

REPUBLIC OF MOZAMBIQUE



ELECTRICIDADE
DE MOÇAMBIQUE, E.P.

TERMS OF REFERENCE (TOR) TO CONTRACT SENIOR PLANNING
AND ENGINEERING MANAGER FOR THE ELECTRIFICATION
MANAGEMENT UNIT

UNDER

MOZAMBIQUE ENERGY FOR ALL - PROENERGIA PROJECT

November 2019

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1. PROJECT BACKGROUND

The national power utility **Electricidade de Moçambique (EDM)** has taken the lead role in the **Government of Mozambique's (GoM's)** efforts to expand electricity access, complemented by **Fundo de Energia (FUNAE)** for the provision of electricity services for rural areas and community centres.

EDM has assumed as one of its strategic objectives to promote access to energy to all the population by 2030, this will be driven by National Electrification Strategy Plan that sets the fundamental principles, prioritization criteria, technological solutions, financial mechanisms and implementation roadmap.

It provides a framework to accelerate electricity access in Mozambique by focusing EDM in two major on-grid initiatives to progressively increase from 150 thousands to 400 thousands new connections per year: i) intensify connection in densification areas and ii) extend the national electrical network to rural areas with relevant population density.

Subject to the NES, the electrification program will support the expansion of access to peri-urban and rural areas by harnessing and extending existing grid network and by piloting mini-grids in off-grid areas based on solar power generation.

The NES has attracted the attention and interest from many development partners to finance the first phase of the implementation strategy, with potential financial commitments of around \$200m, including an \$82 million grant from IDA.

The ProEnergia Project will support three components that aim at connecting on-grid and off-grid households based on a sustainable approach to electrification that incorporates proven international experience, technical assistance and capacity building support.

The on-grid component will be implemented by EDM and will focus on densification and short-range grid extension to ensure massive connection of existing potential customers without electricity in peri-urban and rural areas across the country.

EDM has never executed a large electrification program of this magnitude which requires a robust experienced and focused program management unit that is ready to manage, coordinate, execute and report on the electrification results to all key stakeholders, both internal and externally.

2. SCOPE OF WORK

EDM identified the need to hire a specialist that will assume Senior Planning and Engineering Management functions of the Electrification Projects in the Electrification Management Unit team.

The Senior Planning and Engineering Manager will work under the responsibility of the Project Manager and will reinforce the Electrification Program team that is currently managing the ProEnergia Project.

The Planning and Engineering Manager will play a critical role in ensuring the effective operationalization of the Electrification Management Unit (EMU) and a successful implementation of the Electrification program, in particular the achievement of its connection targets over the next 5 years in a cost efficient and sustainable manner. For that purpose, the EMU will be responsible for coordinating, controlling, monitoring and reporting on the execution of the electrification initiatives implemented by EDM, supported by the management procedures and tools to be set for the EMU and the requirements of the ProEnergia Project.

Following is a description of the specific tasks and responsibilities for the Planning Engineering Manager:.

- Guarantee an accurate quality control of the planning and engineering procedures adopted and decisions taken regarding new electrification and connections investment projects.
- Support the central Planning and Engineering Directorate (DPSE) and the local Planning Departments of the Delegations and the Planning Department of the central General Distribution Directorate (DGD) in applying the prioritization criteria and taking decisions on the least cost engineering solutions, according to what is defined in NES and agreed between all stakeholders.
- Make of the analysis of the demand forecast that will inform the design of the typology of the reticulation for electrification in order to support distribution, transmission and generation development planning
- Ensure timely decisions on the execution of the consulting services aiming at reviewing the engineering regulations and of the electric network system under the ProEnergia according to the Procurement Plan approved.
- Maintain updated a consolidated plan and progress status of the prioritized electrification and connections investment projects.
- Ensure that there is a routine to identify potential clients and necessity of materials to electrify identified areas.
- Ensure that electrification projects are well structured and project proposals are produced to allow for financing sourcing.
- Ensure that electrification projects and plans are well coordinated with the planning departments do FUNAE and MIREME
- Verify the design submitted by the contractors of if it complies with the specifications and requirements

3. REQUIREMENTS FOR MONITOR AND PERFORMANCE CONTROL

The Senior Planning and Engineering Manager shall have also the responsibility to promote the implementation of specific process controls and monitoring procedures that

will allow for assessing the performance and managing risks on the electrification program.

In particular, below is a non-exhaustive set of KPIs and control procedures for the role:

Key Performance Indicators(KPIs):

- Volume of target connections “planned” (region, Delegation and country);
- Access rate of electrification as per connections actual and planned (region, Delegation and country);
- Kms of LV and MV lines planned to be deployed and/or upgraded;
- Number of reviews of the designs submitted by contractor against EDM engineering specifications and requirements standards;
- Total investments in the electrification projects portfolio (planned, ongoing, closed).

Control Procedures:

- Delegations’ Demand Forecasts (new connections) submitted, reviewed and approved
- Projects of the Electrification Portfolio with least cost engineering solutions and Implementation Concepts submitted, reviewed and approved
- Monthly update and reporting of the status of the Electrification Projects Portfolio

4. REQUIRED QUALIFICATIONS AND EXPERIENCE

The Senior Planning and Engineering Manager to be hired shall have adequate academic and professional qualifications and substantial experience in the energy sector.

For the purpose of evaluating the quality of the proposed staff, it should be underlined that apart from other important details, the CVs shall duly be signed and shall clearly indicate the experiences including types of activities performed and client references.

The required qualifications and experience for the specialist role is as follows:

The Senior Planning and Engineering Manager shall have a degree in electrical engineering, a professional experience of a minimum of 10 years in planning and supervising distribution (MV and LV) power projects.

Preferably, the Planning and Engineering Supervisor shall have good knowledge of the territory and of EDM distribution network, GIS system and experience in Load forecasting shall be an advantage

The Planning and Engineering Supervisor shall have proficiency in written and oral communication skills in English and Portuguese.

5. REPORTING

The Senior Planning and Engineering Manager will report directly to the ProEnergia Project Manager.

6. PAYMENTS

The payment shall be made base on agreed Lump Sums for each completed millstone of the project.

7. FACILITIES PROVIDED BY THE CLIENT

EDM will provide a dedicated office space,all necessary available information that may be required and all support including credentialsfor access to stakeholders.

The Consultant is to be fully independent in terms of transport, equipment and accommodation.

8. ANNEX

Annex A: ProEnergia Project Organigram