

TERMS OF REFERENCE
(Individual Contract Agreement)

Title: Construction Management Engineer
Project: Rural renewable Energy Project/20439
Duty Station: Freetown/Sierra Leone
Section/Unit: Infrastructure
Contract/Level: ICS9 / IICA 1

1. Background Information – Sierra Leone

UNOPS has been established in Sierra Leone since 2000 and currently has 55 personnel in the country, operating out of 3 main locations – in Freetown (with frequent visit to sites and other districts) and home based.

During the last 15 years, UNOPS has delivered a variety of infrastructure projects nationwide, particularly in the fields of health and security infrastructure, and has procured a variety of vehicles, non-medical health related items and medical equipment.

Current projects include:

- **Infrastructure Programme for Isolation Units;** Construction of screening and isolation units for government hospitals under the Ebola Emergency Response Project (EERP) (with funding from the World Bank) and medical waste management and WASH (with funding from DFID) in support of the Ministry of Health.
- **Procurement of non-health items and services** to contribute to the Global Fund Programme in Sierra Leone, for the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)
- **Construction of the new Administrative Headquarters of the Transnational Organised Crime Unit (TOCU)** in Freetown, Sierra Leone for the United Nations Office on Drugs and Crime (UNODC)

Background Information – Job specific

In Sierra Leone, the Rural Renewable Energy Project (RREP), a DFID-funded project, is collaborating with the Government of Sierra Leone (GoSL) to supply up to 5 MW of sustainable renewable electricity in rural communities through installations of at least 94 solar mini-grids to be operated and managed by private sector partners.

The implementation of the project is developed around five Work Packages (WP):

Work package 1 / 1+: 6kWp solar photovoltaic (PV) generation plants at 54 Community Health Centres (CHCs) were installed between April and July 2017. These generation plants were then extended into small mini-grids with a capacity between 16kW and 36kW and distribution networks installed which will eventually connect all other public institutions and households in 50 of these communities. All 50 mini-grids are installed and ready for operation as of October 2018.

Work package 2: aims to bring the country's photovoltaic (PV) power generation capacity up to 5MW by attracting the private sector to invest in the mini-grid market while drawing on the lessons

of WP 1/1+. WP2 will install mini-grids in an additional 44 communities with >36kW systems (up to max. 200kWp) using sustainable business and delivery models developed by the private sector.

Private sector operators have been selected through a competitive tender process, and will take on operation and maintenance of WP1/1+ mini-grids and co-invest in the development of the WP2 sites. The operators will be responsible for the last mile connection to identified customers and the in-house wiring of customer homes.

Work package 3: provides Technical Assistance (TA) and institutional capacity building to the Ministry of Energy, the Electricity and Water Regulatory Commission, other relevant government agencies as necessary, as well as to private sector companies selected to operate WP1 sites and co-invest in and operate WP2 sites.

Work Package 5: This work package focuses majorly on the Monitoring and Evaluation function. An M&E Plan including Impact Evaluation design will be developed for learning and accountability.

Work Package 6: Private sector development. Through this work package, RREP seeks to develop a private sector engagement and strengthening strategy, underpinned by a keen understanding of local market systems, to promote productive use economies in mini-grid catchment areas; supporting both the commercial viability of the privately operated mini-grids.

In its three years of implementation, RREP has installed 50 mini-grids. These installations will be expanded in capacity throughout the life of the project to 2020, with 44 additional installations commenced. The RREP mini-grid sites are poised to be hubs of new and improved economic activities generating better employment opportunities and incomes and fostering greater social and economic welfare for communities.

The Construction Management Engineer is part of the UNOPS Infrastructure Team and is required to assist the Project Manager (Technical Team Leader) to manage and coordinate the day-to-day activities and outputs of the infrastructure team, including the UNOPS, Consultants and Contractor teams. The Construction Management Engineer is therefore required to have extensive practical experience of performing project management roles as well as practical construction activities of supervising works to ensure that both UNOPS Quality Assurance requirements are being met, and that the Contractor carries out their Quality Control functions effectively.

2. Purpose and Scope of the Assignment

The Construction Management Engineer will be based in the office as well as conduct missions to the site, under the direct supervision of the Project Manager (Technical Team Leader).

Engineering and construction:

- Coordinate the work of the Consultant/Retainer in design development and documentation as well as the associated Design Review process and certification
- Liaise closely with Engineering personnel, ensuring accuracy of construction activities including the administration of the contracts as it relates to claims
- Liaise closely with Engineering personnel to identify and solve construction issues in a timely fashion, consulting and keeping the Technical Team Leader informed

- Understand the technical specification and scope of work of each Contractor and where required assist the Contractor to manage, plan and coordinate monthly, weekly and daily construction activities including monitoring site safety and construction quality
- Participate in supporting construction approval and inspection activities
- Liaise with, and provide support to, other offices within the country as required.

Reporting:

- Actively support the Technical Team Leader and all relevant stakeholders with the supply of data and information including, but not limited to, project implementation and completion reports and other related documents
- Ensure accurate and timely reporting of implementation plan progress as well as conditions on site through daily/ weekly site records.
- Prepare and submit to the Technical Team Leader a weekly or monthly (or as requested) summarizing progress of contractor activities, quality control issues, resourcing and scheduling issues, and any other pertinent facts as required.
- Produce any appropriate documentation identified by the Technical Team Leader in a professional and accurate manner

Work package Performance and Delivery:

Understand the full scope of infrastructure works under WP1 and WP1+, as well as WP 2 and activities and resources required to deliver them to the available timeline and budget

- Assist the Technical Team Leader to develop and monitor Work Package implementation plans including
 - Overall Infrastructure Work delivery plans, stage plans within tolerances set by the project board and in line with overall Project Plan
 - Quality, Health & Safety and Social & Environment plans
 - Risk and Issues plans
 - Infrastructure Human Resource plans and Budgets
- Support the Technical Team Leader to manage communications and ensure stakeholders are aware of work package activities, progress, exceptions and are in a position to accept handover products
- Liaise with any external suppliers or other managers
- Support the Technical Team Leader to manage the production of the required products, overall progress and use of resources and suggesting corrective action where necessary

Knowledge sharing:

- Ensure highest standards of knowledge management, ensuring quality and complete archiving of project Infrastructure products
- Contribute to the project evaluation process; highlight challenges associated with the project and feedback into a continuous improvement cycle.

- Provide training and knowledge transfer to national/contractor personnel including advice on good construction practices, environmental management practices, and appropriate health and safety standards during construction
- Contribute to the dissemination and sharing of best practices and lessons learned for development planning and knowledge building.

Personnel Management:

- Support to motivate the technical team
- Ensure that behavioural expectations of team members are established
- Ensure safety and security for all personnel and comply with UNDSS standards

Core Values and Principles:

- Understand and respect UNOPS sustainability principles
 - I. Look for ways to embed UNOPS sustainability principles in day to day project management
 - II. Seek opportunities to champion gender equality at workplace
 - III. Champion and communicate project's sustainability aspects with key stakeholders
- Understand and Respect National ownership and capacity
 - i. Understand the principles of the Paris Declaration on aid effectiveness and mainstream them into the project plans
 - ii. Seek opportunities to recruit qualified local staff
 - iii. Look for ways to build capacity of local counterparts
- Partnerships and Coordination Understand the UN Development Assistance Framework (UNDAF) and UNOPS, the project's place in the UN system
 - i. Strive to build strong partnerships and effective coordination among relevant project actors (e.g. United Nations, governments, and non-governmental organizations or other relevant partners)
- Accountability for results and the use of resources
 - i. The project management processes are designed to deliver maximum accountability, transparency and results. If a project or processes is not in line with this, it is the responsibility of the PM to raise the issue with a supervisor
- Excellence
 - i. Contribute to innovation and the adaptation of best practice standards of sustainability and quality

3. Monitoring and Progress Controls

Ensure that the project(s) produce(s) the required products within the specified tolerance of time, cost, quality, scope, risk and benefits. The Construction Management Engineer is also responsible for the project producing a result capable of achieving the benefits defined in the Business Case(s). Contribute to the overall business targets and needs.

- a. Accuracy of Infrastructure Work package planning and delivery (according to approved plans);
- b. Timeliness and accuracy of reporting on Work package performance.

- c. Full compliance (and evidence) with HSE and Quality Management System for Infrastructure Work package, demonstrated through completeness of records according to the document management guidance
- d. Identification and implementation of continuous process improvement.
- e. Close out of all Defects Rectifications on Infrastructure Work package and final completion certificates/handovers
- f. Zero audit observations related to the delivery of WP 1/1+ and WP 2 or any other assigned work packages.

4. Qualifications and Experience

A. Education

- Advanced university degree (master or equivalent) in Civil Engineering or related field.
- University Degree (bachelor's degree / first level) in Civil Engineering or related field with 2 additional years of relevant work experience may be accepted in lieu of Advanced Degree requirement.
- A relevant combination of academic credentials and/or industry certifications and qualifying experience may be accepted in lieu of university education.
- PRINCE2® Foundation or equivalent project management accreditation is **required**

B. Work Experience

- A minimum of one (1) year experience working with Government institutions and/or donor funded projects is **required**.
- A minimum of two (2) years experience in Infrastructure development and management with focus on Quality, Health, Safety, Social and Environmental is **required**.
- Knowledge of and/or experience in the Energy Sector (including renewable energy) is **desirable**.
- A minimum of two (2) years experience in Project Management as it relates to project planning, delivery, monitoring and reporting is **required**.
- Competent in the use of all commonly used computer software – spreadsheet, scheduling tools (MS project) and other computer programmes is **required**;
- Knowledge of the UN system and familiarity with UNOPS procedures is an **advantage**.

C. Key Competencies



Develops and implements sustainable business strategies, thinks long term and externally in order to positively shape the organization. Anticipates and perceives the impact and implications of future decisions and activities on other parts of the organization. **(Applicable only for levels ICS-10 and above)**



Treats all individuals with respect; responds sensitively to differences and encourages others to do the same. Upholds organizational and ethical norms. Maintains high standards of trustworthiness. Role model for diversity and inclusion.



Acts as a positive role model contributing to the team spirit. Collaborates and supports the development of others. **For people managers only:** Acts as positive leadership role model, motivates, directs and inspires others to succeed, utilising appropriate leadership styles



Demonstrates understanding of the impact of own role on all partners and always puts the end beneficiary first. Builds and maintains strong external relationships and is a competent partner for others (if relevant to the role).



Efficiently establishes an appropriate course of action for self and/or others to accomplish a goal. Actions lead to total task accomplishment through concern for quality in all areas. Sees opportunities and takes the initiative to act on them. Understands that responsible use of resources maximizes our impact on our beneficiaries.



Open to change and flexible in a fast paced environment. Effectively adapts own approach to suit changing circumstances or requirements. Reflects on experiences and modifies own behaviour. Performance is consistent, even under pressure. Always pursues continuous improvements.



Evaluates data and courses of action to reach logical, pragmatic decisions. Takes an unbiased, rational approach with calculated risks. Applies innovation and creativity to problem-solving.



Expresses ideas or facts in a clear, concise and open manner. Communication indicates a consideration for the feelings and needs of others. Actively listens and proactively shares knowledge. Handles conflict effectively, by overcoming differences of opinion and finding common ground.

Below general Certifications, Contextual Skills and Infrastructure and Project Management Skills are required:

Certifications

PRINCE2® Foundation

Contextual Skills

International organisations experience

Infrastructure Management skills

Design development and Management

Construction implementation



Construction Supervision
Contract Administration
Quality Management
Health and Safety Management
Environmental and Social Management

Project Management Skills

Complex field operations
Multi-site construction projects
Resources Management
Multi-stage reporting
Multi-disciplinary planning
Budget Management
Capacity Building and knowledge sharing
Financial Rules and Regulations
Knowledge Management
Monitoring and Evaluation
Project Management
Risk Analysis
Stakeholder Management

Project Authority (Name/Title):		Contract holder (Name/Title):	
Signature	Date	Signature	Date