

**United Nations Children's Fund (UNICEF)
Phnom Penh, Cambodia
Vacancy N^o MNCHN/13/014**

Terms of Reference

Consultancy: Medical Technical Assistance

Closing Date: Friday 10 January 2014

1. Background and Purpose:

United Nations Children's Fund (UNICEF) has received a grant from Deutsche Gesellschaft für International Zusammenarbeit (GIZ) GmbH towards the project of 'Rights-based Family Planning and Maternal Health'. The objective of the Project is to contribute to the overall goal of the Cambodian health sector in improving maternal and child health through promoting both health facility and community based maternal and newborn care.

As part of the project, UNICEF has procured and delivered medical equipment and supplies to 3 different provinces, 8 operational districts, 14 health facilities. These supplies are aimed to contribute to the quality of services delivery as well as to the readiness to handle obstetric emergency.

The equipment support covered the health centers and referral hospitals in **Kampot, Kampong Thom and Kep**.

As part of the project, UNICEF is now requested to commission the medical equipment in respective centers. Hence, UNICEF is seeking the services of a Technician / Bio-Medical Engineer to offer commissioning assistance for installing, assembling, repairing (if deemed necessary) and delivering training on the use of medical equipment provided to the health facilities.

These Terms of Reference (ToR) are for an Individual Consultant or a team of Consultants who will be engaged to provide the technical assistance for Project.

2. Work Assignments/TOR:

In accordance with the project objectives, the Technician shall undertake the tasks detailed below for the medical equipment, which includes, but not limited to *electrical steam sterilizers, surgical suction pumps, portable patient monitors, infusion pumps, oxygen concentrators, portable ultrasound scanners, phototherapy units etc.*

Task 1: Verification of delivered quantities and working order

- Identify delivered medical equipment in 14 different health centers.
- Check all documentation (such as manuals, instructions for installation, cleaning and care) is enclosed or available.
- Examine and ensure that delivered medical equipment is in good condition and where relevant, in good working order. This may include performing :
 - Visual inspection

- Functional check
- Electrical Safety test (where necessary)
- Calibration and measurement (where necessary)

Task 2: Installation / Mechanical assembly of medical equipment

- Check procedures required during the pre-commissioning and commissioning of all medical equipment. Assembly and installation should be carried out by following the manufacturer's instructions in the operator or service manual, or by watching any video provided by the manufacturer.
- Check the adequacy of the health centers' facility and define the installation constraints of equipment related to works (stability of electricity supply, voltage / plugs etc)
- Undertake the work required to provide electrical requirements (as necessary, for e.g. a new transformer, special circuit breaker, special socket outlet, an electrical circuit with sufficient capacity, etc)
- Ensure the electricity installation is safe, by undertaking an exercise to ensure that all relevant electrical installations are properly grounded and tested
- Recommend, justify and administer the incidental purchases / orders / repairs after securing the UNICEF's verification and approval, thus ensuring that all the technical aspects of installation process is in place
- Perform the installation and assembly of medical equipment in liaison with the user staff of the health centers who observe and learn from the installation and commissioning work
- Commission a series of tests and adjustments to check whether new equipment is functioning correctly and safely, and ensure that any necessary adjustments are made, before the equipment is used.

Task 3: Training

- Arrange and provide on site training sessions to Doctors / Technicians / Staff on the use of medical equipment in local language (Khmer) in all 3 provinces, 8 operational districts, 14 health centers.
- Give general guidance on maintenance, ensuring all maintenance requirements are captured in the maintenance manual e.g. replacement parts for any mechanical or electrical installations.
- Prepare visual aids and training materials (hand-outs) for the trainees
- Ensure that the required staff have a full knowledge on the use of the equipment, which can include
 - good practice when handling the equipment
 - basic 'dos and don'ts'
 - how to operate the equipment (along with familiarization with the symbols and markings on the machine)
 - the correct application of the equipment
 - care, cleaning, and decontamination
 - safety procedures
 - planned preventive maintenance (PPM) for users
 - PPM and repair for maintainers.

- Prepare acceptance certificate, signed off and endorsed by the end users
- Issue to UNICEF the required certificate of completion upon satisfactory commissioning of all equipment.

Methodology:

The consultant is envisaged to work full time in three provinces (Kampot, Kamponth Thom and Kep). Travel time to and within the provinces is expected to take 3-4 days of consultant's time, resulting in the total duration of the assignment of approximately 14 days. Specific details of the methodology will be discussed with the consultant, but the plan needs to sufficiently address the topics mentioned above.

Outputs:

- Assembled / installed and ready-to-use medical equipment in all 14 health centers, 8 operational districts, 3 provinces
- User trainings in Khmer language performed for all the relevant health practitioners in all 14 health centers. If necessary, a technician may involve the services of a translator. It will be a sole responsibility of the technician, however, to verify the technical capacity / technical knowledge of the translator to ensure the adequacy of translation services.
- Maintenance and Operations Manual in Khmer language prepared and distributed for all medical equipment;
- Improved capacity through a quality training, the utilization of modern equipment and technology and the assimilation of international best practices in training.
- While representing UNICEF, liaison with all health centers to ensure fully functional equipment which meets all national infrastructural development requirements
- Issuance to UNICEF final certificate of installation completion upon satisfactory commissioning of all equipment, signed of / endorsed by all 14 health centers
- Issuance to UNICEF final report documenting the process, identifying successes and challenges experienced

3. Qualifications or Specialized Knowledge/Experience Required:

- University degree in engineering (preferably bio-medical), and/or relevant training in health care technology
- 3 or more years of relevant work experience in equipment management including installation, commissioning and maintenance of medical equipment for hospitals or health care centers
- Demonstrated past experience with similar projects.
- Fluency in written and verbal English, and working knowledge of Khmer preferred. As an option, use of a translator can be arranged by the consultant to deliver training in Khmer.
- Strong communication, presentation and facilitation skills;
- Computer literate and competent in the use of Microsoft Word and Excel and Powerpoint.

4. Estimated Duration of Contract (Dates and period):

The assignment shall spread over the period of 14 days with the intended commencement date of this contract – end of January – beginning of February 2014 (negotiable).

5. Work Schedule:

Detailed work plan to be developed in consultation with supervisor.

6. Deliverables with due date:

Exact deliverables and due dates to be developed with consultant, based on the detailed work plan.

7. Payment Schedule (Please link to deliverables to the extent possible):

Payment of fee to the consultant under this consultancy contract is subject to the consultant's full and complete performance of his/her obligations under his/her contract and UNICEF's certification to that effect.

8. Official Travel Involved:

Travel to the provinces is required for this assignment and transport should be arranged by the consultant independently from UNICEF.

9. Contract Supervisor:

The consultant will report to the Chief of Supply and Procurement and work in cooperation with the UNICEF Supply Team members.

10. Type of Supervision that will be Provided:

Face-to-face meetings and consultations and email communication as needed for feedback, updates and guidance

11. Consultant's Work Place/Any facilities to be provided by office:

For the required time, consultant will be expected to work from home, except for the days spent at the health centers and make use of its own IT equipment as required.

12. Nature of 'Penalty Clause' to be Stipulated in Contract:

Payment of fee to the consultant under this consultancy contract is subject to the consultant's full and complete performance of his / her obligations under his/her contract with regard to such payment to UNICEF's satisfaction, and UNICEF's certification to that effect.

13. Evaluation Criteria

A two stage procedure shall be utilized in evaluating proposals, with evaluation of the technical proposal being completed prior to any price proposal being compared.

Applications shall therefore contain the following required documentation:

1. Technical Proposal: Containing a proposal detailing the implementation process and methodology, updated CV and Personal History Form (P11), and performance assessment/references of work performed earlier by the consultant.
2. Financial Proposal: Lump-sum offer with the cost breakdown: Consultancy fee, and any other relevant costs.

The consultancy would be best suited for applicants residing in Phnom Penh or its vicinity with the projected travel to the provinces. Transport and travel should be arranged by the consultant independently from UNICEF.

No financial information should be contained in the technical proposal.

For evaluation and selection method, the Cumulative Analysis Method (weight combined score method) shall be used for this recruitment:

a) Technical Qualification (max. 70 points)

- Completeness and quality of response: concept note, CV, P11, relevant evaluations (5 points)
- Qualifications: degrees, training, skills, knowledge (15 points)
- Experience: range and depth of experience with similar projects (20 points)
- Proposed implementation process and methodology (30 points)

b) Financial Proposal (max. 30 points)

The maximum number of points shall be allotted to the lowest Financial Proposal that is opened /evaluated and compared among those technical qualified candidates who have attained a minimum 50 points score in the technical evaluation. Other Financial Proposals will receive points in inverse proportion to the lowest price.

The Contract shall be awarded to candidate obtaining the highest combined technical and financial scores, subject to the satisfactory result of a verification interview.