

# CONSULTANCY SERVICE FOR TECHNICAL SPECIALIST TO DEVELOP DESIGN, SIZING OF SPVs AND SUPERVISE THE INSTALLATION FOR SOS CV SOMALIA OFFICES.

SOS-Kinderdorf International, also known as "SOS Children's Villages International – SOS CVI" is an association duly registered under the laws of Austria, with registration number (ZVR-Zahl) 083115702, with its Head Quarter office at Hermann-Gmeiner-Straße 51, 6020 Innsbruck, Austria. SOS CVI is a Global Federation of National and Member Associations working in 137 countries and territories with focus to provide alternative care for children who have lost parental care, or at risk of losing. SOS Children's Villages in Somalia is a Member Association of the Global Federation which has officially been working in Somalia since 1985. SOS Children's Villages concept, the organization pioneered a family approach to the long-term care of orphaned and abandoned children in Somalia. SOS has a zero-tolerance policy on child safeguarding and prevention of sexual harassment and exploitation at workplace. SOS Children's Villages in Somalia current works in three federal states and the capital city; Banadir Regions (Heliwa, Garasbaley,Kahda, Dharkenley and Daynile districts) southwest-state (Bay and Bakool regions) Hirshabelle State (Middle-Shabelle region).

When civil war broke out in 1990, SOS CV Somalia started a major medical emergency response and relief programme. The Hermann Gmeiner School was converted into an emergency hospital and the mother and child clinic became part of the emergency relief programme. Today, SOS provides health and nutrition services in five regions of Somalia, including the Bay, Bakol, Benadir, Lower Shabelle, and Middle Shabelle regions.

#### Period of Consultancy

The assignment will be 90 days with weekly visits to project site with Mogadishu.

**Consultancy Type Required** 

Individual

# Responsibility for Logistics Arrangement and Costs.

SOS Children's Villages Somalia will pay the consultant fee in lumpsum amount and will not reimburse any incurred costs during the assignment. The consultant will cover their own logistical arrangements and costs.

### **Taxations Provisions**

Consultant shall be responsible for all taxes arising from the consultancy in line with local tax regulations application in Somalia.

#### Security Requirements





Consultant will comply with standard of SOS CVS security procedures.

# Purpose of the assignment

The main purpose of the consultancy assignment is to supervise and guide the solarization of 3 office sites in Mogadishu. Under the supervision of a selected team, the Individual Consultant will be responsible for designing solar project documentation, supervising the installation of the solar systems in the national office in Zoobe, Village and Hospital in Hiliwa. This includes quality assurance of equipment e.g. through the establishment and enforcement of national and international product standards in accordance with SOS CVS's Core Commitment for Children.

# Scope of Work and Responsibilities

SOS Children's Villages Somalia is working on carbon emission reduction and thus the organization is planning to reduce dependency on the grid electricity and introduce Solar PV systems in 3 offices in Mogadishu. The Consultant will work from home with frequent weekly visits to installation sites.

The scope of work for the assignment includes but not limited to the following tasks:

- I. **Site Assessment:** Carry out site screening, initial layout design, basic grid connection design, selection of critical equipment. This includes revalidating the solar resource potential, site mapping and digitalization whilst exploring space options for the plant. Identify potential solar and BESS energy assets for the project.
- **II. Technical Designs:** Based on the site, demand and resource assessment. The engineer is expected to design a hybrid mini-grid system (solar and grid electricity) that meets SOSCVS investment cap requirements. The system should be designed for scalability.
  - a. Design the best generation option and sizing of the various components of the system, including solar plant and grid connection.
  - b. Develop detailed engineering design and drawings (of power generation), including the bill of quantities (BOQs) and costs.
  - c. Prepare descriptions/specifications of all key equipment for the solar power plant (Solar PV and grid connection associated integrations).
- III. **Monitoring and technical support:** The consultant will monitor ongoing activities of the project and provide technical support during the implementation.
- IV. **Site Commissioning:** Ensure site is commissioned as per the term of reference and provide a final report detailing all achieved deliverables.

# Reporting

To whom will the consultant report (supervisory and any other reporting/communication lines):

• Designated personnel (Director of Operations)





# What type of reporting will be expected from the consultant and in what format/style **will the** submissions of reports/outputs be done:

• Weekly/Monthly monitoring reports on the progress and final report

## How will consultant consult and deliver work and when will reporting be done:

• The individual consultant shall deliver the works through field monitoring visits, weekly updates, monthly reports and final contract completion report.

## **Expected Deliverables**

In alignment with the scope of work as described above, the consultant will be expected to perform the following activities and deliverables as per the schedule and estimated dates below:

Task/Milestone	Deliverable/ Outcome (e.g. Inception, progress, final reports, training material, workshop, etc.)	Estimat ed # of days	Planned Completion date
Solar Photovoltaic (PV) site assessments to determine the system load demand for NO, AC and MED facilities	Progress report	7	20th June 2024
Optimal Solar PV system design for NO, AC and MED facilities in accordance with both local and international standards for solar systems	Progress report	7	27th June 2024
Development of solar TOR	Progress report	7	4th July 2024
Evaluation of Bidders Response		7	11 July 2024
Supervision of installation of the PV system and quality assurance and to supervise the installation of electricity distribution network in NO, AC and MED	Progress report	30	11th Aug 2024
Commissioning of solar systems in	Progress report	20	31st Aug





NO, AC and MED facilities to ensure that the contractors fully comply with standards and adhere to BOQ			2024
Preventive and corrective maintenance and technical inspection of solar PV systems for NO, AC and MED	Progress report and Final Report	7	7th Sept 2024
Final hand over for 3 solar PV systems		7	14th Sept 2024

However, as the actual starting date may impact the dates estimated in the TOR, a detailed workplan with exact timeframes and actual delivery dates will be jointly agreed upon between the consultant/ individual contractor and the supervisor upon contract signature.

## **Performance Indicators for Evaluation of Results**

The performance of work will be evaluated based on the following indicators:

- Completion of tasks specified in TOR
- Compliance with the established deadlines for submission of deliverables
- Quality of work
- Demonstration of high standards in cooperation and communication with SOS CVS and company implementing the project.

#### Time Frame

The consultancy work will last approximately 90 days effective from the date the contract is signed.

#### **Terms and Conditions**

#### Payment Scheme:

Responsible for preparing the tender documents of the upcoming procurement process.
 Payment: 25%
 Due date: to be discuss later





- Facilitate and provide technical inputs to the Final Evaluation process and submit the final report of the evaluation.
  - Payment: 25%
  - Due date: to be discuss later
- Undertake inspection of the goods and coordinate with the partners for effective O&M of the system.
  - Payment: 25%
  - Due date: to be discuss later
- Undertake inspection of the implemented PV Solar system and Commissioning.
  Payment: 25%
  Due date: to be discuss later

## Time and Method of payment:

- Payment shall be provided upon satisfactory completion of the deliverables outlined in the table above. Payment requests submitted by the Consultant must be certified by the supervisor(s)
- Payments are to be made within 30 days from receipt of invoice.
- For each payment a certification of payment needs to be signed and approved by the direct supervisor attached to it explaining the accomplishment of the tasks

#### Key Performance Indicators during implementation of Services:

Overall, the Consultant's performance will be evaluated based on the following key criteria:

- Planning and Organizing skill: Identifies priority activities and assignments; allocates appropriate amount of time and resources for completing work; Foresees risks and allows for contingencies when planning; Monitors and adjusts plans and actions as necessary; Uses time efficiently.
- Communication skill: Speaks and writes clearly and effectively; Listens to others, correctly interprets messages from others and responds appropriately; Asks questions to clarify and exhibits interest in having two-way communication; Tailors language, tone, style and format to match the audience; Demonstrates openness in sharing information and keeping people informed.
- Client Orientation skill: Considers all those to whom services are provided to be "clients" and seeks to see things from clients' point of view; Establishes and maintains productive partnerships with clients by gaining their trust and respect; Meets timeline for delivery of product or services to client.
- Quality of deliveries: Professional skill required for delivering outputs will be assessed.
- Satisfactory and timely completion of tasks and submission of the deliverables within the provision of above explained deliverables and outputs.

Renumeration





The consultant selected will be hired under a lump-sum contract, where all costs are included.

# Desired Competencies, Technical Background & Experience

## Academic Qualification

• Electrical, Renewable Energy, Electrical & Electronics Engineering or relevant training in engineering, preferably with a graduate degree

# Work Experience:

- Minimum of 5 years of commercial PV system installation and design, permitting, construction, commissioning and operation and maintenance of solar systems.
- Familiarity with the key characteristics of implementing solar PV installations, including grid connected, off-grid, and hybrid installations with and without battery storage
- Detailed design, and implementation of solar projects and relevant experience in renewable energy project development (preferably photovoltaics) for at least 2 comparable projects in the past five years.
- Demonstrated extensive knowledge of international best practices in solar power generation project planning, investment cost estimating, operations, and maintenance is critical.
- Carried out site assessments and performed cost-benefit analyses for solar energy for projects for at least 2 projects done in the past five years.
- Experience in providing technical support to energy-related projects with accountability for project performance and design.
- Experience in supervision and inspection of solar projects
- Experience in value engineering of photovoltaic or other constructions projects

# Technical Skills and Knowledge:

- Strong knowledge of photovoltaic system installation and design including optimizing system components for energy production
- Good working knowledge of standard solar utility process for interconnection approval and design requirements
- Strong knowledge of solar electrical and structural design components and manufacturers
- Strong Knowledge in both local and international standards for solar photovoltaic systems
- Strong knowledge in supervising and inspecting solar projects

# **Competencies:**

- Good analytical, conceptual and writing skills
- Strong facilitation and coordination skills, including participatory group discussion
- Strong communication, advocacy and negotiation skills





#### Languages:

Fluency in English (verbal and written) is required, as well the local language (Somali).

Expressions of interest should include **TECHNICAL SPECIALIST SOLAR PV** in the subject heading and have electronic copies of candidate's CVs attached. Expressions of interest will be accepted on a rolling basis until 12:00am GMT, Sunday 16<sup>th</sup> 2024. Please send all CVs and expressions of interest to: procurement@sossomalia.org.

