PRELIMINARY ASSESSMENT METHOD

FOR MEDICAL EQUIPMENT SUPPORT PROJECTS IN DEVELOPING COUNTRIES

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GROUPE u.r.d. urgence réhabilitation développement

FOREWORD

The considerable amount of dysfunctional medical devices to be found in health facilities in developing countries raises the question of the responsibility of developed countries, particularly regarding the efficacy of the aid they provide to equipment support projects. Indeed, according to figures available from the World Health Organisation (WHO) only 10% to 30% of medical devices donated to developing countries is operational in its new environment, although in some of these countries 80% of all their equipment comes from donations[1]. A lot of medical devices are supplied incomplete, without manuals, have not been serviced and sometimes have already broken down. Others are sent without taking into account the real needs of the recipients' health facilities, of the advice of local authorities or the local environment. Some of these failures seem to be due to a lack of methodology by the international aid organisations in the management of medical equipment support projects, which can often be very complicated.

To improve procedures used by project holders sending medical devices to developing countries, Humatem, an organisation specialising in medical equipment support and Groupe URD, an organisation involved in research on the quality of international aid projects, decided to produce a series of methods and tools dedicated to medical equipment support projects built around a quality reference framework: PRECIS. This preliminary assesment method is one of the document in the series.

This series was devised in the context of an action plan[2] financed by the European Union (EuropeAid) as well as the following French local authorities: the Rhone-Alpes Region, the Haute-Savoie General Council and the municipality of Les Houches. It is also part of the World Initiative for Health Technologies launched by WHO following resolution WHA60.29 of May 2007 on health technologies, which aims to encourage the creation of policies and tools in this domain.
Finally, this series is in conformity with the recommendations regarding the donation of medical equipment published by WHO[3].

The working group called *Medical Devices in the Actions of International Cooperation* was involved in the development of these methods and tools, which ensures that they are based on a common consensus. This working group has been managed by Humatem since 2003, and comprises international aid workers, development education organisations and health professionals.

[1] WHO (2011) « Introduction » in *Medical devices donations: considerations for solicitation and provision*, WHO medical devices technical series, Geneva: WHO, p. 10.
[2] Programme EuropeAid DCI-NSA/2009/205-811 *"Strengthening cooperation tools and structuring the dialogue between donation project holders in the provision of medical equipment - To improve practices in medical equipment support projects for healthcare facilities in developing countries".*
[3] WHO (2000) *Guidelines for health care equipment donations*, Geneva: WHO; WHO (2011) *Medical device donations: considerations for solicitation and provision*, Geneva: WHO.

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INTRODUCTION

>>> What need is there for a preliminary assessment method?

The preliminary assessment, which is the first phase of a medical equipment support project for a health facility is too often forgotten or carried out in haste. But a preliminary assessment carried out in a hurry contains mistakes or is incomplete, and could lead to the implementation of an inappropriate or unfeasible project.

In order for the project to be effective, the preliminary assessment must be carried out methodically and rigorously. This requires real commitment by the project holder as well as the health facility, i.e. the potential partner. This commitment is demonstrated by making available sufficient time, human resources and both financial and material means.

So that the preliminary assessment is as **thorough** and **relevant** as possible, we are providing you with framework providing the key elements you need take into account which will help you throughout the process and to make the right decisions.
This preliminary assessment method is based on a quality reference framework of six criteria: **the PRECIS reference**.

PRECIS was specifically designed to assist organisations running medical equipment support projects during the various stages of a project: preliminary assessment, planning, implementation, monitoring and evaluation. A number of elements of this method will also be useful during the other phases of the project (indeed, they can also be found in the Planning and Evaluation Methods that we have designed).

>>> What this method allows you to do

This method is designed to serve as a **practical guide** on how to set up a preliminary assessment with a view to implementing a medical equipment support project. It consists of methodologies and above all practical factsheets ("service" sheets, themed sheets, "information gathering" sheets and analysis sheets).

These practical factsheets can be used throughout the preliminary assessment process, the preliminary phase and the final decision making phase. They allow you to ask yourself the right questions and in some cases, can be used as the basis for note-taking.

>>> Who is this method designed for?

This method is aimed at international aid players who want to become involved in health projects to improve the quality of healthcare in developing countries.

Associations, NGOs, local authorities, specialist organisations, students and other people will find in the following pages a preliminary assessment method which is specific to medical equipment support projects for health facilities.

>>> What this method is not

It is not a theoretical or scholarly document for experts. It aims to be a straight forward and practical tool to carry out a preliminary assessment for a small dispensary or a main hospital.

The method does not aim to replace the skills of medical or biomedical maintenance specialists. Their expertise is still as essential to a health project.

This method isn't a recipe to be followed just as it is. All the practical factsheets and methodological aspects provided are just examples and are there as an aide-mémoire. It is essential that they be adapted to the context of the health project.

PRELIMINARY ASSESSMENT FUNDAMENTALS

>>> Why a preliminary assessment is necessary

Implementing a medical equipment support project, that is to say making medical devices available to a health facility, is complicated and in a sensitive domain, that of health, where stakes are high, indeed, vital.
If the main aim of this type of project is an improvement in the quality and/or number of healthcare, it can have positive impacts, such as, for example, the optimization of the medical or paramedical staff's working conditions. But it can also have negative side effects on economic, social and environmental aspects, and even in the fields of health and safety.

Finally, in order to be able to bring really efficient support without creating issues, it is necessary to be totally aware of the context of the request, but also to ensure that one is actually in a position to be able to manage the project.

Before giving an ultrasound scanner to a health facility that asks for one, it is essential to ensure that there is:

- **A health issue that the partner facility is trying to resolve;**
- **There is a specialist doctor who knows how to use the device and interpret the images;**
- **The budget available for regular purchases of scan gel and printing paper, but also money for spare parts and possible repairs;**
- **A biomedical technician and/or a service provider who can carry out maintenance;**
- **An air conditioned room where the electrical voltage is stable and the hygrometry can be controlled.**

... and to be sure that one has the ability to provide the appropriate equipment!

There's only one way to check the prerequisites: carrying out a preliminary assessment!

Assessing the initial situation will make it possible to judge whether or not the project is appropriate and to check that its aim is achievable. It consists of gathering and analysing information on the healthcare structure and its environment, on the request and real needs as well as the available resources or those that can be co-opted. If the preliminary assessment is carried out with the help of the partner health facility, it will in addition establish a relationship of trust.

The preliminary assessment must result in a decision either not to commit or to implement the project.

It is therefore an essential stage and one on which the quality and effectiveness of the whole process will depend. This stage requires rigour and anticipation. Take time to prepare !

>>> When should the preliminary assessment be carried out?

A health activity has indicated its need for medical devices and has sent a list of them.
Or you want to take action by providlng a real solution to issues that you have identified during a previous visit to a health facility. This is the moment to carry out a preliminary assessment: it is the first step of any medical equipment support project.

>>> Who should be included in the preliminary assessment team?

The preliminary assessment should be led by the project holder in close collaboration with the potential partner. Ideally, the project holder team will include several people with complementary skills and experience:
- medical or paramedical staff (doctors, nurses, etc.);
- people with technical skills (biomedical engineers or technicians);
- someone with project management experience.

>>> What to assess

A preliminary assessment is a sort of snap shot of the situation and its context. From the information thus gathered it will be possible to analyse:

Whether the project is:
- Pertinent
- Rigorous
- Effective;

whether the project holder is able to assemble or acquire the necessary
- Capabilities;

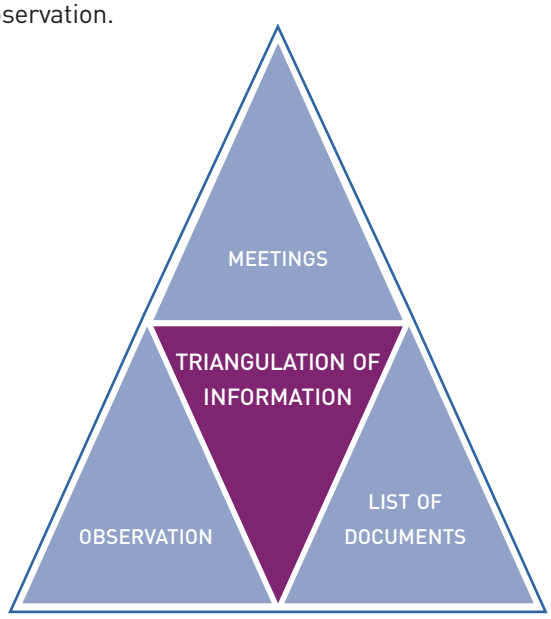
If they are able to work out or anticipate the potential
- Impact

and to work in
- Synergy with the other players.

This analysis is built, therefore, on the basis **of the six criteria of the** PRECIS quality reference.

>>> How to proceed

A preliminary assessment is a process essentially based on collecting and analysing information.
Information is gathered from various sources:
- relevant documents;
- meetings;
- observation.



In order to ensure that the information gathered is valid, it is advisable to use these different sources and to cross-check the information as early as possible. Thus a number of different people should be deliberately asked the same question and the data gathered verified from different sources.

>>> The different phases of a preliminary assessment

The method described below is split into three separate phases:

1/ PRELIMINARY PHASE

Information gathering to obtain an overall view of the situation with regard to the health structures of the developing country and to get an idea of the ability one has as a project holder to respond to a request for medical equipment support.
An analysis of the results thus obtained will enable a decision to be taken whether or not to pursue the project.

2/ ON-SITE PHASE

Confirmation, development and details of the information collected during the preliminary phase.
Meeting the potential partner and all other players involved, closely or from a distance by the request for support.
Drafting the partnership.

3/ ANALYSIS AND DRAFTING PHASE

As a team, analysing the information gathered during the first two phases.
Writing up the preliminary assessment emphasising the various aspects for improvement and the health objectives to be attained.
Team decision regarding whether or not to implement the project and the means required to attain the health objectives.

1/ PRELIMINARY PHASE

AIMS

>>> Analyse project feasibility.

>>> Question your own ability to commit.

>>> And if you decide to pursue further, prepare the site visit.

METHOD

>>> Obtain all possible information about the situation on site from exchangeswith the potential partnerand by studying the relevant documents.

>>> First steps with the preliminary assessment method

To get going, personalise the method which will guide you throughout the preliminary assessment, during both the information gathering and analysis phases. This work could be carried out alone and then as a team to discuss the method and any possible misunderstandings.

>>> Organise your information gathering

You will obtain the information you require to carry out this phase:

- from your potential partner, by telephone conversations, letters, emails and video conferences;
- from documents (articles by specialists, activity reports, bibliographies, etc.) that you can obtain;
- from resource centres, regional aid support networks and specialist associations;
- from the WHO, particularly on its website dedicated to medical devices, or even from the Ministry of Foreign Affairs, etc.;
- from your Embassy in the receiving country[4];
- from research on the Internet.

It is advisable to write down all the data you collect, even things which seem obvious. That way it will be easier to share the information with other members of your organisation and thus take decisions.

The FACTSHEETS provided in this method have been designed to facilitate the inventory, capitalisation and analysis of the information.

>>> Information to be assembled

THE LOCAL CONTEXT

Find out all you can:

- **About the country,**

and more specifically about the region where the health facility is located to have an overview of the political, social and economic situation. Bear in mind geographical and climate constraints as well as socioeconomic indicators in the area (average salary, per capita GDB, human development index, etc.).

- **About the health situation**

Quantitative data regarding health (birth rate, life expectancy, mortality rate, infantile mortality, per capita expenditure on healthcare, etc.) are often available and make it easier to understand the local situation. Moreover, it is important to list the main problems the country is facing regarding health, whether or not they are taken into account by health policies.

[4] In France, the Service de Coopération et d'Action Culturelle (SCAC) is the recommended contact.

– **About local policies**
It is equally important that you find out about the national health policies (this will help you to ascertain whether or not the project tallies with their health priorities) and their policy regarding donations of medical devices (whether or not there is legislation covering this, directives, a procedure, a charter, etc.).
– **About Customs regulations,**
and specifically the technical details required to allow medical devices to be imported into the country (donation certificates, operating instructions, proof of decontamination, maximum age of the device, etc.).

General information regarding the country and on the status of the local partner are very useful for validating the project, but also for future presentations to the funding agencies or donors of medical devices that you intend to approach. Remember to include a section on the local context in your submission!

Subject factsheet
DATA COUNTRY and the HEALTH POLICY
will help you gather information on the subject.
Pages 9 & 10.

THE REQUEST

You need to find out about:
– **The healthcare needs in the region where you will be working** and more specifically the need for medical devices.
– **The requests for medical devices by the health facility.** For this, ask your partner to provide you with the requests including as much detail as possible, particularly quantities.

Subject factsheet
INITIAL LIST OF REQUESTS FOR MEDICAL DEVICES will help to formulate and define the requests. Page 11.

THE PARTNER HEALTH FACILITY

At this stage, it is necessary to create an identity card of the facility so as to have a clear idea of its size, healthcare capabilities, the state of its infrastructure and its desire to evolve. You should identify the person in the health facility who wish to commit to the project with you.

Concrete data should be obtained. For example, the electric voltage (110 V or 220 V) used in the country and its reliability. This information will enable you to establish whether or not transformers, inverters, etc. will be required.

Subject factsheet
IDENTITY OF THE HEALTH FACILITY
will help you to summarise the information you have on the health facility. Pages 12, 13 & 14.

YOUR ORGANISATION AS PROJECT HOLDER

You should establish your own motivation, your level of knowledge and your ability to manage this type of health project.
You should also ascertain the human resources, funding and financial means at your disposal and their appropriateness to the size of the project

Subject factsheet
PROJECT HOLDER CAPABILITIES
will help you compile the information regarding your organisation and your capabilities. Page 15 & 16.

SUBJECT FACTSHEET

COUNTRY DATA

>>> Identify the country's sociogeographic data

Some of this information is available from the PNUD, particularly in the human development reports.

INFORMATION

Country: .....

Surface: .....

Capital: .....

Main towns: .....
.....

Political regime: .....

Population: .....

Number of ethnic groups: .....

Official language(s): .....

Other languages: .....

Religion and beliefs: .....

Currency(ies): .....

SOCIOECONOMIC INDICATORS

Gross national per capita income: .....

Human Development Index (HDI): .....

FOCUS ON

Target area: .....

Total population: .....

Ethnic groups: .....

Languages spoken: .....

Main religions: .....

Main towns: .....

Political situation: .....

Administrative and traditional administrations: .....
.....

Climate: .....

Frequent natural hazards (earthquakes, floods, etc.) and, if possible, the time of year they occur:
.....

Main hospital: .....

Other health facilities: .....

Other organisations working in the area (NGOs, international aid organisations): .....

MAP OF THE COUNTRY - To be attached to the factsheet

SUBJECT FACTSHEET

HEALTH POLICY

>>> **Identify the critical points regarding health management in the country, the system and health policy.**
Some of this information is available from the PNUD, particularly in the human development reports.

ORGANISATION OF HEALTH SYSTEM

Appropriate health authority: .....
.....
Institution providing financial backing for the health facility: .....
Percentage of public and private health facilities: .....
Level of traditional medicine: .....

ACCESS TO HEALTHCARE

Per capita expenditure on health: .....
Percentage of GDP devoted to health: .....
Number of inhabitants per health facility: .....

Main hospital: ..... /..... inhabitants
Regional hospital: ..... /..... inhabitants
Local hospital: ..... /..... inhabitants
Health centre: ..... /..... inhabitants

HEALTH POLICY

Institutions which define the health policy: .....
National health development plan priorities:
1 .....
2 .....
3 .....

Existence of a national policy regarding maintenance: .....
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.....
Existence of a policy (law, charter, etc.) covering donations of medical equipment:
.....
.....

REGULATIONS

Existence of regulations or specific Customs procedures regarding the import of medical devices (new or second hand):
.....

Existence of regulations regarding the management of waste relating to medical devices: .....
.....

SUBJECT FACTSHEET

INITIAL LIST OF REQUESTS FOR MEDICAL DEVICES

>>> Set out, in a structured manner, the initial requests for medical devices by the health facility, and/or potential partner.

NAME OF THE HEALTH FACILITY: .....

Name and position in the health facility of those involved in drawing up the list:

.....

.....

.....

N°	Description of device	Required features: brand, model, options...	Quantity required	Requesting medical services
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
...				

Date and signature:

EXAMPLES OF DETAILS TO OBTAIN ON THE DEVICES REQUESTED

Echograph: for what use (gynaecological monitoring, heart monitoring etc.)? Using which probes (abdominal, vaginal, heart, etc.)?

Operating theatre lighting: mobile or ceiling? Number of domes?

Multiparametric monitor: for monitoring which vital parameters?

Baby scales: mechanical or electronic?

SUBJECT FACTSHEET

IDENTITY OF THE HEALTH FACILITY

>>> **List and summarise the characteristics of your partner.**
If you are unable to get all the information at a distance, you can fill in the gaps once you are on site.

ADDRESS

Name of the facility: .....

Postal address: .....

Telephone number or skype address: .....

Email: .....

Name of the person in charge (+ position and direct line/email):
.....

Others employees involved in the project (+ positions and direct lines/emails):
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.....
.....

GENERAL INFORMATION

Type of facility (main hospital, health centre, etc.): .....

Referral government body (Ministry of Health, Ministry of Education, etc.): .....

Date opened: .....

Status (public, private, association): .....

Level in the health pyramid: .....

Rate scales that are applied
Consultation (average cost): .....
Daily hospital rate (average): .....
Operation (average cost): .....
Variable rates depending on the patient's income: Yes ☐ No ☐
Method used for calculating the rates: .....
.....
.....

Population covered (No. of inhabitants, where they live, sociocultural aspects, residents/nomads, religion, ethnic group, etc.): .....
.....
.....

CAPACITY OF THE HEALTH FACILITY

Number of buildings: .....
Surface (m²) **:** ..... **Number of floors:** .....

Overall condition: .....
.....

Number of beds:
A&E: ..... General hospital: ..... Total : .....

Services and medical specialisation:
.....
.....
.....
.....

Approximate number of patients treated (par mois) **:**
Consultations (outpatient): .....
Hospitalisations (inpatient): .....
Operations: .....
The most requested services/specialties: .....
.....

HUMAN RESOURCES

Medical and paramedical staff

Position	Headcount	Specialties
☐ Doctor and surgeon	.....	.....
☐ Nurse	.....	.....
☐ Nursing auxiliary	.....	.....
☐ Midwife	.....	.....
☐ Chemist	.....	.....
☐ Pharmacist's assistant	.....	.....
☐ Physiotherapist	.....	.....
☐ X-Ray operator	.....	.....
☐ Biologist	.....	.....
☐ Laboratory technician	.....	.....
☐ Other – Define their duties (medical assistant, matron, etc.)	.....	.....

Technical staff

Position	Headcount
☐ Biomedical engineer (maintenance of medical equipment)	.....
☐ Biomedical technician (maintenance of medical equipment)	.....
☐ Overall maintenance officer (infrastructure)	.....

INFRASTRUCTURE

Water supply:

☐ Running water
☐ Tank
☐ Well

Comments on the supply and quality of the water:

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.....
.....
.....
.....

Electricity:

Supply of electricity (220 V, 110 V), stability of the supply, electrical back-up system (inverters, generators, etc.):

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.....

Medical fluids:

Type (nitrogen, oxygen), supply (network, bottles):

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COMMUNICATIONS/ACCESSIBILITY/LOCATION

Means of communication:

☐ Telephone
☐ Fax
☐ Internet
☐ Other : .....

Means of access/accessibility:

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.....
.....

Region subject to natural hazards (earthquakes, floods, etc.) and, if possible, the time of year they occur:

☐ Yes
☐ No, comments: .....
.....
.....
.....

SUBJECT FACTSHEET

PROJECT HOLDER CAPABILITIES

>>> Think about your own ability to lead a medical equipment support project to a successful conclusion, and share your ideas with the potential partner, the donors of medical devices and the funding agencies.

GENERAL INFORMATION

Name of the project holder organisation: .....

Postal address: .....
.....

Telephone number or skype address: .....

Email : .....

Legal status (public, private, association):
.....

CAPABILITIES

Available management documents:
☐ Financial report
☐ Activity report
☐ Provisional action plan
☐ Provisional budget

Available internal human resources:
Number of paid employees: .....
Number of volunteers: .....
Total human resources available pro rata full-time: .....
Specific skills:
☐ Medical/paramedical
Define: .....
☐ Biomedical
Define: .....
☐ Project management
Préciser : .....
☐ Other
Define: .....

Name of the project lead (+ position and direct line/email): .....
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Staff working on the project (+ position and direct line/email): .....
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CAPABILITIES

External resources that can be called upon:

Network:

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Advisors and support from relevant Embassies in the project holder's country and in that of the project:

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Consulting agencies and human resources which could assist the project:

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Potential donors of medical devices:

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Potential fund providers:

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Experience of equipment support projects:

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Experience of carrying out a preliminary assessment:

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>>> Decision making

Once all the information has been gathered, it is strongly advised to meet as a team to carry out in-depth quantitative and qualitative analyses of the data collected.
The analyses should help to answer the following questions, listed by subject.

Analysis of the request and understanding the needs

- Would the type of medical devices requested make it possible to attain the stated healthcare aims?
- Is the health facility's request in line with the health needs of the region and the currently applied health policies?
- Is the request in line with the health facility's need for medical devices?
- Is the type of device requested appropriate in view of the size, socioeconomic and health aspects of the population covered by the health facility?
- Have alternatives to the donation of medical devices been explored?

Feasibility analysis

- In view of the logistic and administrative constraints, can setting up a project be envisaged?
- Do the partner's capabilities (infrastructure, employee skills, maintenance capacity) make it possible to envisage installing the requested medical devices, particularly those requiring maintenance?
- Do the partner's finances make it possible to hope for long-term use of the medical devices requested, particularly those requiring maintenance?
- Is the relationship of the health facility with other health providers in the area good enough to ensure the success of the project and its durability?
- Could the health facility which originally made the request become a trustworthy partner?

Analysis of the capabilities of the project holder

- Does the legal and administrative structure of your organisation allow the setting up of a medical equipment support project?
- Are the necessary resources available or can they be co-opted?
- Have the skills of the other people who could be useful to the project been ascertained?

REMEMBER TO BUDGET!
Think of the different budget lines that your facility will have to provision to implement the project:

- **for the preliminary assessment: anticipate the purchase of airline tickets, visas, vaccination renewals, living expenses on site (local transport, accommodation, food) for the whole team.**
- **for implementation of the project: anticipate considerable expenditure, the details of which should be precisely assessed when the final decision is taken. Some costs can be shared with the health facility (this should be negotiated when the partnership agreement is being drawn up): cost of picking up the medical devices in your country, storage costs, carrying out technical services (dismantling devices, performance control, renovation, etc.) conditioning costs, national and International transport costs, Customs duty, installation of the device, training and operating it (consumables, accessories, maintenance kits, spare parts, etc.).**

VIEW THE HEALTH FACILITY AS A PARTNER IN THE SEARCH FOR INFORMATION TO ENSURE AN ENLIGHTENED DECISION!
If you think that you do not have all the facts to take a decision, do not hesitate to go back to your potential partner so that they can give you as much additional information as possible. This preliminary phase also provides an opportunity to establish a good relationship between you and to test both your and their ability to exchange information!

HOW TO AVOID COMMITTING
Sometimes, even after all this preliminary work, you may decide, for various reasons, not to commit. You may feel that the request is unfounded or the context isn't favourable, or even that you do not have sufficient funds for the project to succeed (human resources, finances, etc.).

It is preferable not to commit that to commit badly!

You will then be able to make the decision to commit to the project, or to withdraw.

>>> Preparation for carrying out the preliminary assessment on site

You have decided to continue? Now you must carefully prepare your site visit in order to be really effective when you reach your health facility. You are strongly advised to include your partner in this preparation.

Prepare your site visit

Select the team. Get inspiration from "the ideal team" described earlier in the section entitled "Preliminary Assessment Fundamentals".

Organise your schedule: list the people you should meet, the services and healthcare facilities you should visit. Bear in mind you may need an interpreter. Don't forget to make appointments with those you wish to meet.

Take the time to become fully acquainted with the preliminary assessment method because it will guide you throughout your site visit and up to your final decision. By reading through the factsheets in advance you will save time and energy.

Think of the essentials to take in your suitcase:
- a tape-recorder to record discussions during meetings;
- a camera and/or a camcorder;
- a note book so that you don't forget anything;
- and above all, the method suggested here!

Include your partner in the preparation

Share your expectations regarding the aims and details of the site visit with your partner. Be sufficiently clear about the aims of the preliminary assessment site visit i.e. to collect information in order to decide whether or not to launch the project, avoid causing frustration and raising false hopes.

Invite them to prepare the site visit with you, particularly the making of appointments with the "officials" you should meet and to define the schedule.

You should, of course, provide your partner with your arrival and departure dates!

Find out about the habits and customs as well as the cultural codes of the country and the region to avoid offending and creating uneasiness between you and the partner (religion, dress, etc.).

2/ ON-SITE PHASE

AIMS

>>> Carry out an in-depth study of the local situation.

METHOD

>>> Reconnaissance of the health facility and the relevant services.

>>> Meetings with key players.

>>> Study of documents.

>>> How long to allow on site

Managing your time will depend on a number of factors, such as the size of the health facility, the cultural codes, climate, ease of communication, etc.

As a rough guide, for a medium-sized regional hospital, allow:
- 2 days of direct reconnaissance (visit the services) and study of documents;
- 2 days for meetings with those in charge and hospital staff;
- 2 days for meetings with health officials and other players;
- 1/2 day for meetings with inhabitants;
- 1 day for group meetings (confirming the list of needs; drafting the partnership agreement).

Plus a few days for transport and unexpected delays!

>>> Start of the site visit

Before you do anything else, on arrival, take the time to introduce the members of your team and to remind them why you are there.

For example, you could set up a meeting with the heads of the relevant services to explain the aims of the visit, the schedule and the sequence of events.

Check the list of appointments made and possibly add some more. Refine the logistics of your visit. If you have hired an interpreter, give yourself time to talk to them to explain the aims, the sort of information you are interested in, etc.

>>> Information gathering

At this stage, three information gathering techniques are recommended:
- direct observation;
- meetings;
- study of documents.

Take time! Adapt to your partner's rhythm.
In countries where greetings are very important, do not disregard them!

! Remember your handwritten notes and your recordings

These techniques will allow you to collect information directly from those who have requested support, as well as from those who are likely to be involved in the use and maintenance of the medical device. You should obtain quantitative and qualitative data based on the advice of local actors. Your own perception and judgment of the dynamics of the health facility are also essential.

In practice, these three information gathering techniques are often inseparable and implemented simultaneously. Seeing a situation, or consulting a document whilst in discussion with the staff of the health facility make it easier to understand and more precise.

FILM, RECORD, TAKE PHOTOGRAPHS...
Of course these tools are very useful to avoid forgetting things: they constitute a virtual memory which is a great help when writing the site visit report. However, always remember to ask permission to record and/or film, particularly in the health facility and in front of patients. During meetings, make sure the recording doesn't bother the speaker, because it can skew the quality of information provided.

DIRECT OBSERVATION

This means close observation of what is being examined on site at the time of the visit. Systematic observation in a precise context needs to be carried out. You will need to be open and curious, but also methodical and organised so that what you have observed has meaning.

VERY SPECIFIC INFORMATION NEEDS TO BE OBTAINED REGARDING SOME SERVICES.
For example, in the case of a request for a dialysis machine, amongst other things, you will have to ascertain the availability of reverse osmosis purified water and the stability of the electric current in the dialysis service.
In the case of a request for ceiling lighting in an operating theatre, you should check the sturdiness of the ceiling in the theatre.

Very diverse information can be gathered whilst visiting the health facility: firstly, those likely to benefit from the medical device in the context of the project as well as those not concerned by the project. You will thus get a general idea of the infrastructure (electrical set up, air conditioning, medical fluids, etc.) of the hospital hygiene, of how the healthcare facility functions and how many patients it treats. This will enable you to ascertain the possible needs, that are sometimes even more urgent than indicated in the request.

Visiting all the services (sterilisation service, laboratory, storage areas, etc.) and public walk-through areas in the health facility (admissions office, waiting rooms, etc.), as well as other buildings (generator, water treatment system, etc.) will provide additional information.
It is essential to visit the biomedical maintenance service and workshop and to ascertain fairly quickly the healthcare facility's maintenance capacity and how it is organised.

MAKE THE HEALTH FACILITY STAFF AWARE OF THE NECESSITY FOR MAINTENANCE!
Maintenance is the weakest link in medical equipment support projects. According to the WHO, over 50% of medical equipment in developing countries is not sufficiently maintained so quickly becomes unusable. To ensure the long-term use of medical devices, it is vital that you make the health facility aware of this point. You should get them to commit strongly to the mobilisation of biomedical human resources as well as technical and financial means devoted to maintenance.

Direct observation of the services is often an opportunity for very interesting informal conversations which will enhance more formal meetings. Exchanges with employees should also be noted.

To make your work easier, in the following pages you will find the SERVICE factsheets and the factsheets INFORMATION TO BE COLLECTED. Look at them before you leave, and don't hesitate to adapt them.

MEETINGS

A great deal of information can be obtained by talking with:

- people directly involved in the project: the management (Director, finance controller, etc.), the health facility's health employees and the biomedical maintenance staff (engineer and/or technician(s));
- other healthcare providers in the area;
- local and/or traditional administration officials;
- those benefitting from the offer of healthcare;
- suppliers of medical devices and maintenance providers in the country;
- other international aid organisation present and working in the country.

A number of different techniques can be used (questionnaire, semi-directed meetings, open meetings, etc.). In general, the **semi-directed meeting** is the most appropriate for a preliminary assessment.

It favours information gathering on the specific questions one has, whilst making it possible adapt the discussion during the meeting depending on the reactions of the person one is talking with.

It is advisable to organise the meetings on a one-to-one basis so that people are able to express themselves freely whilst remaining anonymous.

ADVICE ON MEETING MANAGEMENT[5]

Presentation phase to create an atmosphere of trust:

- greetings and thanks are important;
- clearly outline the aim of the meeting and the site visit (for example, indicate that you are there to understand how the health facility really works and that the preliminary assessment will make it possible to confirm the project's feasibility);
- introduce and explain the roles and status of all those present at the meeting;
- provide information about yourself and your role, invite your opposite number to do the same and suggest that they too ask questions to balance out the speaking time of each. Avoid giving the impression of carrying out an interrogation; on the contrary, right from the start enter into a real dialogue;
- in a francophone country, take an informed decision on which courtesy form to use: "tu" or "vous".

Managing what is said:

- beware of assumptions of all sorts, your bearing and your body language (silences, looks, what is left unsaid, etc.);
- start the meeting with a general discussion about the health facility;
- ask precise questions and don't hesitate to explain the aim of the question: it makes the person feel relaxed;
- go from general to specific questions; only go into detail if absolutely necessary;
- give everyone an opportunity to speak (even those in the background);
- as much as possible, reformulate what has been said;
- in conclusion resume the main points.

Time management:

- ask how much is available for the meeting, and stick to it;
- avoid digressions;
- do not hesitate to get the meeting back on track.

Closure of the meeting:

- remind everyone of the essential points covered, and confirm them;
- indicate the next steps of the process;
- thank everyone for their presence.

[5] You will find the same advice on running a meeting in our Evaluation document.

However, for a semi-directed meeting you need to prepare an organised series of questions and/or subjects and to lead discussions during the meeting.
It is important to give priority to essential questions, because people will have little time to give you!

To make your task easier, factsheets entitled INFORMATION TO BE COLLECTED are available in the following pages. You may also use the factsheets entitled SERVICE and SUBJECT supplied to summarise some of the data obtained.

EXAMINATION OF DOCUMENTS

A certain amount of information is available from your partner in the form of reports or different documents. Amongst these papers, some will already have been collected and analysed during the preliminary phase, but others will only be available on site. This could be the case of financial management documents, files related to healthcare or even maintenance records for medical devices.

Finally, meeting the healthcare authorities or other officials enables the collection of additional documents which are precious to refine and analyse the context. Don't hesitate to ask those you meet for any documents that they think might be useful.

>>> Draw up a provisional evaluation at the end of the visit

TAKE STOCK AS A TEAM

Once all the information has been gathered (observations, meetings and examination of documents), it is advisable to set up an on-site team meeting in order to share and discuss the main points of the preliminary assessment. At this stage you should be able, collectively, to bring out both the strong and weak points of the potential partner, as well as the initial conclusions regarding the feasibility of the medical equipment support project.

To help you analyse all the information gathered, possible questions have been provided in the ANALYSIS factsheets.

TAKE STOCK WITH THE PARTNER

Whatever the conclusions reached by the team regarding the possibility of implementing the project, it is important to spend time with the partner to inform them.

If the conclusions do not appear favourable, explain the constraints discovered that would currently render it impossible to implement a medical equipment support project. It could, however, be useful to leave the door open for possible future cooperation if the circumstances were to change.

If the conclusions appear fairly favourable, you should take stock with the partner to draft the basis of a partnership agreement. You are strongly advised to allow at least a half-day for a round-table meeting with the director of the health facility and those in favour of the project in order to draft this partnership agreement. This work will help to get an idea of the commitments that each person is prepared to undertake and to establish who could and would do what, and in what timeframe.

At this stage, be clear and explain that no final decision has been taken concerning implementation of the project. The draft of the partnership agreement will just give an idea of the extent of the health facility's commitment to the project.

In the end, the partnership agreement will include all aspects of the project cycle.

To draft the partnership agreement you could use the Planning Method document in this series.

>>> Refine the list of medical device needs

At the end of the visit, in cooperation with the head of the health facility, nursing staff and biomedical maintenance staff, you should draw up a precise and detailed list of the medical devices requested.

You should be aware, however, that there are real needs that cannot be met for various reasons, such as the lack of capacity of the partner's facility or the project holder. For example, an isolated or remote health centre may need an operating theatre, but unfortunately does not have any surgeons.

So only needs that take account of the reality of the context should be considered.

BE AWARE, that each device made available, even freely given, will have repercussions on the operational budget of the health facility. Indeed, the use of most of the devices generates costs which tend to be overlooked or underestimated.

Before including a device in the list of needs, it is vital to look at its operating costs so that the partner is fully aware of them.

For example, for an incubator, the health facility will have to make provision for the procurement on a regular basis of dermal temperature sensors which are accessories for use on a single patient; to pay for the cost of preventive maintenance (changing the air filters every two months, controlling the temperature and other parameters every year, etc.).

A subject factsheet entitled FINAL LIST OF MEDICAL DEVICE NEEDS can be found on. Page 39.

INFORMATION TO BE COLLECTED FACTSHEET

HEALTH AUTORITIES

>>> **The questions will need to be adapted according to the health authority. The local authorities will be able to provide precise answers but more technical questions should be addressed to specialized authorities.**

ANALYSIS OF THE REQUEST AND UNDERSTANDING NEEDS

- Do the health authorities support the request?
  What do they think of the medical equipment support project?

- What sort of relationship do the health facility and the health authorities have?

- What are the health requirements in the area?
  Is the request for medical devices by the health facility coherent in view of the local health context?
  Are some of the requested devices inappropriate?

- What needs are currently not at all, or poorly met, to justify the request?
  How do people cope currently without the medical device requested?
  What loss of quality or capacity for healthcare is there without this medical device?

- Are there other health needs that are not covered which should take precedence over the target health facility's request for medical equipment support?
  What are they? How are they handled?

- Is there a likelihood of duplication if an identical medical device exists in a neighbouring health centre?
  In this case, would it not be possible to pool currently available medical devices or share their use with other health centres?

FEASILIBITY STUDY

- What administrative constraints should be borne in mind?
  Is there a policy covering the importation of medical devices, are there Customs clearance procedures, Visa requirements, etc.?

- Which suppliers or service providers operating in the area would be able to ensure maintenance and the supply of consumables, accessories, maintenance kits and spare parts?
  How much can they handle?
  How far away are they?

INFORMATION TO BE COLLECTED FACTSHEET

THE HEALTH FACILITY'S MANAGEMENT TEAM

(Director, financial controller, etc.)

ANALYSIS OF THE REQUEST AND UNDERSTANDING NEEDS

- Which device is being requested? Is the list complete, quantified and sufficiently detailed? Who drew it up? More specifically, were biomedical maintenance staff involved?
- What needs are currently not at all, or poorly met, to justify the request? How do people cope currently without the medical device requested? What loss of quality or capacity for healthcare is there without this medical device?
- What grounds are there for the need (replacement of an existing medical device, creation of a service, broadening the range of healthcare, etc.)?
- How many patients are affected by the medical equipment support project (per month or per year)? For which health issues?
- Which health objectives can be attained by the provision of medical devices?
- Can the devices requested be made and/or bought locally from neighbouring countries particularly small healthcare and examination device, as well as hospital furniture, for example: height gauges, stethoscopes, tensiometres, beds? And if so, at what price?
- Does the health facility have the means to purchase the medical device requested?
- Does the health facility need other medical devices? If so which ones? Should they take precedence over the request? How does the health facility intend to deal with them?

ANALYSIS OF THE FEASIBILITY AND THE PARTNER'S CAPABILITIES

- When was the health facility set up? What is its background?
  What contact does it have with the population, other health centres and the NGOs also operating in the area?
- Has the health facility already been the object of medical equipment support? From whom?
  What lessons should be drawn from this experience?
- Which management systems have been set up in the health facility?
  How accurate are the available documents (accounts, financial report, etc.)?
- Which administratives constraints should be taken into account?
  Is there a policy covering the importation of medical devices, are there Customs clearance procedures, Visa requirements, etc.?
- What logistics constraints should be borne in mind?
  What are the most appropriate means of transport and which local transporters could be called upon?
  Are roads viable all year round or does that vary according to the season?
- What is the health facility's annual operating budget (and how has it evolved over the past three years)?
  Where do its resources come from? Are its financial resources long-term?
  In this budget, what percentage is dedicated to maintenance (human resources, service providers, accessories, maintenance kits, spare parts), to the provision of consumables and to staff training?

ANALYSIS OF THE FEASIBILITY AND THE PARTNER'S CAPABILITIES

- Will the use of the medical device requested be free for patients?
  If not, how much does the health facility intend to charge patients for the use of the device?
  Will all patients, whatever their level of income, be able to benefit from it?

- Do the potential users know how to operate the medical device requested?
  If not, what training would be required?
  Who could provide the training (the health facility's biomedical maintenance staff or an external contractor, project partner, etc.)?

- Will current or future financial resources cover all the new operating costs of the medical devices requested (recruitment of staff, human resource training, energy consumption, maintenance, consumables, accessories, maintenance kits and spare parts, etc.)? If not, are there other options to ensure the long-term use of the device?

- What sort of relationship does the health facility have with the health authorities?

- Is there a likelihood of duplication if an identical medical device exists in a neighbouring health centre?
  In this case, would it not be possible to pool currently available medical devices or share their use with other health centres?

- Has the health facility created hospital hygiene procedures to ensure the correct use of the medical device?

RISK ANALYSIS

- What measures should the health facility apply to ensure that the use of the medical device is not limited to those patients who are the most well off or does not greatly penalize patients on lower incomes?

- Is there a risk that the destination or the primary use of the medical device could be misappropriated and/or the device could be monopolized for personal gain (excessive use, bribery, etc.)?
  Is there a past history of these issues?
  What measures could be taken to avoid this risk?

- What recycling measures are there for devices that are reaching the end of their cycle and how is the waste generated by the devices themselves or those relating to their usage (such as development of x-ray and film products, fluids, used consumables and accessories, broken spare parts, packaging, etc.) managed?
  Are there any waste treatment plants?
  What is envisaged regarding waste produced by the use of the medical devices requested?

- What are the risks of side effects on the health of patients and health employees linked to the use of medical devices that have been provided?
  What preventive measures could be envisaged?

ANALYSIS OF THE REQUEST AND UNDERSTANDING NEEDS

- Which medical devices have been requested?
  Is the list complete, quantified and sufficiently detailed?
  Who drew it up?
  More specifically, were biomedical maintenance staff involved?

- What needs are currently not at all, or poorly met, to justify the request?
  How do people cope currently without the medical device requested?
  What loss of quality or capacity for healthcare is there without this medical device?

- What grounds are there for the need (replacement of an existing medical device, creation of a service, broadening the range of healthcare, etc.)?
  How many patients are affected by the medical equipment support project (per month or per year)?
  For which health issues?

- Which health objectives can be attained by the provision of medical devices?

- Can the devices requested be made and/or bought locally from neighbouring countries, particularly small healthcare and examination devices, as well as hospital furniture, for example: height gauges, stethoscopes, tensiometres, beds? And if so, at what price?

- Does the health facility have the means to purchase the medical device requested?

- Does the health facility need other medical devices? If so which ones?
  Should they take precedence over the request?
  How does the health facility intend to deal with them?

- Would use of the device go against sociocultural practices (religion, tradition, etc.) and/or would it compete with local doctors?

- Which NGOs also operate in the area?

- What sort of relationship does the health facility have with the health authorities?

ANALYSIS OF THE FEASILIBITY AND CAPACITY OF THE HEALTH FACILITY

- What state are the buildings in?
  Is there running water?
  Electricity?
  Medical fluids?
  Telecommunications (fax, internet, telephone)?
  Some sort of air conditioning?

- Do the potential users know how to operate the medical device requested?
  If they do not, what training would be necessary?
  Who would be able to provide the training (the health facility's biomedical maintenance staff or an external contractor, project partner, etc.)?

- Will the cost of supplying consumables always be bearable for the health facility?
  If not, are there other options to ensure the long-term use of the device?

INFORMATION TO BE COLLECTED FACTSHEET

MEDICAL AND PARAMEDICAL STAFF

(future users)

ANALYSIS OF THE REQUEST AND UNDERSTANDING NEEDS

- Which medical devices have been requested? Is the list complete, quantified and sufficiently detailed?
- Who drew it up? More specifically, were biomedical maintenance staff involved?
- What needs are currently not at all, or poorly met, to justify the request? How do people cope currently without the medical device requested? What loss of quality or capacity for healthcare is there without this medical device?
- What grounds are there for the need (replacement of an existing medical device, creation of a service, broadening the range of healthcare, etc.)? How many patients are affected by the medical equipment support project (per month or per year)? For which health issues?
- Which health objectives can be attained by the provision of medical devices?
- Can the devices requested be made and/or bought locally from neighbouring countries, particularly small healthcare and examination devices, as well as hospital furniture, for example: height gauges, stethoscopes, tensiometres, beds? And if so, at what price?
- Does the health facility need other medical devices? If so which ones? Should they take precedence over the request? How does the health facility intend to deal with them?
- Would use of the medical device go against sociocultural practices (religion, tradition, etc.) and/or would it compete with local doctors?
- Which NGOs also operate in the area?
- What sort of relationship does the health facility have with the health authorities?

ANALYSIS OF THE FEASIBILITY AND CAPACITY OF THE HEALTH FACILITY

- What state are the buildings in? Is there running water? Electricity? Medical fluids? Telecommunications (fax, internet, telephone)? Some sort of air conditioning?
- Do the potential users know how to operate the device requested? If they do not, what training would be necessary? Who would be able to provide the training (the health facility's biomedical maintenance staff or an external contractor, project partner, etc.)?
- Will the cost of supplying consumables always be bearable for the health facility? If not, are there other options to ensure the long-term use of the device?

RISK ANALYSIS

- What recycling measures are there for devices that are reaching the end of their cycle and how is the waste generated by the devices themselves or those relating to their usage (such as development of x-ray and film products, fluids, used consumables and accessories, broken spare parts, packaging, etc.) managed? Are there any waste treatment plants? What is envisaged regarding waste produced by the use of the medical devices requested?
- What are the risks of side effects on the health of patients and health employees linked to the use of medical devices that have been provided? What preventive measures could be envisaged?
- What measures should the health facility apply to ensure that the use of the medical device is not limited to those patients who are the most well off or does not greatly penalize patients on lower incomes?
- Is there a risk that the destination or the primary use of the medical device could be misappropriated and/or the device could be monopolized for personal gain (excessive use, bribery, etc.)? Is there a past history of these issues? What measures could be taken to avoid this risk?

INFORMATION TO BE COLLECTED FACTSHEET

BIOMEDICAL MAINTENANCE STAFF

(internal to the health facility or external service provider)

ANALYSIS OF THE FEASIBILITY AND SIZE OF THE HEALTH FACILITY

- Which medical devices have been requested? Is the list complete, quantified and sufficiently detailed? Who drew it up? More specifically, were biomedical maintenance staff involved?
- Is the request coherent with the health facility's need for medical devices?
- Is the health facility's infrastructure appropriate for the medical devices requested or will renovation work have to be carried out?
  Are the biomedical maintenance staff able to install the medical devices requested?
- Has the health facility set up a maintenance policy?
- Is the biomedical maintenance service able to carry out preventive and corrective maintenance?
- Will they be able to handle the maintenance of the medical devices requested (skills, technical ability, need for additional training, etc.)? On what type of device?
- Will the health facility be able to bear the maintenance costs (preventive and corrective maintenance, the procurement of accessories, maintenance kits and spare parts)?
  If not, are there other options to ensure the long-term use of the medical devices that are donated?
- Will the health facility always be able to bear the cost of the provision of consumables?
  If not, are there other options to ensure the long-term use of the medical devices?
- How is the purchase of accessories, maintenance kits and spare parts handled (keeping a stock, a list of suppliers, order procedures, the budget is independently managed by the service, etc.)?
- Which suppliers or service providers operating in the area will be able to ensure the maintenance and supply of accessories, maintenance kits and spare parts? How big are these companies?
  How far away are they?
- Do the potential users know how to use the medical device requested?
  If not, what training would be required?
  Who would be able to deliver the training (the health facility's biomedical maintenance staff, external contractor, project partner, etc.)?
- What state are the buildings in? Is there running water? Electricity? Medical fluids?
  Telecommunications (fax, internet, telephone)? Any sort of air conditioning?
- What recycling measures are there for medical devices that are reaching the end of their cycle and how is the waste generated by the devices themselves or those relating to their usage (such as development of x-ray and film products, fluids, used consumables and accessories, broken spare parts, packaging, etc.) managed?
  Are there any waste treatment plants?
  What is envisaged regarding waste produced by the use of the medical devices requested?
- What are the risks of side effects on the health of patients and health employees linked to the use of medical devices that have been provided? What preventive measures could be envisaged?

INFORMATION TO BE COLLECTED FACTSHEET

POPULATION/POTENTIAL PATIENTS

RISK ANALYSIS

- Would use of the medical device go against sociocultural practices (religion, tradition, etc.) and/or would it compete with local doctors?
- In the past, have patients been faced by a refusal of healthcare or access to a medical device due to their low or insufficient income?
  On the contrary, do they know of a system implemented by the health facility enabling the poorest patients to be treated?

INFORMATION TO BE COLLECTED FACTSHEET

OTHER HEALTHCARE PLAYERS

ANALYSIS OF THE FEASIBILITY AND CAPACITY

- What advice and support can Embassies provide to medical equipment support projects?
- What external resources can be co-opted in the area (WHO programmes, the PNUD, Foundations, decentralized local authorities supporting humanitarian projects, NGOs, neighbouring health facilities, etc.)?
  Are there similar projects which it would be interesting to investigate?
- Who are the potential providers of funds for this on site project?

RISK ANALYSIS

- Is there a likelihood of duplication if an identical medical device exists in a neighbouring health centre?
  In this case, would it not be possible to pool currently available medical devices or share their use with other health centres?

SERVICE FACTSHEET

BIOMEDICAL MAINTENANCE SERVICE

>>> This factsheet relates to the heath facility's internal biomedical maintenance service, if there is one, and/or external service provider(s) with whom the facility works.

Date: .....

Name of the observer: ..... **Duration of the study:** .....

Floor plan or sketch of the service (to be attached to the factsheet):
Remember to take photographs of the various aspects of the service and attach them to the factsheet.

Estimation of the surface (m^2)**:** .....

Head of the service (name and position): .....

Human resources (biomedical engineer, biomedical technician, general maintenance officer, etc.) **:**

Position	Level of training	Level of skill
		Level 1: basic scientific and technical knowledge, Level 2: specific training on the device, Level 3: experience of the process.
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....
.....	.....	.....

Possible external provider(s) of biomedical maintenance: .....
.....

Skill domains	Medical devices maintained in the various domains	Level of maintenance which can be carried out on each medical device
☐ Anaesthesia and resuscitation	....	☐ Preventive ☐ Corrective ☐ Preventive ☐ Corrective
☐ Operating theatre/surgery	....	☐ Preventive ☐ Corrective ☐ Preventive ☐ Corrective
☐ Dental care/stomatology	....	☐ Preventive ☐ Corrective ☐ Preventive ☐ Corrective
☐ Dialysis	....	☐ Preventive ☐ Corrective ☐ Preventive ☐ Corrective

Skill domains	Medical devices maintained in the various domains	Level of maintenance which can be carried out on each medical device
☐ Medical imagery (X-ray, scanner, echograph, etc.)	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Physiotherapy	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Laboratory	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Maternity/antenatal service	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Functional monitoring and exploratory	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Ophthalmology	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Ear, nose and throat	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Paediatrics	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Sterilisation	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Information technologye	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective
☐ Other	.....	☐ Preventive ☐ Corrective
	.....	☐ Preventive ☐ Corrective

Level of equipment and lay-out of the service:

☐ Worktop/workbench
☐ Stock of accessories (cables, etc.)
☐ Stock of spare parts
☐ Library of technical documents
☐ Computer ☐ Telephone ☐ Internet connection
☐ Basic tools (screwdriver, pliers, soldering iron, etc.)
☐ Electrical or electronic testing tools (multimeter, oscilloscope, etc.)
Indicate which ones: .....
.....
.....
☐ Specific testing equipment: instruments to control, measure and test
Indicate which ones: .....
.....

Follow-up documents used internally (Safety and quality of maintenance records /SQMR):

☐ Management of Computer-assisted maintenance (CAMM)
☐ Yes ☐ No - or : .....
☐ Stock of medical equipment inventory*
How often inventories are updated: .....
☐ Maintenance procedures
☐ Order forms
☐ Maintenance schedule
☐ Record of maintenance jobs carried out
☐ Maintenance report or maintenance file relating to each device (past history)

* If the service has a complete inventory of all the equipment, try to obtain a copy. It will be very useful when analyzing the requests.

Storeroom:

☐ Area dedicated to the delivery of new medical devices
Describe: .....
.....

☐ Area dedicated to medical devices waiting to be serviced
Describe: .....
.....

☐ Area dedicated to storage/removal of medical devices to be disposed of
Describe: .....
.....

Infrastructure of the service:

Air conditioning: ☐ Yes ☐ No What kind: .....

Ventilation system: ☐ Yes ☐ No What kind: .....

Running water: ☐ Yes ☐ No
Demineralised water: ☐ Yes ☐ No
Other: .....

Electricity protection and safety: ☐ Circuit breaker ☐ Antistatic protection
Other: .....

Fire Protection: ☐ Extinguisher ☐ Alarm
Other: .....

Cleaning of the service:

☐ Cleaning protocol for the premises
☐ Cleaning and hygiene products in the premises
☐ Cleaning products for medical devices paid for by the health facility

General comments on the service (specifically cleanliness, tidiness, organisation, state of the equipment and lay-out, staff motivation, etc.):

.....
.....
.....
.....

SERVICE FACTSHEET

SERVICE (ALL SPECIALTIES)

>>> To be reproduced in as many copies as the services visited
(e.g: maternity, operating theatre, ophthalmology, chemist, sterilisation, laboratory, etc.)

Date : .....
Name of the observer: ..... **Duration of the study:** .....

NAME OF THE SERVICE: .....

Floor plan or sketch of the service (to be attached to the factsheet):
Remember to take photographs of the various aspects of the service and attach them to the factsheet.

Estimation of the total surface (m^2) .....
Estimation of the working surface: ..... How many patients can be seen: .....

Head of the service - Name and position:
.....
.....

Human resources (medical, paramedical, administrative, external contributors, other):

Duties	Number of staff for each duty	Specialties	Range of working hours
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

On average, how many tasks does the service carry out each day?
.....
.....

What type of tasks (consultations adult/child, surgical acts, biological acts, etc.)?
.....
.....

Crowds at visiting times (number of patients in the waiting room, are there specific sociodemographic characteristics?): .....
.....

Medical devices on site:

Description (brand, model, capacity, functions)	Quantity	Stock of related consumables	Year put into use	Date of last maintenance
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....
.....	.....	.....	.....	.....

Available documents regarding the medical devices:

Instruction manuals: ☐ Yes ☐ No
Use policy: ☐ Yes ☐ No
Documents of user traceability (standardisation, calibration, etc.): ☐ Yes ☐ No
Policy for standard operations to be carried out by users (1st level maintenance such as: changing batteries, roll of printing paper, etc.): ☐ Yes ☐ No

Infrastructure of the service:

Air conditioning: ☐ Yes ☐ No Type : .....
Ventilation system: ☐ Yes ☐ No Type : .....
Running water: ☐ Yes ☐ No
Any other water available (specify): .....
Electricity security system: ☐ Inverter ☐ Dedicated generator
Fire protection: ☐ Extinguisher ☐ Alarm
Medical fluids: ☐ Wall socket ☐ Bottle ☐ None
Other features (solid walls, system to dispose of residual gas, etc.): .....

Cleanliness and upkeep:

☐ Protective equipment for employees – Specify: .....
☐ Cleaning protocol
☐ Cleaning products
☐ Cleaning equipment – Specify: .....
☐ Protocol covering cleaning and upkeep of the premises
☐ Cleaning products used on the premises
☐ Protocol for the maintenance of medical devices
☐ Cleaning products for medical devices

Comments on the service (specifically: tidiness, state of the premises, cleanliness, management and supervision of the service, staff motivation, instruments which appear to be lacking; if there are external contractors, indicate whether or not they bring their own medical devices): .....
.....
.....
.....
.....

SUBJECT FACTSHEET

HUMAN RESOURCES AT THE HEALTH FACILITY

>>> Provide a detailed list of all the human resources working in the health facility.

The aim of this factsheet is, if necessary, to define more clearly and completely the information already gathered at a distance during the preliminary phase (see. Subject factsheet entitled IDENTITY OF THE HEALTH FACILITY p. 12).

PERSONNEL (equivalent to full time employees):

Salaried employees	Headcount	Duties/Roles/Specialty
Doctors, surgeons		
Nurses		
Registered nurses		
Specialised nurses		
Healthcare managers		
Nursing auxiliaries		
Biologists		
Laboratory technicians (laboratory assistants)		
Midwives		
Pharmacists		
Pharmacist's assistants		
Physiotherapists		
Radiographers		
Other medical staff		
Other paramedical staff		
Biomedical engineers (maintenance of medical instruments)		
Biomedical technicians (maintenance of medical instruments)		
General maintenance officers		
Administrative staff		
Other qualified staff (medical assistants, auxiliary nurses, matron, etc.)		
Other unqualified staff		

Volunteers	Headcount	Duties/Roles/Specialty
Indicate their skills		
Temporary staff (external contractors)		

Total headcount	

SUBJECT FACTSHEET

FINAL LIST OF MEDICAL DEVICE NEEDS

>>> Draw up a clear and precise list of the medical device needs confirmed by your organisation and the health facility employees involved in the support project.

Person who participated in drawing up the list (name and position):

.....

.....

.....

.....

Medical devices requiring maintenance (equipment):

Name	Features: brand, model, options, etc.	Quantity	Associated consumables and accessories	Requesting Service	Comments

Medical devices not requiring maintenance:

Name	Features: brand, model, options, etc.	Quantity	Requesting Service	Comments

Date and signature:

3/ ANALYSIS AND WRITING PHASE

AIMS

>>> To decide whether or not to commit!

METHOD

>>> Organise the information gathered during both the preliminary and on-site phases.

>>> Carry out an in-depth analysis of the context and the needs.

>>> Write the preliminary assessment report.

>>> Analysis of the data

On return from your on-site visit, all the qualitative and quantitative information should be analysed to respond to the essential questions indicated in the introduction (criteria of the PRECIS quality reference).

Is the project
- Pertinent?
- Rigorous?
- Effective?

Will the project holder be able to call upon or acquire the required
- Capabilities?

Will they be able to gauge (or anticipate) the potential
- Impact?

And to work in
- Synergy with the other players?

The ANALYSIS factsheets which you will find in the following pages will help you to ask yourself the right questions and to respond the best you can to the PRECIS quality reference. The factsheets will also indicate what information, out of all you have collected, to use to respond to the questions.

>>> Writing the preliminary assessment report

Once you have carefully analysed the information collected during the first two phases, you can now write your preliminary assessment report.

The preliminary assessment report should describe the method used, take account of the context, of the resources and potential, the attributes and constraints; and even list the commitments your organisation and the health facility would be prepared to make in the context of the project (if a draft partnership agreement has been drawn up). Use (or attach) the service factsheets with your comments and the subject factsheets that you have completed. Think of enhancing your report with photographs taken during the site visit and other documents you have collected.

You could look at the subject factsheet entitled DETAILED PLAN FOR A PRELIMINARY ASSESSMENT REPORT to write your report. Page 52.

The preliminary assessment report and your analysis are very useful documents to attach to your requests for finances or medical devices. Funding agencies and donors of medical devices can be won over by the seriousness of your approach!

>>> Decision taking

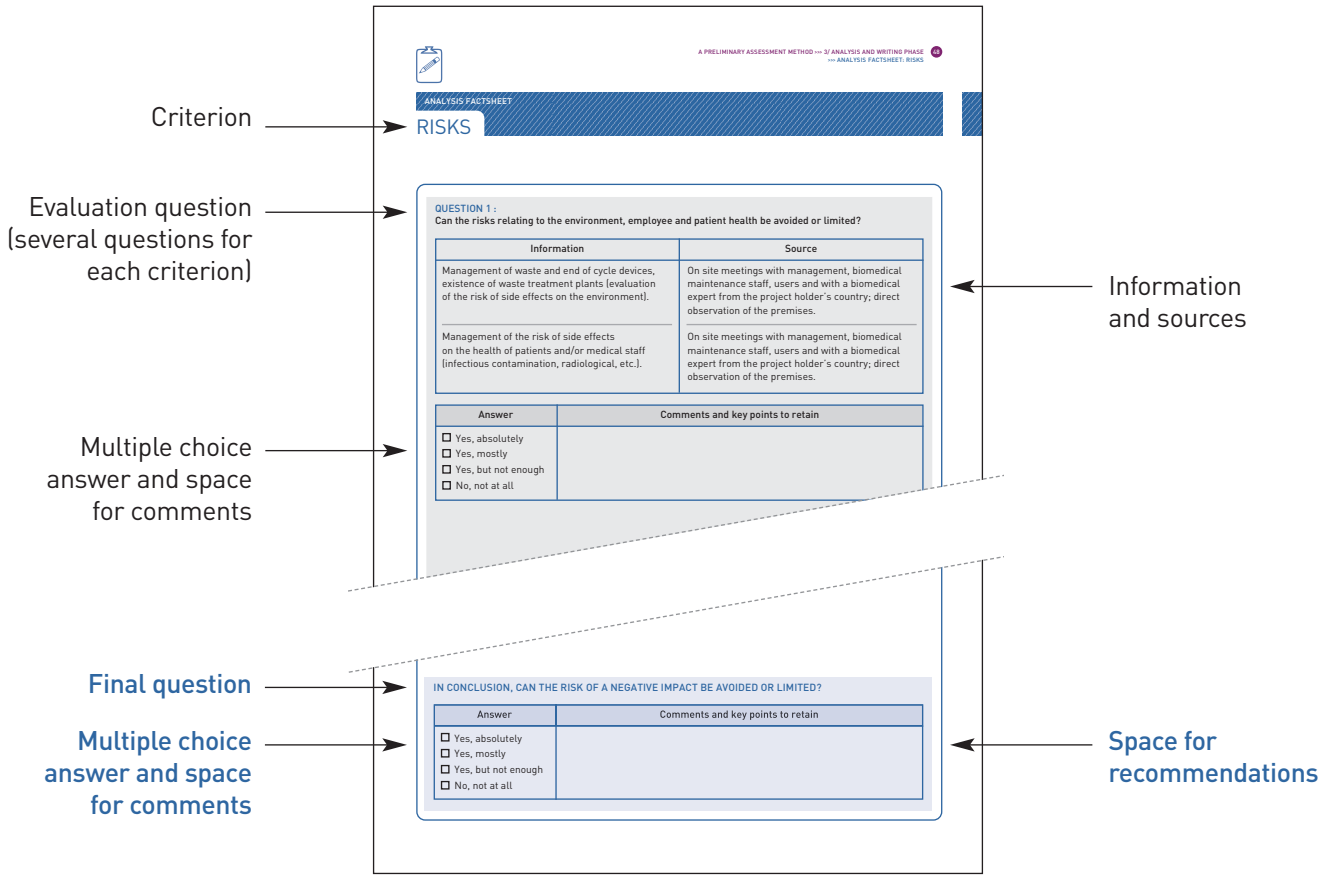
Once the analysis has been done and the report written, you have everything you need to decide, along with the whole team and your partner, whether or not to pursue the project.

If you decide to continue, you will be well prepared for the next steps:
- establish an exact budget for the project;
- write up or finalise the partnership agreement and sign it;
- co-opt the financial and technical partners, associations and donors of medical devices.

Before you start your project...
There may be a lapse of time between the preliminary assessment and the actual start of the project, so you will need to check carefully the key data in your preliminary assessment to ensure that they are still applicable, and if necessary, update them and take account of any changes.

>>> The analysis factsheets for the preliminary assessment

For each topic, there are a number of analysis questions that must be answered.
You are reminded of the sources of the information collected in each question.
The suggested scale provides a response option so that you can qualify your degree of enthusiasm from "yes, absolutely" to "No, not at all". The comments are essential. They justify your decision.
At the end of each factsheet, a final question will lead you to express a decision.



ANALYSIS FACTSHEET

REQUEST AND UNDERSTANDING THE NEEDS

QUESTION 1 :

Will the type of device requested make it possible to attain the stated health aims?

Information	Source
Medical device requested.	Request document, meetings with management, healthcare staff and biomedical maintenance staff.
Health issues the equipment project wishes to address.	Meetings with the healthcare staff and the facility's management team.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 2 :

Is the health facility's request coherent with the health needs in the area and the health policies currently applied?

Information	Source
Support from health authorities.	Support document from health authorities or meetings with them.
Evaluation of the extent to which the population served by the health facility suffers from the disease that would be treated by the equipment requested.	Meetings with health authorities, management, health staff, biomedical maintenance staff and other health workers.
Existence of other health issues requiring priority over the stated request.	Meetings with health authorities.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 3 :

Is the request coherent with the health facility's needs for medical devices?

Information	Source
Reason for the need (replacement, new requirement).	Request document; meetings with management and healthcare staff.
Other needs for equipment that would take precedence over the request.	Meetings with management and healthcare staff.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 4 :

Is the type of medical device requested appropriate for the size, socioeconomic and health aspects of the population served by the health facility?

Information	Source
Evaluation of the number of patients affected by the equipment support project (by month or by year).	Meetings with management and future potential users.
Evaluation of the cost of using the device and the ability of the patients to pay for it.	Meetings with management, future potential users and potential population/patients.
Compatible with the culture or traditions.	Meetings with healthcare staff and potential population/patients

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 5 :

Have alternatives to the donation of medical device been explored ?

Information	Source
Existence of local/traditional alternatives in terms of medical devices (local manufacture of beds, height gauges, etc.).	Meetings with management and healthcare employees.
Ability of the health facility to purchase themselves.	Meetings with management.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

IN CONCLUSION, DOES THE REQUEST CORRESPOND TO REAL NEEDS ?

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

ANALYSIS FACTSHEET

FEASIBILITY AND PARTNER'S CAPABILITIES

QUESTION 1 :

Do the logistical and administrative constraints make it possible to envisage setting up a project?

Information	Source
List of administrative constraints (device importation policy, Customs procedures, etc.).	Meetings with the health facility's management and health authorities, documents.
List of logistical constraints (transport, packaging, road conditions depending on the season, etc.).	Meetings with the health facility's management and local transporters, documents.
Evaluation of transport costs (door-to-door).	Local transporters and freight companies.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 2 :

Do the partner's capabilities (infrastructure, employee skills, maintenance capacity, etc.) make it possible to envisage installing the medical devices requested, particularly those requiring maintenance (equipment)?

Information	Source
Evaluation of the host infrastructure (state of the buildings, water, electricity, medical fluids, space, getting around in the building, telephone, fax, internet, air conditioning, etc.).	Direct observation; meetings with healthcare staff biomedical maintenance staff and management.
Partner capability in terms of expertise in the use of the device, possible need for additional training.	Meetings with management, potential future users, biomedical maintenance staff.
Ability of the partner or service provider in terms of maintenance (access, means of communication).	Meetings with health authorities, biomedical maintenance staff.
Existence of a supply source for consumables, accessories, maintenance kits and spare parts.	Meetings with management, healthcare staff, biomedical maintenance staff; visit of supply companies.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 3 :

Does the financial capacity of the partner make it possible to expect long-term use of the medical devices requested, particularly of those requiring maintenance?

Information	Source
Evaluation of the cost of maintenance for long-term use of the medical device.	Meetings with current users in a local health centre and with its biomedical maintenance staff.
Evaluation of the cost of supplies for long-term use of the medical device.	Meetings with potential future users and current users in a different local health facility and with the biomedical maintenance staff.
Partner's annual operating budget, source of funds.	Meetings with management.
Evaluation of the cost of use for the patient and their ability to pay for it.	Meetings with management, healthcare staff and the potential population/patients.
Provisional operating budget for the equipment, in view of the long-term use of the device (human resources, energy, maintenance, consumables, etc.).	Meetings with management and the financial controller; opinion of a local expert in a main hospital where the device is in use.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 4 :

Does the relationship between the health facility and the other health workers in the area ensure the project will work well and durably?

Information	Source
Contact with other providers of healthcare in the area: type of facility, distance, possible partnership, etc.	Meetings with health authorities, management and other health providers.
Existence and quality of maintenance service providers and suppliers (type of facility, distance).	Meetings with the management, future possible users, biomedical maintenance employees and current users of other health facilities.
Relationship with regional and national health services (provision of resources, planning, regulations, opinion of the project).	Meetings with management, regional and possibly national health authorities, healthcare employees.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 5 :

Could the health facility which initiated the request become a trustworthy partner?

Information	Source
Past history and date the health facility was established.	Meetings with management.
Past history of a previous possible partnership with the project holder and/or other international aid organisation.	Meetings with management and other relevant partners.
Partner's management capabilities (activity and financial reports, provisional budget, use of monitoring reports for some devices, etc.).	Meetings with management (director and financial controller) and the doctors responsible for units; examination of management documents.
Official support of health authorities.	Support document or meetings with health authorities.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

IN CONCLUSION, IS THE PROJECT FEASIBLE? IS THE POTENTIAL PARTNER SUFFICIENTLY CAPABLE?

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

ANALYSIS FACTSHEET

PROJECT HOLDER CAPABILITIES

QUESTION 1:

Does the legal and administrative structure of the project holder allow them to set up a medical equipment support project?

Information	Source
Project holder's past history and legal status.	Meetings with the project holder's decision-making authorities; the project team
How the facility operates in terms of financial and administrative management (communications, logistics, the decision-making process and documenting projects, etc.)	Meetings with the project holder's decision-making authorities; the project team; examination of management documents and Minutes of the decision-making authority.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 2:

Are the required resources available or can they be co-opted?

Information	Source
Availability of internal resources (time, money, expertise, network, etc.).	Meetings with project holder's decision-making; project team.
External support that can be co-opted if necessary (additional resources and skills and/or similar experience of other project holders).	Meetings with project holder's decision-making, support structures, other actors involved in this type of project and other health worker on the area; project team.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 3 :

Has a list been drawn up of the skills of other workers who could be useful to the project?

Information	Source
Advice and support from relevant Embassies (project holder's country and beneficiary country).	Project team, meetings with other health workers on site.
Identification of advisory organisations (for example: Humatem, Bioport, etc.) and of people (medical experts, NGOs with experience in the same field).	Project team.
Identification of donors (of devices, money, etc.) for the project.	Project team; meetings with other health workers on site.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

IN CONCLUSION, DOES THE PROJECT HOLDER HAVE THE REQUIRED CAPABILITIES TO IMPLEMENT THE PROJECT?

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

ANALYSIS FACTSHEET

RISKS

QUESTION 1:

Can the risks relating to the environment, employees and patients health be avoided or limited?

Information	Source
Management of waste and end of cycle devices, existence of waste treatment plants (evaluation of the risk of side effects on the environment).	On-site meetings with management, biomedical maintenance staff, users and with a biomedical expert from the project holder's country; direct observation of the premises.
Management of the risk of side effects on the health of patients and/or medical staff (infectious contamination, radiological, etc.).	On-site meetings with management, biomedical maintenance staff, users and with a biomedical expert from the project holder's country; direct observation of the premises.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

QUESTION 2:

Can the financial risks taken by the partner health facility, or indeed the patients, relating to the medical device requested be avoided or limited ?

Information	Source
Evaluation of the risk of economically destabilising the health facility (evaluation of direct and indirect costs of maintenance, consumables, training, etc.).	Meetings with management (general and financial directors).
Evaluation of financial risks for patients (if operating costs are too high: risk of patient discrimination or discouraging capital investment), existence of a system to cover costs of people on very low incomes.	Meetings with management, users and potential population/patients.
Evaluation of the partner's probity, risks evaluation regarding future use of device (management of the risk that the device will be monopolised for personal gain).	Meetings with management (director and financial controller), the health facility's board of directors/ management, future users and health staff.

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

IN CONCLUSION, CAN THE RISK OF A NEGATIVE IMPACT BE AVOIDED OR LIMITED?

Answer	Comments and key points to retain
☐ Yes, absolutely ☐ Yes, mostly ☐ Yes, but not enough ☐ No, not at all	

SUBJECT FACTSHEET

DETAILED PLAN OF A PRELIMINARY ASSESSMENT REPORT

INTRODUCTION (indicate the initial request and the health objective, context and aims of the preliminary assessment and outline of the plan)

A. The method:
- the method and tools used (PRECIS method and practical factsheets);
- organisation of the job (the various steps carried out, how and by whom, scheduling, etc.);
- the constraints and issues encountered.

B. The local context:
- introduction to the country (economic, political, geographic and cultural contexts), system of healthcare, health policy, the health situation, etc.;
- introduction to the target area (economic, political, geographic and cultural particularities), health priorities, neighbouring health facilities, international aid organisations operating in the area, etc..

C. The health facility:
- description and features (status, level in the health system, past history, population served, activity, means of communication, infrastructure, etc.);
- human resources;
- management and finances (organisation, procurement process, financial resources, etc.).

D. The stock of medical devices they currently possess and their use:
- the current devices (type, state, etc.);
- usage capability (medical and paramedical human resources and their skills, state and organisation of services, budget allocated to the supply of consumables, accessories, maintenance kits and spare parts, etc.);
- maintenance capability (biomedical maintenance human resources and their skills, state and organisation of the premises and dedicated technical equipment, external service providers, allocated budget, etc.);
- waste management (medical devices, particularly end of cycle equipment and waste from the use of medical equipment).

E. The health facility's needs:
- the health objective being pursued;
- the confirmed needs (final list compared with the initial list of stated requests);
- the project is consistent with policies and health priorities.

F. Feasibility of the project at the level of the health facility:
- means available for operating the medical devices requested (human resources and skills, financial resources, infrastructure, etc.);
- additional means to be called upon (human resources, training, financial resources, external service providers, building work etc.);
- organisational set up (management, follow-up);
- potential positive and negative impacts of the project.

G. Feasibility of the project at the level of the organisation implementing the project:
- means available to carry out the project (human resources and their skills, financial resources, etc.);
- additional means to call upon (human resources, financial resources, external service providers, support structures, etc.);
- organisational set up (collecting/purchase of appropriate medical devices, biomedical maintenance technical services, storage, transport, long-term commitment, etc.);
- potential positive and negative impacts of the project.

CONCLUSION
- constraints and opportunities;
- strengths and weaknesses;
- recommendations.

ANNEXES
- completed practical factsheets;
- photographs;
- draft of the partnership agreement (if available);
- any other relevant documents acquired.

DEFINITIONS

FOR A CLEAR UNDERSTANDING OF THE PRELIMINARY ASSESSMENT METHOD

ACCESSORY: in the medical field, an object that is used in conjunction with medical equipment and is usually essential to its function: defibrillator paddles, ECG cables, handle for an electrosurgical generator, etc.

CONSUMABLE: in the medical field, this is an essential supply for an action, which is normally replaced after use. For example: bandages, compresses, gloves, masks, printing paper, X-Ray film, scan gel, sterile towels, diathermy knife blades, etc.

PARTNERSHIP AGREEMENT: formal document/agreement which dictates the relationship between several parties who have agreed to work in partnership and which defines their respective duties.

MEDICAL EQUIPMENT: medical device requiring maintenance, on which users need training, and that need to be overhauled – activities that are usually the job of biomedical engineers. It can be used alone or in conjunction with accessories, consumables and/or other medical devices.

MAINTENANCE KIT: a set of element that is required to carry out preventive maintenance on a specific piece of medical equipment. A maintenance kit could, for example, consist of filters, joints, valves, etc.

MAINTENANCE: in the biomedical field, action plan to maintain a medical device in an optimal operating mode. There are different sorts of maintenance:

> **PREVENTIVE MAINTENANCE:** planned action to reduce the likelihood of a breakdown of an equipment and maintaining it in a state of optimal operation.
>
> **CORRECTIVE MAINTENANCE:** action carrying out repairs following a breakdown or malfunction noticed on an equipment, with the aim of rendering it durably operational again.

MEDICAL DEVICES: the term medical devices as used in this document applies to all medical devices as defined by article L.5211-1 in the French public health Code as indicated below (which specifically includes medical devices) as well as the technical equipment for hospitals which is not considered to be medical devices (furniture and minor hospital instruments)

Article L.5211-1 of the French public health Code, article 1 item 2 in directive 2007/47/CE defines medical devices as: "any instrument, machine, device, software, material or other article, used alone or in conjunction with another, as well as any other accessory, including software designed by the manufacturer to be used specifically for diagnoses and/or therapy, and necessary for it to work properly, intended by the manufacturer for use on humans for the purposes of:

- Diagnosis, prevention, control, treatment or alleviation of an illness;
- Diagnosis, control, treatment, alleviation or to compensate for a wound or a disability;
- Examination, replacement or modification to the anatomy, or for a physiological process;
- Implementing a design, the desired principal action of which, in or on a human body, cannot be obtained by pharmacological or immunological means nor by metabolism, but the operation of which can be assisted by such means."

STOCK OF MEDICAL DEVICES/EQUIPMENT: all the medical devices available to a health facility.

PARTNERSHIP: in the field of international solidarity, relationship between legal entities which have decided to carry out a project in order to achieve common objectives. It is a dynamic process, usually long-lasting, based on principles of cooperation, equality, and exchange, confidence and reciprocity. It can be conveyed by a formal agreement, which often takes the form of a partnership agreement.

PROJECT HOLDER: in this document, a person or legal entity responsible for coordinating all the tasks and the stages necessary for the success of the medical equipment support project (preliminary assessment, definition of the aims, planning, recruiting partners, fund raising, management and implementation of human resources, equipment and financing, communication, logistics, monitoring, evaluation, etc.).

MEDICAL EQUIPMENT SUPPORT PROJECT: international aid project aiming to reinforce the quality and capability of care in a health facility by the provision of medical devices that is appropriate in the context and local resources.

BIOMEDICAL HUMAN RESOURCES:

> **BIOMEDICAL ENGINEER:** healthcare professional who designs, leads and controls the investment and maintenance policy of medical equipment in conjunction with the healthcare facility's policies and the desired levels of quality and safety. They are usually in charge of a team of biomedical technicians, they keep up with technological innovation, the regulations and precautions regarding medical devices and manage all the facility's equipment throughout its life span, from procurement to withdrawal.
>
> **BIOMEDICAL TECHNICIAN:** healthcare professional who ensures the maintenance of medical equipment. They are responsible for the installation of equipment and management of the stock of spare parts, accessories and maintenance kits. They train and inform the operators and participate in the detection of risks to the safety of patients and operating staff. The biomedical technician usually works under the supervision of a biomedical engineer.

BIOMEDICAL MAINTENANCE SERVICE: service responsible for the management and maintenance of medical equipment in a health facility.

HOW TO OBTAIN SUPPORT OR GET TRAINING

There are a number of organisations that can provide assistance to project holders wisking to set up a medical equipment support project in a health facility.
Their support can take the form of personal interviews, distribution of documents and tools, making people aware of the issues surrounding donations, specific training on project methodology or even the supply of appropriate medical devices. In France, these organisations are mainly regional networks which support international aid providers, resource centres and specialist organisations. Examples are listed below.
Look for organisations in your own country that could provide assistance.

HUMATEM

Provides methodological support, the supply of all sorts of medical devices and technical services on your devices.
www.humatem.org

GROUPE URD

Provides support on quality control and field expert report missions.
www.urd.org

BIOLOGIE SANS FRONTIÈRES

Provides methodological support, supplies of laboratory devices and technical services on them.
www.bsf.asso.fr

BIOPORT

Provides technical support with international logistics.
www.bioport.asso.free.fr

CAP SOLIDARITÉS

Provides assistance in setting up a project.
www.capsolidarites.asso.fr

ENTRAIDE BIOMÉDICALE

Provides imaging devices and technical services on this type of device.
www.entraide-biomedicale.org

MISSION AIR

Provides made-to-measure solutions for humanitarian transport needs.
www.mission-air.com

TRANSHUMA

For national and international road transport.
www.transhuma.org

RECOMMENDED READING

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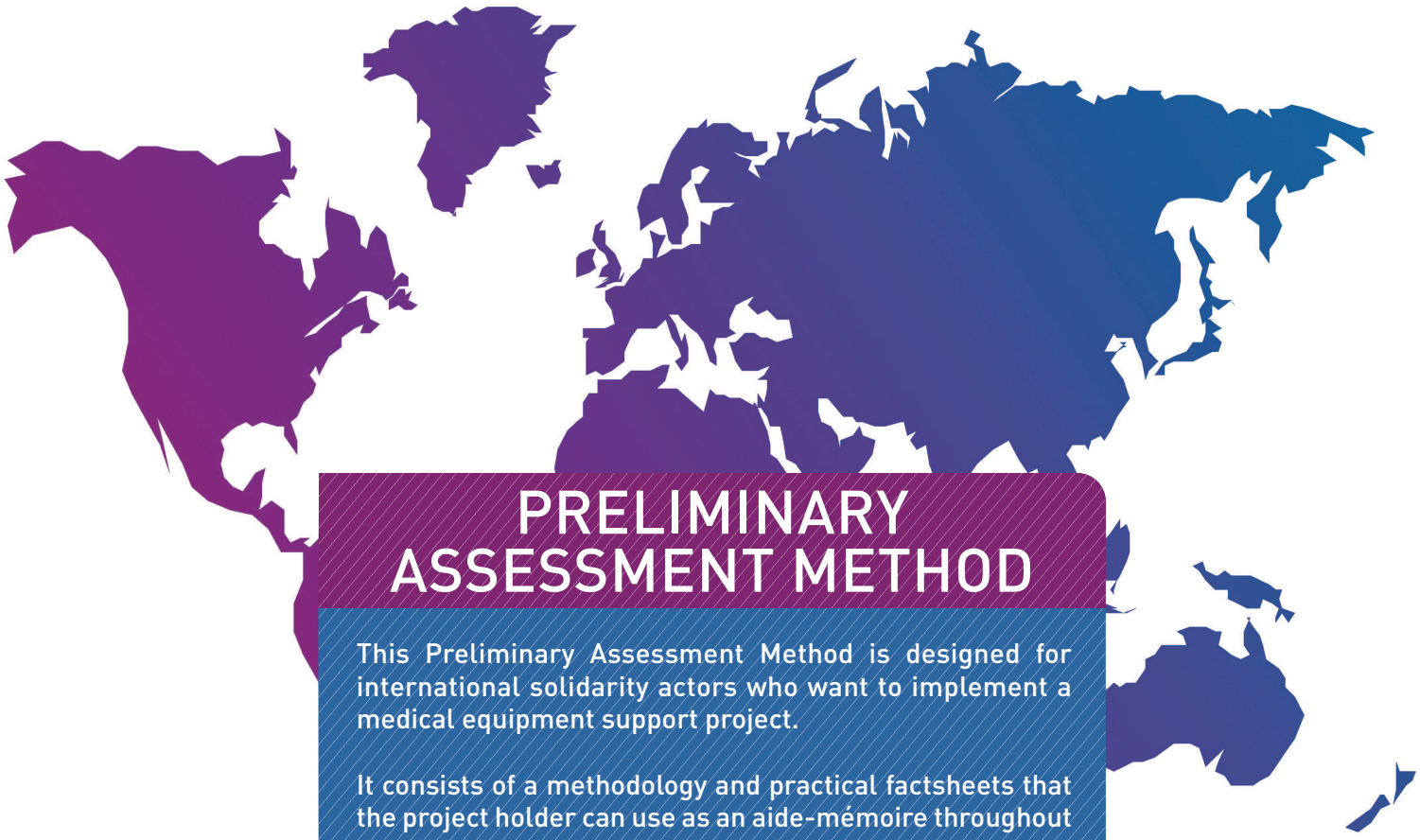

PRELIMINARY ASSESSMENT METHOD

This Preliminary Assessment Method is designed for international solidarity actors who want to implement a medical equipment support project.

It consists of a methodology and practical factsheets that the project holder can use as an aide-mémoire throughout the various phases of the preliminary assessment. It provides techniques on how to carry out an appraisal of the context, resources and expectations of the local health facility they wish to support and to think about their own ability to work with it.
In addition to the information the method suggests should be collected, it provides assistance on how to analyse it, and taking the decision on whether or not to commit to the project.

This document is part of a series of methods and tools designed to improve the quality of medical equipment support projects.

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