Guidelines on Medical Equipment Donation

A Publication of The Pharmaceutical Programme - World Council of Churches (WCC) & Community Initiatives Support Services (CISS)

A guide for those accepting and making donations. It is also useful for those planning to buy equipment

Why do both recipients and donors need guidelines on the donation of equipment?

Although donations of equipment and materials may improve the efficiency of health facilities, experience has shown that equipment donation may cause the recipient more problems than benefits. Reciepient should therefore develop clear policies on their equipment requirements. These should be shown to donors, who should respect them. Before a donation agreement is settled, donors and recipients should make a thorough evaluation of the requirements of both parties. The final choice of equipment will be limited by cost, environmental and operational conditions, the availability of supplies of spare parts and the quality of maintenance services.

SUMMARY

Recipient:

1. Standardise equipment

This ensures a greater likelihood of:

- Economical purchasing of spare parts and appropriate storage
- Availability of instruction manuals
- Availability of local expertise in operation and maintenance procedures
- Selection of appropriate equipment

2. Involve technical departments

Technicians can be asked to consider and advise upon:

- Installation, operation and maintenance requirements
- Staff and training requirements for users and technicians
- The essential spare parts required
- Appropriateness of equipment in terms of running costs and technical design

3. Specify clearly items to accompany the equipment

These should include:

- A full set of technical documents in a specified language
- An agreed quantity of spare parts and supplies
- A document of warranty (guarantee) for the replacement or repair of faulty equipment

4. Make a check-list (see over) including all the above.

This ensures that the donor receives enough information to make an appropriate response.

5. Communicate alternative preferences

For example, if a financial contribution would be more appropriate than a donation of equipment from abroad, make this clear to the donor.

Donor:

1. Communicate with the recipient

Make sure that the potential recipient has provided a comprehensive description of the equipment required.

2. Supply fully functional equipment

Test the equipment and make sure all necessary spare parts and supplies are included in the package before making shipment. Do not supply worn-out, broken or redundant equipment.

3. Supply all technical documents

Installation, operation, maintenance and repair manuals and diagrams should be made available in a language understood by the users and the technicians.

4. Supply enough consumables and spare parts to last at least two years

Include a complete list of spare parts and indicate the name and address of the authorised dealer.

5. Ensure proper packaging and shipping:

- Use strong sturdy and easy-to-handle packing materials
- Include a comprehensive packing list
- Supply shipping documents promptly

6. Offer technical assistance

This should include promoting, recommending and providing training for users and for maintenance personnel.

7. Understand the import regulations in the recipient's country

Make sure that the recipient is able to cover the costs of custom duties and any other charges associated with importation.

Guidelines on Medical Equipment Donation

Donations of equipments are made as a result of:

- A genuine desire to help
- A response to a request by recipient
- A desire to utilize functional equipment not necessarily required by donor
- A need for financial gain

However problems arise when:

- Donors of medical equipment may have no background in health issues, or an understanding of the structure of health services of the recipient (usually based in a developing country), and do not recognise the need to seek expert advice.
- New but inappropriate equipment is donated as a means of promoting and marketing it.
- Companies, hospitals or private doctors donate outmoded, outdated equipment as it provides them with tax exemptions or as a means of getting rid of redundant equipment.
- Potential donors with patronizing attitudes towards recipients, regard them as beggars desperate for any
 equipment and therefore don't consider it worthwhile to consult them. The recipient may compound this
 problem by feeling obliged to accept any donation, even though the equipment is unnecessary, or where charges
 such as import taxes and transport costs, are prohibitive.

What can be done?

The donor and the recipient must get together as equal partners to work out how the effort and goodwill involved in making a donation can be put to best use. The recipient's policy on equipment requirements should be known to the staff and the donors.

The right to give and receive a "**No, thank you**" should be expressed, appreciated and accepted. A refusal (or acceptance) that is justified by a comprehensive statement of requirement is often much appreciated by the donor.

To help build a comprehensive statement of requirement, the following list of criteria may be useful. Working through the list by both recipient and donor, may make it easier to decide whether or not to accept a donation, make a purchase, or make a particular donation. However, each partner needs to understand what is expected of them and their counterpart.

RECIPIENT RESPONSIBILITIES

1. Standardise equipment

Equipping a medical unit is more than simply obtaining the equipment. Maintenance is vital, and maintaining a vast array of different equipment can be problematic.

Some countries have service centres to provide technical support for health services. These centres may have compiled a national Standard Equipment List to keep the number of different makes of equipment to a minimum.

This list is useful because:

- a) Equipment included on the list can be fully supported in terms of spare parts, maintenance and operating instructions.
- b) Installation and operation arrangements for users, and maintenance procedures for technical personnel are simplified.
- c) Lower prices due to bulk purchasing is possible, and planning for storage space is easier.

Before making a request, check whether the equipment requested is on the national standard equipment list.

If a national Standard Equipment List is unavailable, it is advisable to develop one for the unit or hospital, or working as a team, for a related group of hospitals. Associations or coordinating agencies may make a list for their members. Such cooperation encourages sharing of resources and experiences.

Important issues to consider with regard to standardization include:

- *Staff* experience, and training required for installation, operation, and maintenance. Consider both the clinical staff and the technical service staff required to operate the equipment.
- Location for the equipment including site accessibility and the space available.
- Climatic and environmental conditions, such as heat (temperature), humidity, dust, ventilation, etc.
- *Utilities:* power supply (electric, gas, generator, fossil fuel, wood fuel, solar, windmill, biogas, etc.), reliability of supply (fluctuating power, interruptions, rationing, etc.), type of power (voltage, frequency, phase, AC/DC); type of water (polluted, salty, hard, soft, etc.) and the means of delivery (piped, stored, well, river, rain, etc.).
- Support services required for operation, procedures, and clinical use of the equipment. Keep in mind that modern equipment may offer a wide variety of operational modes and may simplify the performance of certain procedures but it is often very expensive, and may need both health specialists and a manufactures' service network for maintenance and repair. When these are available, spare parts and special maintenance tools that are costly may be required. Sophisticated equipment often has very sensitive parts. Also remember that sophisticated modes offered by the equipment are often not utilised.
- *Maintenance costs:* in terms of spare parts, downtime during normal servicing and level of expertise of technical staff required.
- Availability of consumables: Some equipment may require consumables which are not available locally, for example, special papers, films, filters, etc. These are recurrent cost items and their availability must be assured.
- Other specific requirements related to the equipment. For example, whether a new addition will conform with existing equipment, whether a cold room is required for computerised equipment, or especially solid walls for x-ray machines, or a boiler for autoclaves, or power stabilizers for electronic equipment etc.
- Experience of others with similar equipment, brands, or sources. Check whether equipment is manufactured locally or imported on a regular basis.

This list may not be exhaustive. It aims at providing criteria to help define equipment that is technologically and clinically appropriate to the intended use. By following this list, the final choice of equipment is likely to be of high quality, solid and robust and of a standard that will withstand both environmental and operational conditions.

2. Involve technical departments

In preparing the Standard Equipment List or ordering equipment, the technical personnel must be involved. As experts, they will consider and advise upon:

- All aspects of the requirements for installation, operation, and maintenance
- Essential spare parts and other special requirements, their availability, and costs
- Availability of technical personnel and level of training required
- Estimated lifespan of the equipment based on the model, year of manufacture and whether it is new or recondition.
- Appropriateness of equipment in terms of running costs and design.
- If a financial contribution would be more appropriate than a donation of equipment.

3. Specify clearly items to accompany the equipment

- All equipment must be provided with a full set of technical documents. That is, documentation for installation, for user operation, for repair and maintenance (manuals), a list of spare parts and diagrams and technical data. Clearly indicate the language in which documents should be made available. (Most developing countries use either English, French, Spanish or Portuguese as a second language. If documents cannot be made available in the local language, insist that these are made available in whichever of the above four main languages is most appropriate).
- All equipment must be accompanied by a reasonable quantity of spare parts and consumable items. This should take into account the "lead period" (i.e. period between placing an order and receipt of spare parts). If the lead period is two years then spare parts and consumables are needed to cover that period.
- All new equipment must be accompanied by documents of warranty (guarantee). Get a legal expert to read and interpret the conditions if necessary.

4. Make a check-list

Compiling a check-list will include consideration of all issues discussed above. It will ensure that the donor receives all the information required in order to make an appropriate donation.

5. Communicate alternative preferences

If a financial contribution to allow local or regional purchase would be more appropriate, cheaper or easier, state this information clearly. Issues on which the donor is unable to comply can then be discussed. The solution should be understood and agreed upon by both parties. As a result, the donors will not substitute items believing that such alternatives would be equally suitable. If donations of equipment that are not needed are received, inform the donor immediately. It is also advisable to contact a national coordinating agency.

DONOR RESPONSIBILITIES

Donated equipment will only be useful if it is properly installed, operated, maintained, and appropriately used.

1. Communicate with the recipient

Before supplying any equipment, request for a comprehensive description of the equipment required by the recipient (including their check-list). Ensure that the conditions that cannot be fulfilled are communicated to the recipient. An agreement on all conditions should be reached before shipping the equipment. This ensures that the equipment supplied is clinically, economically, and technologically appropriate.

2. Supply fully functional equipment

Equipment whether new or reconditioned, should be tested and all essential parts, accessories and working materials included before shipment. A basic list of all components must be provided to the recipient. Second-hand equipment should be fully rebuilt or reconditioned. It should be established that the manufacturer continues to produce spare parts, and the "life expectancy" of the equipment should be indicated.

Old, broken, outmoded, and redundant equipment for which spare parts and consumables are no longer available, or equipment which is no longer supported by the manufacturer, is as useless in the developing country as it would be in the industrialised. If it is difficult for the donor to service the equipment, it will be impossible for the recipient. Do not supply such items. It is kinder to send them to the junk yard.

3. Supply all technical documents.

These include all installation, operation, maintenance, and repair manuals. It is particularly important to include technical diagrams as the symbols used are usually international. The technical documents should be supplied in the language of the permanent employees of the recipient enterprise. The need for these documents applies even when expatriate staff are provided to help in the initial stages. Expatriates tend to leave just before the equipment develops problems, and local maintenance personnel will find that the documents are most valuable!

4. Supply an initial requirement of consumables

and spare parts

Recipients often face lengthy and complicated procurement procedures. Equipment should therefore be supplied with an initial consignment of consumables and spare parts expected to last at least two years (or as requested), and a full list of spare parts. The list must clearly indicate the part name and number, and full name and address (including phone, telex and fax numbers, if possible) of the manufacturer or authorised dealer. Vagueness over the description and source of spare parts can cause months of delay in an already long process.

5. Ensure proper packaging

The consignment is likely to endure long periods in ships, aeroplanes, trains, motor vehicles, bicycles and even on animal backs or by hand. The packaging must therefore be strong and sturdy to withstand rough handling and to minimise damage during transportation. It should also:

- Include a clear packing list identifying all components
- Be of a size that can be handled using simple mechanical devices and manual labour

6. Supply shipping documents promptly

Consignments have been known to remain at ports for months, facing possible damage and accumulating demurrage charges (penalty for delayed action) due to late submission of shipping documents. Prompt submission of documents is essential and should be sent by express insured mail. If possible, send advance copies by fax.

7. Offer technical assistance.

Where possible, promote, recommend and provide training for the use and maintenance of the equipment. On site training is usually very useful.

8. Understand import regulations of the recipient country.

There may be regulations which restrict who can receive donations, and which indicate taxes and other charges. It is important to know about these conditions. It is also important to assess the **ability of the recipient to pay** the accompanying local costs.

If you have difficulties in developing equipment specifications, there are organisations which can help you. For further information on this or on any other issue involved in developing equipment guidelines, please contact:

CISS International, P.O. Box 73860 Nairobi Kenya. Tel: 254-2-444020 / 444832. Fax: 254-2-440306

World Council of Churches, 150 route de Ferney, 1211 Geneva 2, Switzerland.

An example of an equipment check-list

1. Name of equipment

- 2. Description of equipment
- 3. Equipment type included on national Standard Equipment List (SEL)
- 4. Technical specifications
- **5. Functions required**
- 6. Special requirements
- 7. Staff available for:
 - a) Instalation
 - b) Operation
 - c) Maintenance
 - d) Other (Specify)
- 8. Location:
 - a) Site
 - b) Size
 - c) Accessibility
 - d) Type of building
 - e) Other factors (specify)
- 9. Climate:
 - a) Temperature range Day / Night
 - b) Humidity Maximum / Minimum
 - c) Ventilation system
 - d) Other factors

10. Utilities:

- a) Power supply
- b) Fuel type
- c) Voltage
- d) Frequency
- e) Phase
- f) Other issues
- g) Water system
- *h)* Water type

11. Any other comments