



## **Donation Strategy**

**For the benefit of developing countries, improve globalization and partnership for better health.**

**To improve the quality of healthcare, improve access and increase demand for seeking health care in development countries.**

**Global Medical Aid**

<http://globalmedicalaid.com>

Vandtårnsvej 38

DK-3460 Birkerød

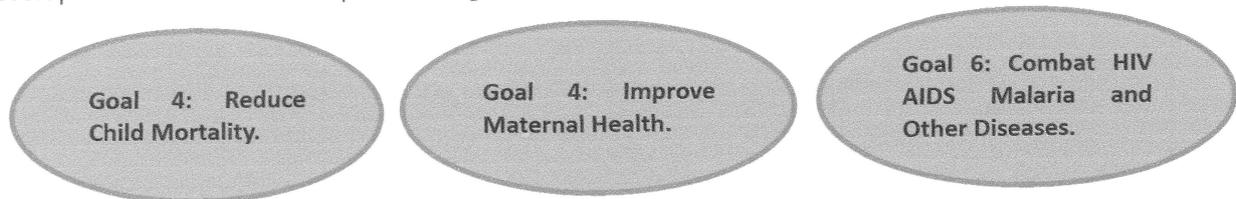
[hfd@globalmedicalaid.com](mailto:hfd@globalmedicalaid.com)

## EXECUTIVE SUMMARY

Conflicts resulting economic changes and financial problems, and a growing burden of disease have contributed to an increasing dependence on donor assistance in the area of health care for many developing economies. The Global Medical Aid assistance usually includes physical equipment and spare parts, and medicines based on the need and request of the counties.

The structure and the GMA donation strategy, to a large extent, are inspired from the WHO Guidelines for Drug Donations produced by the WHO Action Program on Essential Drugs and context analysis. The purpose of the guidelines is to improve the process, management and quality of equipment donations, for a responsible and accountable donation toward GMA strategic goal.

GMA is working to contribute on Millennium Development Goals **4**, **5** and **6** through donation of medical equipment/medicines and training of the countries medical staff on biomedical engineering and use of new technologies with main focus on mother and child health and overall strengthening of the health system in development countries and expected long term changes in health status of the needy people.



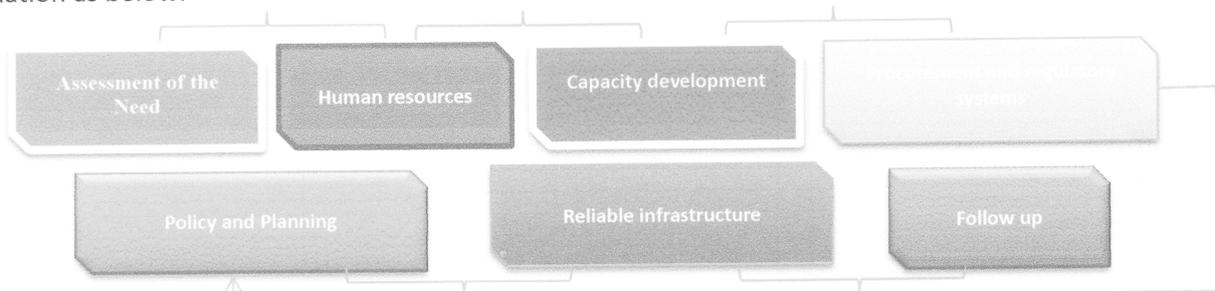
GMA also consider playing an active role in the Sustainable Development Goal (SDGS) which is Ensure healthy lives and promote well-being for all at all ages, as one of the active partner with UN SDGS.

### Beneficiaries

The Primary beneficiary for donation is general public those who are faced with lack of access to essential health services due to lack of life saving medical equipment/medicines in low income societies.

The secondary beneficiary is the private sector with the aims to strengthening the public private sector partnership as it's a key for better health services in any part of the world.

The tertiary beneficiary is the government and NGOs, in low resources countries, as they play a key role in health services for the rural areas of the countries with low in come. GMA will consider essential steps/facts in donation as below:



**Assessment of the Need:** is there a strong need for donation?

**Human Resources:** clinical staff who use the equipment to care for patients, and technical staff (biomedical engineering professionals, technologists and engineers to maintain and manage the equipment)

**Capacity development:** Lack of practical competency based training for both the clinical staff who use the equipment and the technical staff who maintain it and maintenance systems (Proper tools, engineering test equipment, information resources e.g. manuals and spare parts)

**Procurement and regulatory systems:** That ensure safe, appropriate good quality equipment is purchased.

**Policy and planning:** To ensure new equipment is meeting clinical needs, training and maintenance are planned and budgeted for and maintenance systems are established.

**Reliable infrastructure to operate the equipment:** That includes the power supply, temperature and humidity control, and water and

medical gas supply.

**Follow Up:** an agreed mechanism will be in place between parties to ensure the donation utilized for the agreed propose and its reaches to the targeted population.

The concept of Global Medical Aid is simple. For the benefit of developing countries and contribution on health equity, GMA collect usable medicine and hospital equipment by using the network with the hospitals and pharmaceutical companies in European countries.

Currently in collaboration with the concerned ministries of health and/or international non-governmental organizations, 13 countries in the world received donation from GMA; that included Afghanistan, Burkina Faso, Nepal, Sri Lanka and etc.. In the long term, we are expecting to donate to additional countries and initiate training and maintenance arrangement system establishment within recipient countries.

*"DANMARK hospitals discard over 2 million tons of medical waste each year, with a portion of that waste being unused, surplus medical supplies".*

The term health care equipment for GMA is not only medical equipment and medicines but also all other equipment used in the delivery of health care, such as hospital plant, vehicles, laboratory equipment, water and sanitation equipment, etc. According to GMA, health care equipment/medicines donations occur in many different scenarios but GMA providing donation by involving the primary, secondary and tertiary beneficiaries (private voluntary non-governmental organizations, government organization, key stakeholders and civil society organizations) in both recipient country and here is Denmark. In summary, the GMA intended beneficiaries range from individual health care facilities to entire health systems.

### The GMA Story

Considering the discarding percentages of the medical equipment's and medicines and the need for advance technology and essential medicines in development countries, in 2010 GMA explore the possibility of using such disposed equipment/medicines for saving lives of poor and deprived people in development countries, with main focus on countries experiencing ongoing conflict.

As start, we find out that more than 90% of these equipment's is functioning properly and a less percentages required a minimum repairmen from raw materials and can be used for long time within hospital and clinics in most needy countries. Hospitals in many low-income countries rely significantly on donations of medical equipment/medicines. GMA donations are made with the best of intentions; however, the outcomes are not always positive, but we try our best to minimize the misapplication and mismanagement of the donated equipment as much as possible.

*Every day in Denmark destroyed more than 5 tons of medicines, most of which are still fully usable. At the same time there will be in Danish hospitals discarded functioning hospital equipment for several million DKR each year because there develops new technologies, and constantly changing "outdated equipment" out with newer equipment.*

### Strategic Areas of Intervention

Global Medical Aid strategic areas of interest are continues to expand life-saving activities in the developing countries by concentrating on essential programs and services related to:

- Mother and child health.
- Safe delivery.
- Health intervention in emergency response.
- Infectious disease prevention and treatment.
- Improve access to health facilities.
- Improve quality of health.
- Capacity development of medical providers on new technology.
- Biomedical equipment training, renewal and maintenance.

## Rational

Many developing states are increasingly dependent on donor assistance to meet the medicines and medical/laboratory equipment which are ultimate needs of their health care systems. However, GMA believe that by taken into consideration all important parameters, donations should achieve their intended objectives, and could even avoid an added burden to the recipient health care system. There is therefore a need to improve the process of donation, to the mutual benefit of both donors and recipients.

## The GMA Core Principles for Donation

1. A health care equipment/medicines donation should benefit the recipient to the maximum extent possible.
2. A donation should be given with due respect for the wishes and authority of the recipient, and in conformity with existing government policies and administrative arrangements.
3. There should be no double standard in quality: if the quality of an item is unacceptable in the donor country, it is also unacceptable as a donation.
4. There should be effective strategic communication between the donor and the recipient through all steps.
5. Donations (solicited) should never be sent unannounced.
6. An agreed follow-up and future plan should be in place. (Between receiver and GMA)

*GMA Maternal & Child Health donation approaches provides many of the necessary medical supplies and equipment required for the prevention, early detection and treatment of the most preventable medical conditions leading to maternal and child deaths.*

## Key facts

- Every day, approximately 800 women die from preventable causes related to pregnancy and childbirth. Of these deaths, 99% occur in developing countries.
- In 2012, 6.6 million children died before age 5 with 5 million children dying in the first year of life.
- In 2015, an estimated 303,000 women died from complications related to pregnancy or childbirth. In addition, for every woman who dies in childbirth, dozens more suffer injury, infection or disease.
- Almost all of these deaths occurred in low-resource settings and most can be prevented. The health of women and children is vital to creating a healthy world.

### **Factsheet: Need for Biomedical Equipment Training and Renovation services**

*As much as 40% of equipment in the developing world is out of service.*

*Countries in the developing world have little money, underdeveloped infrastructure, and few workers to find appropriate solutions, like voltage compatibility, to use donated equipment.*

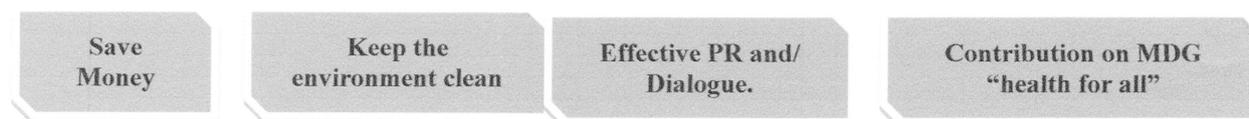
*As much as 40% of donated medical equipment sits idle in the developing world due to lack of technical expertise and voltage compatibility in the receiving country.*

*Ofentimes there is no local expertise to install, commission, service or repair the equipment.*

- Despite great progress, there are still too many mothers and children dying mostly from causes that can be prevented.

## GMA Donation General Principles

Global Medical Aid donation strategic objectives are defined as bellow:



A large portion of GMA's medical equipment/medicines come from health facilities, medical manufacturers and distributors. We often accept equipment/products that:

- Have cosmetically-damaged packaging.
- Production overages.
- Usable returned products.
- New products that a company wishes to donate to charity.

## Medicines

- Acceptable time for expiry date.

- Has simple storing condition. Already clinically approved.

### Conditions of equipment/medicines that will be accepted by GMA

1. Disposable items should have NEVER had direct patient contact.
2. Durable goods, such as walkers, wheelchairs and crutches, should be new or gently used and come complete with all parts and accessories.
3. Only accepts and ships disposable products that have AT LEAST 12 MONTHS of use BEFORE they expire. NB
4. Is fully operational.
5. Have cosmetic damage only and has all necessary accessories.
6. Have company instruction guideline or specification of products from manufacturers in the donor country.
- 7.
- 8.

### Processes

GMA will provide donation after elimination of the recipient's circumstances which is a mistaken belief that anything is better than nothing. For this GMA will complete below steps and consider as key for successful donation. ?

### Step 1:

#### GMA Responsibilities ???

Prior to making a piece of equipment available for donation, GMA makes a critical evaluation of it. It is not only a waste of precious resources to move useless and unsafe equipment from one place to another. GMA will ensure about below specification of the planned donation:

#### 1. General Quality

- 1.1. Its fully operational at the system and sub-system levels.
- 1.2. All essential accessories and supplies are available.
- 1.3. Completion of a checklist to ensure that all sub-systems, components, accessories, and supplies (for initial operations) are included.
- 1.4. GMA will supply the recipient with the checklist. (Checklists are often found in operating manuals produced by the manufacturer or prepared by the former operators, in the case of previously used equipment).
- 1.5. Documentation, especially operating and service manuals with part lists, is critical to the usability of the donated equipment.

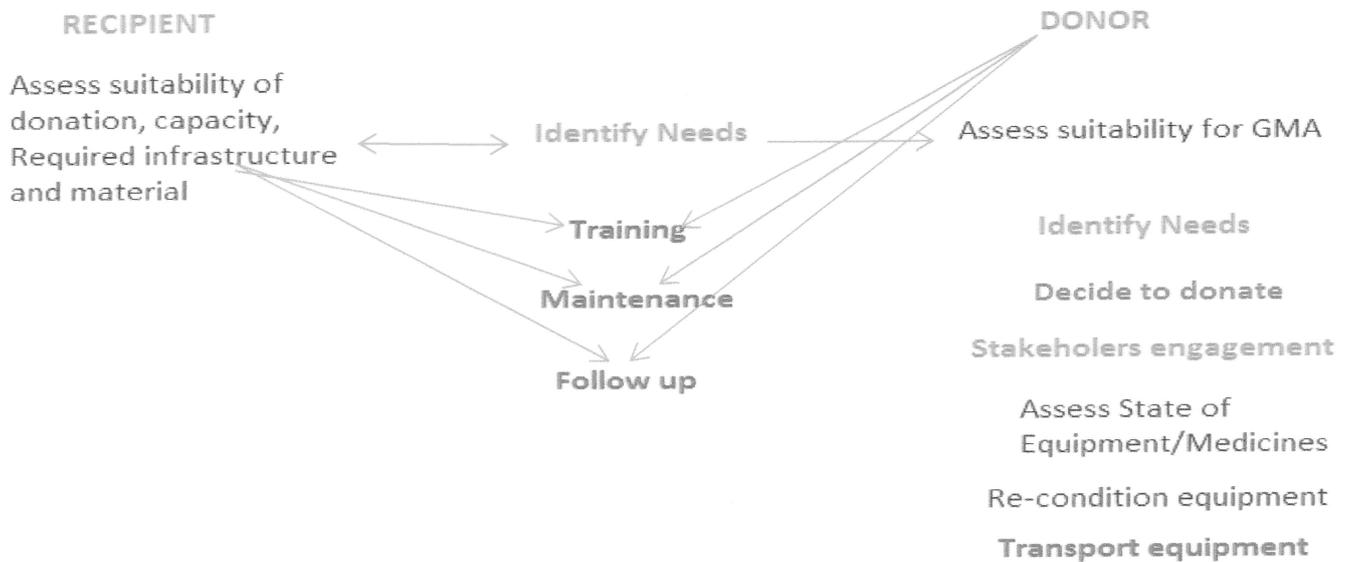
#### 2. Safety, Specifications and Standards

- 2.1. All health care equipment should meet or exceed existing safety and performance specifications provided by the manufacturer.
- 2.2. If necessary, they should meet standards promulgated by international bodies such as International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC).
- 2.3. Equipment that has not been approved by the appropriate regulatory agency of the donor country should not be donated.
- 2.4. Equipment that is the subject of manufacturer recalls or hazard alerts should be updated to the new requirements or not be donated.

#### 3. Uselessness ?

A minimum of two years, preferably four years, of manufacture sales support is required. This support should include spare parts, accessories (either reusable or disposable), and troubleshooting, repair and maintenance assistance. Obsolete equipment or equipment for which replacement parts are unavailable should be donated only if they are destined "for parts only", and so designated.

## Donation Framework



### 4. Appropriate Technology

In considering the provision of health care equipment to developing economies, GMA is in courtesy the following desirable characteristics in such equipment:

1. Simplicity of operation.
2. Minimal number of accessories required.
3. Availability of necessary operating supplies (particularly disposable) in the recipient country, at affordable cost.
4. Standardization with other equipment in the locale.
5. Low energy consumption.
6. Does not use environmentally hazardous substances.
7. Ease of maintenance.
8. Tolerance to hostile electrical and physical environment.

## **5. Installation, Operation and Maintenance Requirements**

**5.1.** GMA will provide a detailed guideline for installation, operation and maintenance of the equipment/medicines.

### **6. Operation Requirement**

**6.1.** The GMA will inform the recipient about of all the necessary sub-systems, such as cables, re-agents, filters, electrodes, and recording paper that will be required to operate the equipment to be donated.

**6.2.** Often test equipment and calibration standards are required to ensure performance and accuracy of the equipment.

**6.3.** Operator training should be clearly stated if there is a need for such training observed by donor and/or recipient country.

### **7. Maintenance Requirement**

**7.1.** GMA will seek guidance from its own service personnel so it can provide detailed maintenance requirements, such as technician training, special tools, preventive maintenance materials, and test and calibration equipment needed, as well as necessary documentation, including such information as recommended preventive schedule, etc.

### **8. Special requirements**

**8.1.** Any special requirements for proper use of the equipment will be identified and communicated to the recipient.

**8.2.** GMA will provide sometimes specialized software that may be required to install, operate, or maintain equipment.

### **9. Training**

**9.1.** Training of personnel to operate and maintain the equipment is an important aspect of the preparation. If the recipient has difficulty organizing training for operators and maintenance personnel, they should communicate in advance the need for training and GMA will start finding sources for conducting required training or will suggest alternatives.

**9.2.** When all requirements have been satisfied, the GMA will notify the recipient country to assemble and report about completion of the equipment receipt from their country airport.

GMA strongly believe on awareness of the local realities of the intended beneficiaries as a key for effective donation and strongly committed on parties strategic communication as equal partners in the pursuit of a common goal.

Recipients must articulate how best they wish to be helped, and clarify the common goal to the donor the GMA. For any interested organizations, companies or suppliers those who want to donate surplus medical supplies or equipment, or to request further information, GMA has its own standard form to be fill. (Annex 1)

### **Step 2:**

#### **Recipient responsibilities prior to donation**

**1.** it's clear that the needs are vary between countries and from situation to situation. Hereby, GMA jointly with recipient and key stakeholder will investigate the situation at the end-user of the equipment/medicines. Health care equipment donations will be based on:

- A thorough analysis of the needs, and their selection and distribution and should benefit the recipient to the maximum possible extent.
- A comply with existing technology policies and be compatible with the local administrative systems.
- An agreed follow up and reporting system between parties.
- All donations must be based on an expressed and validated need.
- There should be effective communication between the donor, the recipient authority and, whenever possible, the end-user, before, during and after the donation.

- The quality of an item must meet the quality standards in the donor country, if not, it is unacceptable by GMA.
  - Recipient countries/organization must define in advance the administrative procedures for receiving health care equipment/medicines donations.
2. The donated equipment/medicines should be registered or authorized for use in the country under the country administrative procedure which is in place for government tenders as well as they should be entered into the inventory, distributed through the existing distribution channels and be subject to the same quality assurance procedures.
3. As much as possible, the recipient must specify the need for such donations. The recipient is responsible for carefully preparing the request, which should clearly identify the needs and priorities them, with proper indications of the quantities required.

In addition, samples of questions, which have to be answered in each recipient country and/or organization, are:

- Who is responsible for defining the needs, and who for prioritize them?
- Who co-ordinates all health care equipment donations?
- Which documents are needed when a donation is planned, and who should receive them?
- Which procedure is used for reporting and follow-up of the donated equipment/medicines?
- What are the criteria for accepting or rejecting a donation, and who makes the final decision?
- Who co-ordinates reception, storage, distribution, follow up with donor and maintenance of the donated health care equipment?
- How are donation valued and entered into the budget/expenditure records?
- Who will take care of recurrent costs implications, and how will this be done?

#### 4. Installation Requirements

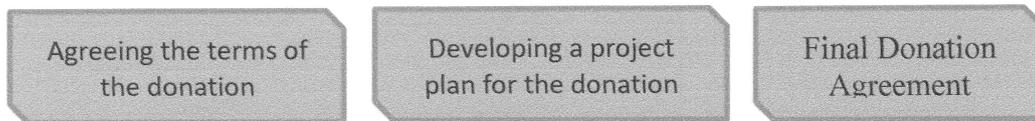
- The GMA will ask for specification on the following requirements for proper use of the equipment:
- Installation location, safety requirements (such as shielding), accessibility, floor loading capacity, space and electrical power (voltage, frequency, phase, and dissipation), water volume and pressure (and drainage) needed, and environmental conditions.
- Care that is under consideration for identification of any unusual extremes of temperature, humidity, dust and electrical power fluctuations that could adversely affect the equipment's operation.
- The GMA will ensure that detailed installation instructions are provided. Most, if not all, of this information is available in the equipment's operating, technical reference or service manual.

#### GMA Principles of Donation

Four underlying principles, which form the core of *GMA Donation Practice*, are advocated.

- 1) Health care equipment donations should benefit the recipient to the maximum extent possible;
- 2) Donations should be given with due respect for the wishes and authority of the recipient, and in conformity with government policies and administrative arrangements of the recipient country.
- 3) There should be no double standard in quality. If the quality of an item is unacceptable in the donor country, it is also unacceptable as a donation.
- 4) There should be effective communication between the donor and the recipient, with all donations made according to a plan formulated by both parties.

## Plan for Proper Management of Donated Equipment/medicines



- Analyze patterns and volumes of demand for maintenance services in developing economies.
- Affordable and realistic maintenance arrangements for equipment in developing economies.
- Warranty terms, energy consumption of the equipment, and disposal of waste and disposables.

### Site Preparation

- Global Medical Aid will provide the recipient with detailed information regarding the installation, operation, and maintenance of the equipment. This information will enable the recipient to begin pre-installation tasks, including the training of personnel for operation and maintenance.
- After receiving the information, the recipient should start preparing the site for the equipment.
- When all the preparations are ready, the recipient should notify GMA.
- If pre-installation work is required, the recipient should state when the work will be completed.

### Criteria for Suitability of the Donation accepted by GMA

GMA will consider the WHO's medical equipment donation guidance document includes five indicators of suitability that can be used. To evaluate specific offers for donation these five criteria are met when:

1. The equipment is appropriate to the setting.
2. The equipment is good quality and safe.
3. The equipment is affordable and cost-effective.
4. The equipment is easy to use and maintain.
5. The equipment conforms to the recipients' policies, plans and guidelines.

### Assembly, Packaging and Shipping

#### Prior to packaging

GMA will ensure about the equipment that it is safe and performs within manufacturer's specifications. (Operation manuals)

1. All accessories and supplies should be checked and all software necessary for equipment operation should be included.
2. Training aids such as slides, books, and videotapes should be supplied if available.
3. The checklist mentioned above should be used to verify that all sub-systems, components, and accessories and supplies are included.
4. Equipment that may contain patient material should be properly de-contaminated prior to packaging and shipment.
5. Radioactive sources should be removed and properly packaged in special shipment containers (with radioactive marking on outside).
6. Fluids should be drained and fragile parts, packaged with great care.

#### General Considerations

International shipments are often handled roughly by people without proper training and equipment and, therefore, subject to high probability of damage. It is important that the end-user of the equipment receives operation and service manuals. Experience has shown that manuals are sometimes lost when they are shipped with the equipment. If the end-user is known to the donor, it is best if the consignment is accompanied only by shipping documents giving full details of contents, and the user documentation is transmitted separately to the user.

If the end-users can be identified at the time of shipment, one copy of all documentation should be shipped but also a plaque should be attached to the equipment giving an address from which the necessary documents

can be obtained, with some reference code to easily identify the equipment.

The supplier should retain a second copy of the manuals in order to meet any subsequent requests from the end-user.

Software version numbers and significant hardware updates if applicable should be noted.

#### **Operation Manuals:**

1. Should contain detailed operating instructions.
2. Should have complete list of necessary sub systems, accessories and user replaceable parts and manual should contain specifications, schematics, operating instructions, troubleshooting, repair and maintenance procedures, cleaning and/or sterilization recommendations, and replacement parts list.
3. If the documentation is not available, GMA will consider purchasing it to ensure the eventual usability of the donated equipment.
4. Manual should be in a language that commonly understood by recipient countries utilizers. if necessary translations should be supplied.

#### **Other requirements**

5. Donated equipment should be packaged in accordance to the method of shipment to minimize damage in transit.
6. For surface shipment, waterproof wrapping and wooden cases are a necessity.
7. Air shipment requires less sturdy packaging, but limitations in size and weight are more severe.
8. Materials with a limited shelf life should be shipped separately, if necessary, and the recipient should be informed of this situation.
9. Shipping documents should list everything inside the respective packages and clearly indicate that the shipment is a donation.
10. If GMA was not familiar with packaging, shipping, and documentation we will consider seeking assistance of freight forwarders - companies which specialize in assisting exporters in the transfer of goods to other countries.

#### **Follow up and evaluation**

The mere supply of equipment does not guarantee a positive impact on health care delivery and health outcomes. When the equipment is operational, the GMA and the recipient should assess the level of operational success or failure of the health care equipment donated. This assessment fosters communication between GMA and recipient, encourages the continued support of the GMA, and allows both parties to learn to improve from previous experience.

Both GMA and recipient should not hesitate to identify mistakes made by each side or by the other. An honest and timely evaluation should be made of the activities, particularly as concerns the outcomes, effects and impact of the donated equipment. The success of future donations will be enhanced as a result of such assessments. (An agreed follow up and evaluation plan will be on place before donation implementation phase.)