

# **Request for Proposals**

for

**Consultancy Services for** 

Creating a program document on upgrading the hydro-meteorological network and database for small-scale hydro power in Guinea and Sierra Leone





# REQUEST FOR PROPOSALS

Countries: Guinea, Sierra Leone

Program Name: ECOWAS Small-Scale Hydropower Program

Project Name: Upgrading the hydro-meteorological network and

database for small-scale hydro power

Title of Consulting Services: Creating a program document on upgrading the

hydro-meteorological network and database for small-scale hydro power in Guinea and Sierra Leone



# 1 GENERAL DESCRIPTION

#### 1.1 Client

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE): ECREEE as specialised ECOWAS agency develops the market for renewable energy and energy efficiency in the 15 ECOWAS countries. The Centre ECREEE is based in Praia, Cabo Verde.

## 1.2 Scope of procurement

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) intends to develop a 3 year program document on upgrading the hydro-meteorological network and database for small-scale hydro power in Guinea and Sierra Leone.

In the frame of the ECOWAS Small-Scale Hydro Power Program ECREEE plans to contract an individual or a company to provide the services described in the enclosed Terms of Reference (ToR).

Deadline for submission is: 5:00pm (UTC-1), 20 of November, 2015

This call is open for submissions to consultants and companies with strong experience in building hydro-meteorological network and database for small-scale hydro power. Detailed requirements see in ToR.

The call is supported and funded by Austria (ADA) and Spain (AECID).

#### 1.3 Period of contract

The contract period shall be 3.5 months (tentatively). If well justified an extension can be decided by ECREEE up to a total duration of 4.5 months.

### 1.4 Announcement

Link to the call ECREEE Website: <a href="http://www.ecreee.org/node/85164">http://www.ecreee.org/node/85164</a>



# 2 Competition Rules

# 2.1 Secrecy

The Client shall treat all bids and their contents in line with ECREEE General Conditions of Contract.

### 2.2 Communication during the tender process

All communication during the process shall be sent to <a href="mailto:hbauer@ecreee.org">hbauer@ecreee.org</a>

Requests received later than 5 <u>working days</u> prior to the deadline for the offer will not be answered.

## 2.3 Cancellation of competition

The Client may cancel the competition and reject all bids if adequate reasons are found to be existent.

# 3 Qualification requirements

Requirement	Supporting documentation	
Certificate of Incorporation	The Contractor should be registered as a legal Entity authorized to	
	enter into contracts for provision of services and goods. As a proof,	
	the Contractor should provide a certified copy of Certificate of	
	Incorporation or other documents setting forth the legal basis of the	
	company.	

# 4 Profile of the Expert/s: Experience and Qualifications

The consultant or at least one of the consultant's team should meet the following requirements:

- PhD or Master's degree or equivalent in hydrology or hydropower related subjects
- At least 10 years of job experience in the field of hydrology and hydrometrics of which at least 6 are at international level.
- Minimum 4 years of experience in managing programs in hydrology and strengthening the operation of hydrological services in African countries.
- Knowledge and expertise in analysis of hydrological information for hydropower planning and design



- Strong proof record in training and capacity building
- Proficiency in reading, speaking and writing English (French will be an added value)

### 5 Award criteria

### 5.1 General

The tender offering the most advantageous proposal will be selected, and the selection will be based on the criteria in this section.

Proposals will be ranked according to their combined technical ( $S_T$ ) and financial ( $S_F$ ) scores, calculated by the formula:  $S = S_T \cdot t + S_F \cdot f$ , where the t is 0.80 and f is 0.20

#### 5.2 Technical Criteria

The technical score  $S_T$  shall be the weighted sum of the scores for:

- Appropriateness of the consultants understanding of the assignment, quality of methodology and work plan (weight 0.30)
  - The evaluation will focus on the appropriateness of the consultant's
    appreciation of the tasks involved and the purpose of the assignment as
    described in the Terms of Reference (ToR). Relevant, clear, specific
    comments to ToR, backed by evidence from the ground are thus likely to
    be rewarded.
  - The evaluation will focus on the completeness of the Proposal with regard to the Terms of Reference, the adequacy of proposed approach, effectiveness of suggested methods, potential for effective coordination with the ECREEE and potential for transfer of capabilities. The consistency of the proposed work plan with the resources suggested will be assessed, as will the measures proposed for quality assurance of the work produced.
- Qualifications of personnel offered (weight 0.70)
  - The evaluation will focus on the staff proposed having thorough and relevant experience for their respective tasks, particularly experience from assessment and implementation of hydrometric network in Africa, personal experience from hydropower projects, capacity building experience, relevant language skills etc. In the case where teams are



offered, the score will be the weighted average of the team members, using time planned for work on the project as weight.

Technical criteria will be scored on an absolute, and not relative, basis. All categories will be scored on a scale from 0 to 10, ten being best.

When sub-criteria are used, the same weighting methodology will be used as for main criteria.

#### 5.4 Financial Criterion

The financial scores of the proposals will be computed as follows:  $S_F = 10 \cdot P_L/P$ , where  $P_L$  = the lowest offered price and P = the price offered in the Financial Proposal in question. This criterion is thus weighted on a relative basis. All prices will be converted in the common currency EUR.

For the evaluation of the best financial offer the following costs will be considered:

- Personnel Costs: budget table according to the expert diagram (showing the individual daily fees of the experts in Euro; inclusive of all taxes, duties, contract tax, service tax, VAT etc.)
- Travel costs according to the suggested methodology
- Other costs (telephone, printing, translation etc.)

### 6 PROCEDURES FOR SUBMISSION OF PROPOSALS

All proposals shall be submitted by email not later than 5:00pm (UTC-1), 20 of November, 2015 to: <a href="https://doi.org/10.1007/jba.200

A proposal shall:

- 1. be in writing and it shall include a signed and dated cover letter
- 2. will include related documents and information in English

A cover letter for the proposal dated and signed by an authorised person. The cover letter shall state the validity of the proposal and it should include:

- Name(s)
- Type of company / organization
- Official registration number (if relevant), or personal identification number



- Street and Postal address
- Telephone, and e-mail address
- Contact person
- Any deviations or conditions related to these terms should be explicitly stated. Reservations not included in the cover letter will not be accepted.

If the letter is signed by a person other than the one(s) authorised according to company legislation in the supplier country, the proposal shall include a power of attorney.

The proposal will include following documents:

- 1. Documentation of Academic qualifications and professional experiences of team members.
- 2. Comments to ToR if any (Maximum 2 A4-pages)
- 3. Methodology and work plan, including time and manning schedules. (Maximum 6 A4 pages)
- 4. Presentations of the proposed personnel. The presentation shall state the personmonths planned for him/her. (Maximum 2 pages)
- 5. CVs of the proposed expert(s). (Maximum CV length strictly 4 A4-pages only)
- 6. Financial proposal. The price shall be quoted in EURO exclusive of VAT. Fee rates shall be given for all personnel (daily rate, assuming 8h per day). Tables presenting the total cost for fees, including a breakdown on tasks and persons, and the total cost for reimbursable expenses, including a detailed breakdown on tasks, shall be included.

# 7 Location of Technical Services and Missions

The consultancy will be based in home office with two field missions to Guinea and Sierra Leone. The consultant shall be prepared to additionally undertake a final travel to meet ECREEE staff.

# 8 Language of Work

The language will be English with ECREEE and with relevant institutions of Sierra Leone and French with those from Guinea. The mission reports shall be formulated in English, as well as the draft program documents for both countries. For national validation the Guinea program document needs to be translated into French.

The day to day working language with the project team is English.



# 9 Duration of consultancy

Please see details in ToR.

The minimal mission duration shall be justified according to the necessary and planned stocktaking activities, visits and meetings. The mission flights shall be planned as efficient and cheap as possible under reasonable conditions. Only economy class tickets will be refunded.

# 10 Terms of payment

Payments will be made in accordance with the table below:

Upon signature of contract	50%
Upon approval of the final report	50%

### 11 Other Provisions

- The proposal should clearly indicate the proposed approach and methodology and include a work plan (e.g. through a Gantt chart).
- The travel and accommodation cost estimations associated with the missions will be included in the financial proposal.
- The consultant is expected to participate in a briefing and debriefing meetings with ECREEE during the project (via skype or phone).
- Funding from ECREEE should be acknowledged in relevant project-related documents and publicity (consult with ECREEE concerning issues and use of logos and corporate design).
- The contractor will provide ECREEE with short publishable reports suitable for the ECREEE website (selection, length and layout to be agreed with ECREEE).
- The final report layout will be agreed with ECREEE.

For further information on ECREEE and the programs and units, visit the ECREEE website www.ecreee.org





# /TERMS OF REFERENCE/

For creating a program document on upgrading the hydrometeorological network and database for small-scale hydro power, in Guinea and Sierra Leone

Job Title: International Consultant

Languages required: excellent skills in English

Starting Date: November 2015

**Expected Duration of Assignment: 3.5 months** 

**Duty station**: Home based with stocktaking mission to the two selected ECOWAS

Countries

# 1. COUNTRY / REGION

Two selected Countries with very high small-scale hydro power potential in West Africa and bad hydrometric data situation: Guinea and Sierra Leone

# 2. BACKGROUND

The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) intends to develop a program document on upgrading the hydro-meteorological network and database for small-scale hydro power (SS HP) in Guinea and Sierra Leone.

The program documents shall cover the period of 3 years in the two selected ECOWAS countries with high small-scale hydro power (SS HP) potential. In ECOWAS region small-scale is defined as pico, micro, mini and small hydropower up to 30 MW.



Liberia, also offering a high small-scale hydropower potential and lacking of hydrometric data, is not considered in this exercise because of the ongoing successful similar project, funded by Government of Norway. In 2011, the Norwegian Water Resources and Energy Directorate in collaboration with the Liberian Ministry of Lands, Mines and Energy started the process of capacity building in Liberian Hydrological Service and carried out the upgrade of Liberian hydro-meteorological network. The first phase of the project will end in 2016.

The ECOWAS region is characterized by one of the lowest access rates to modern energy services, thereby inhibiting prospects of developing economic activities, providing basic social services and fighting poverty. The region, with more than 300 million inhabitants equivalent to about one third of Africa's total population, has one of the lowest modern energy consumption rates in the world with an average electricity consumption of 88 kWh/capita compared to global average 2596 kWh/capita. Household access to electricity across the region is about 20%, but differences exist between the access rates in urban areas that average at 40% while rates in rural areas range between 6% and 8%. Therefore, the ECOWAS countries are facing simultaneously the interrelated challenges of energy access, energy security and climate change.

In 2012 the ECOWAS ministries of energy approved the ECOWAS small-scale hydropower program which was developed by ECREEE and UNIDO. In July 2013, the 43<sup>rd</sup> Ordinary Session of the ECOWAS Authority of Heads of State and Government renewed its commitment to the provision of access to sustainable energy services in West Africa by adopting the ECOWAS Renewable Energy Policy (EREP) as well as the ECOWAS Energy Efficiency Policy (EEEP). The political targets of EREP by 2020 and 2030 aims at developing the SS HP sector in countries with high SS HP potential.

Hydrometric data are essential for development of the SS HP sector. In many West African countries basic hydrological data are lacking, operative hydrometric networks are missing or they are in state of decline and it is difficult to assess potential mini and micro hydropower resources. In some countries available hydrometric data were lost during conflict situation or because of missing documentation awareness. Generally, the access to hydrological data and the quality of hydrometric networks in ECOWAS region are not adequate to address the needs of the development of the SS HP sector.

This activity responds to the need for upgrading of hydrometric networks and necessary hydrometric training as starting point to develop smalls-scale HP sector in Guinea and in Sierra Leone.



### 3. OBJECTIVE OF THE CONSULTANCY

The **overall objective** of the program to be developed is to develop the sector of small-scale hydro power by reducing the barriers of lacking capacities and networks for hydrological and meteorological data.

The **specific objectives** of the consultancy is to:

- I. To carry out rapid review of relevant literature related to small scale hydropower potential, hydropower development and operational hydrology in ECOWAS region with the main focus on situation in Guinea and Sierra Leone.
- II. To carry out field reconnaissance to collect baseline data and information and thereafter together with the ECREEE team to consolidate the overall analysis of the situation, resources, problems, development and training needs for hydrological data collection in the context of SSHP development in Guinea and Sierra Leone.
- III. To create a program document for the selected countries on creating / upgrading the hydro-meteorological network and database that would serve the needs of small-scale hydro power including the necessary capacity building of local stakeholders.

### 4. TASK AND MODE OF WORK

### 4.1 Task 1, Inception Phase

The contractor will suggest an efficient and cost-effective methodology and approach to this process.

The consultant will conduct a rapid review of relevant literature related to small scale hydropower potential, hydropower development and operational hydrology: This review will include (but not be limited to) the following key sources:

- Baseline Report on existing and potential small-scale hydropower systems in the ECOWAS region, ECREEE, 2012
- ECOWAS small-scale hydropower program document, ECREEE, 2012
- World Small Hydropower Development Report 2013, 2013 © UNIDO and ICSHP
- Key hydro-meteorological data from sources as the GRDC, RBA and from the running ECREEE project on GIS HP resource mapping
- Answered Hydrometric questionnaires from ECREEE filled by national hydrological institutions
- Answered questionnaires on lessons learned of operative SS HP plants



The Consultant will prepare the Inception Report which will outline:

- Preliminary findings of the literature review
- Recommendations out of the existing Terms of Reference and the methodology for the rest of the project
- Proposed changes (if any), the scope of work and work plan
- Initially identified stakeholders related to the Program in the respective countries
- A draft mission plan and schedule with planned visits of selected stakeholders in the 2 countries in collaboration with ECREEE and the countries

The Draft Inception Report will be reviewed by the ECREEE project team. The Client's comments and recommendations will be forwarded to the Consultant. The Client will organize telephone conference to discuss and to agree with the Consultant on the proposed field mission plan, evaluation methods, stakeholders to be meet during the mission.

The outcomes of the telephone conference call will be documented and fed into the final version of the Inception Report. Two weeks after the phone call with ECREEE the consultant will elaborate the final version of the Inception Report and the field mission plan to ECREEE.

### 4.2 Task 2, Field reconnaissance and assessment

The Consultant shall visit Guinea and Sierra Leone in order to gather baseline data which will be used in the development process of the Program Document for upgrading hydrometeorological network and database for small-scale hydro power. Tentatively, the Consultant will stay in each country for at least five working days.

It is proposed that following activities and task will be carried out:

- Identify role/functions of stakeholders, responsible ministries, authorities (national hydrological services and institutes, RBA), training institutions
- Determine how national hydrological data are collected, processed, analysed, stored, retrieved, and used
- To the extent possible, determine and describe the difficulties encountered in the process of collecting hydrological data and making it available for decision-making by national agencies
- Identify specific constraints to sustainable operation and maintenance of existing national hydrological mentoring systems,



- Identify the gaps and requirements for hydrological data acquisition operation, maintenance and financing and determine whether constraints are related to organizational structure, budget, or technical skills
- Determine what specific skills training is necessary for operating and maintaining the hydrological monitoring system in each country,
- Determine availability local human resources suitable for trainings or hydrometric support
- Identify national and regional organizations with the capacity to provide training required for sustainable operation and maintenance of national hydrological monitoring systems;
- Evaluate awareness of stakeholders in the individual countries about the need for upgrading hydro-meteorological network
- Identify national water resources and hydropower programs and financial support
  ongoing in the countries regarding data gathering in the frame of a hydrometeorological network for the purpose of SSHP.
- Motivate responsible stakeholders to get filled the ECREEE questionnaires
  - on technical, organisational, and structural lessons and experiences on operative SS HP plants by the relevant stakeholders
  - o n hydrometric situation

The Consultant will prepare the mission report, present it to ECREEE and add remarks and conclusions of ECREEE. The consultant and ECREEE will discuss the results and conclusion from the mission and the appropriate design of the hydrometric training and measurement program in a phone conference. The consultant will include these conclusions and requirements in the mission report, which is one basic document for development of the program document, see below.

### 4.3 Task 3, Development of Program Document

In cooperation with the Client, the Consultant shall prepare a Programme Document and Work Plan for a 3 year lasting Program on upgrading the hydro-meteorological network and database for small-scale hydro power, in Guinea and Sierra Leone. The programme preparation shall be guided by the review and analysis of the relevant information gathered during the field mission. Tentatively the Program Document shall include at a minimum, the following

 Assessment of technical, human and financial resources that are required for the program for each country and of potential risks, assumptions and sustainability factors over the period of 3 years



- Minimum hydrometric network setup that could address the hydrological data needs of the SS HP sector in two countries including selected locations with high SS HP potential
- Evaluation of institutional setup for these networks
- Specification of necessary minimum equipment needed for upgrading hydrometeorological networks and hydrometric training
- Assessment of training needs and a training action plan for the hydrological monitoring system including required training mode, proposed manuals and slides, proposed trainees, and training institutions
- Specification of hydrological data awareness raising activities for administration and necessary authorities

#### 4.4 General Timeline and deliverables

Unless otherwise stated in the below, all reports shall be submitted in draft form for review by the Client and his representatives. After receipt of comments from the Client the Consultant shall prepare and submit a final edition of each report. It should be noted that the timings of deliverables stated in the following are indicative.

Activity	Deliverable	Weeks from the
		consultancy start
Inception Phase	Draft Inception Report	2
Comments of the ECREEE team		3
Telephone Conference		4
Finalization of Inception Report	Final Inception Report and	5
	Field Mission plan	
Field Mission		6 - 8
Field Mission Report and Client	Field Mission Report in English	9
comments		
Preparation of Draft Program Document	Draft Program Documents in	10 -13
	English	
Telephone Conference on PD and	Improved Draft Program	14-15
Comments of the ECREEE team and	Document in English	
validation of PD by national relevant	Translation of Guinea PD to	
stakeholders	French	
Final and validated Program Document	Final Program Document	16
TOTAL		16 weeks



## 5. COORDINATION AND REPORTING

The expert will work closely and directly report to the certification team based at ECREEE.

Responsible project officers are:

Mr Hannes Bauer: Project ManagerMr Daniel Paco: Project Officer

ECREEE will use and share its contacts to further stakeholders to get a broad picture in the stocktaking and identification process. The above mentioned experts will support strongly in providing the contacts for stocktaking and identification processes - and if necessary catalysing those processes - and assess the planned steps and recommendations elaborated by the consultant. The consultant is also expected to use experience from setting up previous certification schemes to define a methodology for reaching stakeholders in the ECOWAS region.