled stage (mortality rate due to neonatal tetanus of less than 1/1,000). The number of deaths among neonates from tetanus in the 12 provinces during 2002 is estimated to be approximately 5,000 <sup>\*7</sup>. With the implementation of immunization, approximately 4,000 neonates, about 80% of the above-mentioned 5,000 cases, are expected to avoid death through acquisition of the antigen.

3) With the continuation of immunization, it will be possible to maintain the present morbidity rate

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<sup>\*7</sup> Estimated using infant mortality in 1995 (51 per 1,000) and the mortality rate from neonatal tetanus as a percentage of infant deaths (3.7%).

and prevent an increase in the number of deaths from neonatal tetanus caused by a rise in morbidity due to the termination of continuous immunization.

4) With the use of AD syringes and safety boxes, safety injection can be implemented. Conventional disposable syringes can be re-used, but with AD syringes, re-use of syringes is impossible and secondary infection can be eliminated. With the use of safety boxes, accidental infection of staff can be reduced and the syringes can be incinerated safely.

## **(2) Indirect Effect**

1) When the Project which targets pregnant women in the 12 provinces achieves results, the scope of women targeted for immunization can be extended to CBAW. In addition, when immunization is extended to the remaining 14 provinces, EPI can be undertaken using the experience gained in this Project.

2) Popularization of the use of AD syringes and safety boxes all over Indonesia will help to train immunization staff in safety injection methods.

## **3-2 Recommendations**

In Indonesia, decentralization will be expanded from 2001. With the transferral of administration hitherto borne by the central government to each provincial government, administrative confusion is anticipated at first. In the health and medical administration, the provincial health office of central ministry (KANWIL) directly governed by MOH will be absorbed into the Provincial Health Offices (DINAS) and the budget flow will change. For this reason, monitoring implemented by MOH of Indonesia through KANWIL in each province will be placed under the responsibility of Provincial Health Offices (DINAS). Therefore, smooth and prompt transferral of affairs and reliable implementation of monitoring are required of MOH of Indonesia and the Provincial Health Offices (DINAS).

On the other hand, since the economic crisis in 1997, economic recovery has not proceeded as expected. Whether MOH and Provincial Health Offices (DINAS) can take the budgetary measures necessary for implementing future immunization is still unclear. Since a major effect is expected from the continuous implementation of immunizations, it is considered necessary to examine the support system for the future implementation of immunizations by donors including Japan.

## Appendices

1. Member List of the Survey Team
2. Survey Schedule
3. List of Parties Concerned in the Recipient Country
4. Minutes of Discussion

## 1. Member List of the Survey Team

<u>Name</u>	<u>Position</u>	<u>Organization</u>
YONEDA Kazuhiro	Leader	JICA Indonesia Office
SHIOTA Akio	Equipment Planning	JICS
SUGAWARA Toshio	Procurement Planning	JICS

## 2. Survey Schedule

No.	Date	Activity	Stay
1	Nov.13 Mon.	Tokyo – Jakarta	Jakarta
2	Nov.14 Tue.	9:30 Courtesy Call to JICA Indonesia Office 10:00 Courtesy Call to Embassy of Japan 14:00 Discussion with CDC, Ministry of Health	ditto
3	Nov.15 Wed.	8:00 Discussion with UNICEF 10:00 Courtesy Call to CDC 11:00 Discussion with CDC 14:00 Discussion with WHO	ditto
4	Nov.16 Thu.	Visit to Bio Farma	Bandung
5	Nov.17 Fri.	Site survey at the Office of Department of Health in West Java Province Health Office of Bandung District, Health Centers	Jakarta
6	Nov.18 Sat.	Preparation of the reports	ditto
7	Nov.19 Sun.	ditto	ditto
8	Nov.20 Mon.	Site survey at the Office of Department of Health in South Kalimantan Province	Banjarmasin
9	Nov.21 Tue.	Site survey at Health Office of Banjarmasin District, Health Centers	Jakarta
10	Nov.22 Wed.	9:00 Discussion with CDC	ditto
11	Nov.23 Thu.	9:00 Site survey at Health Office of DKI Jakarta, Health Center 15:00 Discussion with CDC 16:30 Signing of the Minutes of Discussion	ditto
12	Nov.24 Fri.	10:00 Report to JICA Office 12:00 Discussion with CDC 14:30 Survey about inland transportation cost	ditto
13	Nov.25 Sat.	Preparation of the reports	ditto
14	Nov.26 Sun.	ditto	ditto
15	Nov.27 Mon.	13:00 Discussion with USAID	ditto
16	Nov.28 Tue.	Site survey at Office of Department of Health in DI Yogyakarta, Health Office of District, Health Centers	Yogyakarta
17	Nov.29 Wed.	ditto	Jakarta
18	Nov.30 Thu.	10:00 Discussion with CDC	ditto
19	Dec. 1 Fri.	10:00 Report to JICA Office 11:30 Report to Embassy Jakarta –	on plane
20	Dec. 2 Sat.	– Tokyo	

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

#### Directorate General of Communicable Disease Control and Environmental Health

Professor Umar F. Achmadi	Director General
Dr. H. Indriyono Tantoro	Director of Epidemiological Surveillance, Immunization & Matra Health
Dr. Harmein Harun	National EPI Manager
Dr. Totok Heriyanto	Director of Department of Cooperation
Dr. Julitasari Setiadi	Medical Epidemiologist
Mrs. Asmaniar	Chief of Monitoring and Evaluation
Mrs. Kartini	Staff of Monitoring and Evaluation

#### Health Office of West Java (KANWIL)

Dr. Uduy Daman P	Director of Evaluation
Mrs. Vuwu SP	EPI staff
Mrs. Yayu Rahayu	EPI staff

#### Health Office of West Java (DINAS)

Mr. Yudi Koharudin	EPI staff
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#### Health Office of Bandung District

Dr. Uikes	Director of Communicable Disease Control
Mr. H. Uan Diursa	Director of EPI
Mr. H. Didin Raqumat	EPI staff

#### Cimahi Health Center, Bandung District, West Java Province

Mr. Suryana	Vaccine Management officer
Mr. Kosim	General Affair

#### Health Office of South Kalimantan (KANWIL)

Dr. Manaham	Deputy Director
Dr. Swandi	Staff of Communicable Disease Control Division

#### Health Office of Banjarmasin District, South Kalimantan Province

Mr. Abdullah A. Arif	Director of EPI Section
Mr. Hamli Sabere	Staff of Communicable Disease Control Division
Dr. Rita	ditto

#### November 9<sup>th</sup> Health Center, Banjarmasin District, South Kalimantan Province

Dr. Supoatrum	Medical Doctor
Mrs. Wiwik Ramadhani	Midwife

#### Health Office of DKI Jakarta (KANWIL)

Dr. Murdiati Umbas	Director
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Health Office of DKI Jakarta (DINAS)

Dr. Tini Suryanti	Director, Division of Communicable Disease Control
Dr. Hg. Radiarti	Director, EPI Division
Mrs. Fuad Nurdin	Staff of EPI Division

Health Office of East Jakarta District, DKI Jakarta

Dr. Hakim Siregar	Director, Division of Communicable Disease Control
Mrs. Sri Istini	Staff of Division of Communicable Disease Control
Mrs. Sudarno	ditto

Jatinegara Health Center, East Jakarta District, DKI Jakarta

Dr. Ristiyani	Director
Dr. Indradiaya	Medical Director

Health Office of DI Yogyakarta (KANWIL)

Dr. Ngadiyo	Director
Dr. Joko Hastaryo	Director, Division of Communicable Disease Control
Mr. Trisino Agung	Staff of Division of Communicable Disease Control

Health Office of DI Yogyakarta (DINAS)

Mr. Suyani Hartono	EPI staff
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Health Office of Seleman District, DI Yogyakarta

Dr. Bambang Suharjono	Director, Division of Communicable Disease Control
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Seleman District Health Center, DI Yogyakarta

Mrs. Suharyati	EPI staff
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Health Office of Yogyakarta District,

Mrs. Tri Mardani	Director, Division of Communicable Disease Control
Mrs. Citraningsilt	Staff of Division of Communicable Disease Control
Mrs. Setyariti	Staff, Division of Decentralization
Mr. Sasmini	EPI staff

UHII Health Center, Yogyakarta District

Dr. Hetiy Handayani	Director
Dr. Florence M.	Medical Doctor

P.T. Bio Farma

Mr. Kurnia Kusumah Negara	Marketing Director
Drs. Marzuki Abdullah	Planning & Development Director
Drs. Manan Hidayat	Production Director

Drs. Isa Mansyur	Head Division for Pharmaceutical Products
Mr. Erman Boedisetianto	Viral Vaccine Production Manager
Mr. Takashi Iwamoto	Technical Advisor

#### WHO

Dr. George Petersen	Representative, Indonesia Office
Dr. Cakmak Niyazi	Consultant

#### UNICEF

Dr. Victor O. Cole	Health Project Officer
Dr. Wibowo	EPI Officer
Mr. Uramoto Yoshiteru	Senior Programme Office, Planning & Advocacy

#### USAID

Jonathan Ross, MPH	Public Health Advisor
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#### 4. Minutes of Discussion

### MINUTES OF DISCUSSIONS

## THE STUDY ON THE PROJECT FOR NEONATAL TETANUS ELIMINATION IN THE REPUBLIC OF INDONESIA

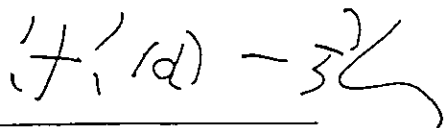
In response to a request from the Government of the Republic of Indonesia (hereinafter referred to as "Indonesia", the Government of Japan decided to conduct a Study on the Project for Acceleration of Neonatal Tetanus Elimination in the Republic of Indonesia (hereinafter referred to as "the Project")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

JICA sent the Study Team (hereinafter referred to as "the Team"), headed by Mr. Kazuhiro Yoneda, to Indonesia from November 13, 2000 to November 28, 2000.

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

As the result of discussions between both sides and the field survey, the team has confirmed to convey the requested items as per attached sheet to be considered by the Government of Japan.

Jakarta, November 23, 2000



Mr. Kazuhiro Yoneda  
Leader  
Study Team  
Japan International Cooperation Agency



Professor Umar F. Achmadi  
Director General  
Directorate General of Communicable  
Disease Control and Environmental Health  
Ministry of Health  
The Republic of Indonesia

## ATTACHMENT

### 1. Objective of the Project

The objective of the Project is to accelerate neonatal tetanus elimination through the provision of necessary equipment.

### 2. Project site

All Provinces

### 3. Responsible and Implementing Agency

The Responsible Agency : Ministry of Health

The Implementing Agency : Directorate General of Communicable Disease  
Control and Environmental Health,  
Ministry of Health

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

After discussions with the Team, the items listed in Annex-1 were finally requested by the Government of Indonesia. JICA will further assess the appropriateness of the request in Japan.

### 5. Japan's Grant Aid Scheme

- 5-1. Indonesian side understood the Japan's Grant Aid Scheme explained by the Team, as described in Annex-2.
- 5-2. Indonesian side shall 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 consultant members of the Team will proceed to further studies in Indonesia until December 1, 2000.
- 6-2. JICA will prepare the study report on the Project in English around April 2000.

### 7. Other relevant issues

- 7-1. Indonesian side shall take necessary measure to sign the Exchange of Notes immediately after the Cabinet of Japan approved the Project.
- 7-2. Indonesian side shall secure the budget necessary to implement the Project such as handling cost of the Equipment, operational cost of the Project and social mobilization cost, etc.
- 7-3. Directorate General of Communicable Disease Control and Environmental Health shall provide special effort for supervision and monitoring on the project implementation.
- 7-4. Directorate General of Communicable Disease Control and Environmental Health shall submit the progress report and completion report of the Project to JICA Indonesia Office.

## List of equipment requested by Ministry of Health

No.	Province *1	Target Pregnant Women	Auto-disable Syringe for TT1 + TT2 (pcs.)	Tetanus Vaccine (vials*2)	Safety Box (boxes*3)	Priority
1	D.I.Aceh	120,810	241,700	30,220	2,425	B
2	Sumatera Utara	342,202	684,500	85,560	6,850	AA
3	Sumatera Barat	133,931	267,900	33,500	2,700	A
4	Riau	129,922	259,900	32,500	2,600	AA
5	Jambi	72,750	145,500	18,200	1,475	A
6	Sumatera Selatan	226,369	452,800	56,600	4,550	A
7	Bengkulu	47,270	94,600	11,820	950	A
8	Lampung	204,677	409,400	51,180	4,100	AA
9	DKI Jakarta	250,875	501,800	62,720	5,025	AA
10	Jawa Barat	1,309,106	2,618,300	327,280	26,200	A
11	Jawa Tengah	773,463	1,547,000	193,380	15,475	AA
12	D.I.Yogyakarta	57,032	114,100	14,260	1,150	AA
13	Jawa Timur	797,888	1,595,800	199,480	15,975	AA
14	Kalimantan Barat	111,324	222,700	27,840	2,250	A
15	Kalimantan Tengah	45,722	91,500	11,440	925	A
16	Kalimantan Selatan	85,850	171,700	21,480	1,725	A
17	Kalimantan Timur	74,885	149,800	18,740	1,500	AA
18	Sulawesi Utara	75,489	151,000	18,880	1,525	AA
19	Sulawesi Tengah	62,034	124,100	15,520	1,250	AA
20	Sulawesi Selatan	213,609	427,300	53,420	4,275	A
21	Sulawesi Tenggara	50,008	100,100	12,520	1,025	A
22	Bali	62,272	124,600	15,580	1,250	AA
23	Nusa Tenggara Barat	114,900	229,800	28,740	2,300	AA
24	Nusa Tenggara Timur	102,755	205,600	25,700	2,075	B
25	Maluku	67,057	134,200	16,780	1,350	B
26	Irian Jaya	57,748	115,500	14,440	1,175	B
Total		5,589,948	11,181,200	1,397,780	112,100	

\*1 Province covered by Health Office

\*2 10 dose/vial, one vial for 8 syringes

\*3 Capacity : 100 syringes/box

Priority AA, A : Equipment to be delivered to the warehouse of each province.

Priority B : Equipment to be delivered to the warehouse of MOH in Jakarta.

After delivery of Jakarta, distribution to each province shall be borne by MOH.

Japan's Grant Aid Program

1. Japan's Grant Aid Procedures

- (1) The Japan's Grant Aid Program is executed by 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 the Cabinet of Japan)
  - Determination of Implementation (Exchange of Notes between both Governments)
  - Implementation (implementation of the Project)

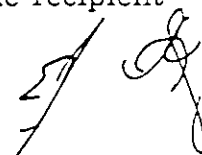
(2) Firstly, an application or a request for a Grant Aid project submitted by the recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Japan's Grant Aid. If the request is deemed appropriate, the Government of Japan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

Secondly, JICA conducts the study, using a Japanese consulting firm.

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 Study Report prepared by JICA and the results are then submitted to the cabinet for approval.

Fourth, the project approved by the cabinet becomes official with the Exchange of Notes signed by the Government of Japan and the recipient country.

Finally, for the implementation of the Project, JICA assists the recipient country in preparing contracts and so on.



## 2. Contents of the Study

### (1) Contents of the Study

The purpose of the Study conducted by JICA on a requested project is to provide a basic document necessary for appraisal of the project by the Japanese Government. The contents of the Study are as follows:

- a) confirmation of the background, objectives, benefits of the project and also institutional capacity of agencies concerned of the recipient country necessary for project implementation,
- b) evaluation of the appropriateness of the project for the Grant Aid Scheme from a technical, social and economical point of view,
- c) confirmation of items agreed on by the both parties concerning a basic concept of the project,
- d) preparation of a basic design of the project,
- e) estimation of cost of the project.

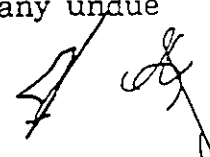
The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The basic design of the project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

Final project components are subject to approval by the Government of Japan and therefore may differ from an original request. Implementing the project, the Government of Japan requests the recipient country to take necessary measures involved which are itemized on Exchange of Notes.

### (2) Selection of Consultants

For smooth implementation of the study, JICA uses a registered consulting firm. The firm selected carries out the Study and writes a report, based upon terms of reference set by JICA.

The consulting firm used for the study is recommended by JICA to a recipient country to also work as consultant on the Project after Exchange of Notes, in order to maintain technical consistency and also to avoid any undue delay in implementation should the selection process be repeated.



### 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 equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with relevant laws and regulations of Japan. The Grant Aid is not supplied through the donation of materials or such.

(2) Exchange of Notes (E/N)

Both Governments concerned extend Japan's Grant Aid in accordance with the Exchange of Notes in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid etc., are confirmed.

(3) "The period of the Grant Aid" means one Japanese fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedure such as Exchange of Notes, concluding a contract with a consulting firm and (a) contractor(s) and a final payment to them must be completed.

(4) Under the Grant, in principle, products and services of origins of Japan or the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant may be used for the purchase of products or services of a third country.

However the prime contractors, namely, consulting, contractor 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.)

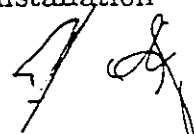
(5) Necessity of the "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. The Government of Japan shall verify those contracts. The "Verification" is deemed necessary to secure accountability to Japanese tax payers.

(6) Undertakings Required to the Government of the Recipient Country

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

- a) to secure land necessary for the sites of the project prior to the installation work in case the project is providing equipment,





- b) to provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) to secure buildings prior to the installation work in case the project is providing equipment,
- d) to ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) to exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which will be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) to accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(7) Proper Use

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

(8) Re-export

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

(9) Banking Arrangement (B/A)

- a) The Government of the recipient country or its designated authority shall open an account in the name of the Government of the recipient country in a bank in Japan. The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by Government of the recipient country or its designated authority under the Verified Contracts.
- b) The payments will be made when payment requests are presented by the bank to the Government of Japan under an Authorization to Pay issued by the Government of the recipient country or its designated authority.

## 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 a bank of Japan for the banking services based upon the B/A		
	1) Advising commission of A/P		●
	2) Payment commission		●
2	To ensure prompt unloading and customs clearance at the port of disembarkation in recipient country		
	1) Marine(Air) transportation of the products from Japan to the recipient country	●	
	2) Tax exemption and custom clearance of the products at the port of disembarkation		●
	3) Internal transportation from the port of disembarkation to the project site	●	●
3	To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified 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 contract		●
5	To maintain and use properly and effectively the facilities constructed and equipment provided under the Grant Aid		●
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		●