



Uganda Cancer Institute

EAST AFRICA ONCOLOGY INSTITUTE PROJECT

TERMS OF REFERENCE

FOR

THE BIO-MEDICAL ENGINEER

MAY 2016

TERMS OF REFERENCE FOR THE BIO-MEDICAL ENGINEERING TECHNICAL ASSISTANT

1.0 Background

The Government of the Republic of Uganda received a loan financing from the African Development Fund (ADF) towards Project for establishing the East Africa Oncology Institute at Uganda Cancer Institute, Mulago Kampala.

The overall objective of the project is addressing the crucial labour market shortages in highly skilled professional in oncology sciences and cancer management in Uganda and the EAC region in general. Component one of the project includes expansion and Improvement of the Infrastructure and Equipment at the Uganda Cancer Institute (UCI) as a centre of excellence in cancer research and management.

This will involve among others expansion of infrastructure at the UCI to provide required research laboratories, training facilities for post graduate and doctoral training, faculty and research scholar offices, conference facility, adequate ancillary spaces to enable the institution to offer state of the art training and provision of medical equipment for laboratories and training facilities

The Government now requires services of a Bio-Medical Engineer to offer Technical Assistance in planning, procurement and use of medical equipment and furniture for the project. The Biomedical Engineer will be a member of the Project Management Team for a designated period and will liaise with the National Advisory Committee on Medical Equipment to guide and oversee the procurement and installation of medical and hospital equipment, medical furniture, instruments and other goods required under the project.

These Terms of Reference (TOR) are for an Individual Consultant who will be engaged to provide the Bio-Medical Engineering Technical Assistance for Project.

2.0 Objective of the Assignment

The objective of the assignment of the Bio-Medical Engineer is to offer Technical Support to the Project in all areas of bio-medical engineering including medical equipment and furniture and telemedicine technologies. The assignment shall entail, but not limited to, preparation of documentation and bidding documents, development of specifications and supervision and monitoring of installed facilities.

3.0 Scope of Work

In accordance with the project objectives, the Bio-Medical Engineer shall undertake the following tasks:

Task 1: Identification of the medical Equipment and medical Furniture requirements

- a. Examine the building plans of the multipurpose building the standard medical equipment lists of Ministry of Health, and determine their medical equipment and medical furniture requirements. The lists to include a room by room distribution of medical equipment and medical furniture
- b. Study and refine the existing preliminary medical equipment and medical furniture requirement proposed for Uganda Cancer Institute, in liaison with the project technical sub-committee on medical equipment
- c. Define the installation constraints of equipment related to works

Task 2: Technical Support in the Tender Process and Installation for Medical Equipment

- a. Study the Ministry of Health Standard Specifications of Medical Equipment and Medical Furniture and develop updated specifications for the proposed medical equipment and medical furniture for the project
- b. Identify the basic equipment pre-installation works to be incorporated in the works (civil, electrical, mechanical) contracts
- c. Support the project management unit in evaluation and identification of suitable medical equipment suppliers
- d. Support the project management unit in examination of the architectural and technical studies/documents concerning the installation constraints of equipment's
- e. Support the project management unit in examination and analyse of equipment bids
- f. Supervise and certify installation and commissioning of medical equipment and medical furniture in liaison with the National Advisory Committee on medical Equipment
- g. Monitor performance of medical equipment and furniture within the warranty period

Task 3: Technical Support on Telemedicine

- a. Participate in the development of the appropriate Telemedicine technologies to be adopted on the project, in liaison with the Telemedicine Consultants and Project Stakeholders

4.0 Deliverables / Outputs of the Bio-Medical Engineer

The Biomedical Engineer will deliver the following:

1. The complete lists of medical equipment and medical furniture to be procured under the project
2. Technical specifications for all pieces of medical equipment and medical furniture
3. Schedule of particular equipment pre-installation works for specialised equipment
4. Equipment Installation completion reports and certification
5. Project completion report for medical equipment and medical furniture component
6. Developing Equipment maintenance management policy and Equipment Disposal policy

5.0 Qualifications and competences

The successful candidate should have the following minimum qualifications:

- a. At least an honours University degree in Bio-Medical Engineering or a University Degree in other fields of Engineering with a postgraduate diploma in Bio-Medical Engineering/ postgraduate diploma in project planning and management or its equivalent from a recognized University / Institution
- b. At least eight (8) years professional experience in preparation of medical equipment condition assessment and specifications for hospitals including installation, commissioning large scale maintenance networks of biomedical and hospital equipment
- c. Demonstrated knowledge in preparation of supply tender documents and Specifications for medical equipment and medical furniture is desirable.
- d. A high level of interpersonal, management skills, integrity and ability to work with complex teams
- e. Proven ability to work under pressure and meet tight deadlines with minimum supervision

- f. Strong written and oral communication skills in English, demonstrated ability of making effective presentations to diverse audiences.
- g. Computer literate and competent in the use of Microsoft Word and Excel.

6.0 Timeframe

The assignment shall be for a total duration of thirty (36) months the total duration of first phase of the project.

The assignment shall be spread over a period not exceeding thirty (36) months. The schedule shall depend on the construction schedules and delivery schedules by the equipment suppliers. Commencement of each phase shall be upon written instruction by the Project Coordinator.

7.0 Reporting

The Bio-Medical Engineer will report directly and administratively to the Project Coordinator. All reports prepared by the bio-medical Engineer shall therefore be submitted to the Project Coordinator. He / She will work in liaison with the National Advisory Committee on Medical Equipment, and with Project Technical Sub-Committees for Medical Equipment and for Telemedicine.

8.0 PAYMENT

The successful candidate shall be paid a competitive, negotiated and agreed monthly salary commensurate with qualification in accordance with the project financing provisions.