

TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS AND CONTRACTORS

Title	Funding Code	Type of engagement	Duty Station:
Solar Power Installation Consultant - UNICEF		<input checked="" type="checkbox"/> Consultant <input type="checkbox"/> Individual Contractor Part-Time <input type="checkbox"/> Individual Contractor Full-Time	Lusaka, Zambia
<p>Purpose of Activity/Assignment: A technical feasibility study for Off-Grid Solar PV systems in 20 Lower Secondary Schools in the GPE programme supported in 20 districts of Eastern, Muchinga, Northern, Southern and Western provinces.</p> <p>Objectives: The main purpose of the feasibility study is to provide UNICEF with analysis and recommendations that will support the organisation decision-making with regard to the implementation of solar photovoltaic installation in 20 lower Secondary Schools in GPE programme Provinces (Eastern, Muchinga, Northern, Southern and Western). On review of the final report and the actual feasibility of the projects, UNICEF will implement the Solar PV installations effectively</p> <p>The objectives of this consultancy are:</p> <ol style="list-style-type: none"> 1. Assessment of identified sites: Review in general by capturing information on the existing school energy infrastructure, the viability of the proposed project sites selected by UNICEF and MoGE. 2. System Capacity: Assess the energy demand of each of the 20 selected schools for the project and individual school needs and staff houses built within school compound. 3. Applicable Technology: Review the available technology in the market, recommend the best technology for the project sites, and fix the efficiency level of the equipment. 4. Cost Estimation: Review all aspects of the project components and prepare a detailed breakdown of the cost estimate for each element in each selected school site. 5. Review of Environmental Issues: Review the existing environmental laws, regulations and recommend ecological issues that may arise due to the implementation of the project. 			
<p>Scope of Work:</p>			
<p>The consultant will be expected to undertake the following general tasks:</p>			
<p>1. Pre-Feasibility:</p>			
<ul style="list-style-type: none"> • Participate in briefing and consultative meetings on the assignment at UNICEF CO and in the field with UNICEF and government officials. • Familiarise with the local energy context, the energy policies, plans and the available wider (other building infrastructure) project documents. • In consultation with the UNICEF GPE team, determine the most appropriate methods for conducting the feasibility study and preparatory work needed. • Prepare a work plan for the duration of his/her engagement in the field and at the base agreed and approval by UNICEF. • Desk review to provide a high-level analysis of the options and feasibility of installing a Solar PV system. 			
<p>2. Site Visits:</p>			
<ul style="list-style-type: none"> • Conduct project site visits and agreed methodology with the GPE Manager, liaise with MoGE, beneficiaries and stakeholders; • Collect data from target beneficiaries at the selected schools in the districts. • Provide feedback to UNICEF throughout the visit and share a summary of the study, observations, and recommendations with the GPE team. 			

3. Detailed Study:

- Design a system and recommendations based on the data collected; propose viable options and installation considerations.
- Debrief project team and MoGE on the process and preliminary findings of the technical assessment.
- Prepare a draft report of the feasibility study report and share it with the Project Manager, Project Engineer or designate. The draft report will be subject to discussion by relevant program staff.
- Prepare and submit a comprehensive, well-structured report of the feasibility study.
- Prepare a detailed breakdown of solar PV solution design, BOQs and cost estimates for each component per site.
- Review the existing environmental laws, regulations and recommend ecological issues, if any, which may arise due to the implementation of the project.

Child Safeguarding

Is this project/assignment considered as “[Elevated Risk Role](#)” from a child safeguarding perspective?

YES NO If YES, check all that apply:

Direct contact role YES NO

If yes, please indicate the number of hours/months of direct interpersonal contact with children or work in their immediate physical proximity, with limited supervision by a more senior member of personnel:

The consultant will be hired for 30 working days and will need to travel to different schools to identify the need for solar power installation in selected schools. The consultant will be accompanied by assigned MOGE/DEBS personnel and school administration or UNICEF GPE team and will only have access to schools after clearance from MOGE in the company of MOGE staff. The consultant will not be left unattended to interact with children.

Child data role YES NO

If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):

More information is available in the [Child Safeguarding SharePoint](#) and [Child Safeguarding FAQs and Updates](#)

Budget Year: 2021	Requesting Section/Issuing Office: Education Section, UNICEF Zambia	Reasons why consultancy cannot be done by staff: UNICEF doesn't have the capacity and expertise to do this assessment, therefore,	
Included in Annual/Rolling Workplan: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, please justify:			
Consultant sourcing: <input checked="" type="checkbox"/> National <input type="checkbox"/> International <input type="checkbox"/> Both Consultant selection method: <input type="checkbox"/> Competitive Selection (Roster) <input checked="" type="checkbox"/> Competitive Selection (Advertisement/Desk Review/Interview)		Request for: <input checked="" type="checkbox"/> New SSA – Individual Contract <input type="checkbox"/> Extension/ Amendment	
If Extension, Justification for extension:			
Supervisor: Karam Ali	Start Date: 01 September 2021	End Date: 15 October 2021	Number of Days (working) 30
Work Assignment Overview			
Tasks/Milestone:	Deliverables/Outputs:	Timeline	Estimate Budget
Prepare a preliminary feasibility report, design a system, propose viable options and installation considerations.	A preliminary feasibility report included a survey plan.	4 days	10%
Conduct a detailed survey in selected schools to identify the actual needs, size of the work and specification	A survey plan Updates from the field	15 days	40%
Prepare a presentation and organise a debrief meeting with MoGE and the project team to share preliminary findings of the technical assessment.	Presentation based on preliminary findings from the technical assessment	3 days	
Review the existing environmental laws and regulations and recommend ecological issues that may arise due to the implementation of the project.	A brief environmental assessment report	2 day	
Prepare and share a draft report based on the assessment study done in the field and a detailed specification and prices.	A draft report with detailed specifications and prices	4 days	50%
Submit a revised and comprehensive, well-structured report with a detailed breakdown of solar PV solution design, BOQs and cost estimates for each component per site.	A final report	2 days	

Estimated Consultancy fee			
Travel International (if applicable)	Yes		
Travel Local (please include travel plan)	Yes, the consultant expected to travel to select districts and schools sites determined by MOGE		
DSA (if applicable)	Yes, DSA should be included in the Consultancy fees. UNICEF will cover all-inclusive fees, including DSA and travel-related costs		
Total estimated consultancy costs¹			
Knowledge/Expertise/Skills required: <ul style="list-style-type: none"> ▪ Minimum of Degree in the fields of Electrical/Electronic Engineering, Renewable Energy technologies or other relevant fields. 	<ul style="list-style-type: none"> ▪ Minimum of 5 years of experience with stand-alone renewable energy generation using Solar Photovoltaics ▪ Technical solar power capability, including pre-feasibility and design capability ▪ A track record of taking energy projects through the development process ▪ Previous experience of working with UN projects and in school context is an asset; ▪ Knowledge of construction management procedures in Zambia; ▪ Experience in the design, and management of development projects, in particular with working with schools and local communities; ▪ Good analytical and writing skills and fluency in English, and knowledge of any local languages in any of the targeted districts are an asset 		
Administrative details: Visa assistance required: <input type="checkbox"/> Transportation arranged by the office: <input type="checkbox"/>	<input checked="" type="checkbox"/> Home Based <input type="checkbox"/> Office Based: If office-based, seating arrangement identified: <input type="checkbox"/> IT and Communication equipment required: <input type="checkbox"/> Internet access required: <input type="checkbox"/>		
Request Authorised by Section Head _____ Date:	Request Verified by HR: _____ Date:		
<i>Approval of Deputy Representative Operations (if Operations):</i> _____ Date:	<i>Approval of Deputy Representative (if Programme)</i> _____ Date:		
<i>Representative (in case of single-sourcing/or if not listed in Annual Workplan/or for Sections reporting to the Rep)</i> _____			

ⁱ Costs indicated are estimated. Final rate shall follow the “best value for money” principle, i.e., achieving the desired outcome at the lowest possible fee. Consultants will be asked to stipulate all-inclusive fees, including lump sum travel and subsistence costs, as applicable.

Payment of professional fees will be based on submission of agreed deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant

Text to be added to all TORs:

Individuals engaged under a consultancy or individual contract will not be considered “staff members” under the Staff Regulations and Rules of the United Nations and UNICEF’s policies and procedures, and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants and Individual Contractors. Consultants and individual contractors are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.