

Project number/
cost centre:Terms of Reference for the Owner's Engineer for the
construction of the 50MW Solar Power Plant at Ha-
Ramarothole, Mafeteng, by LEGCO,Project number/
cost centre:
18.2010.9-680.00

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0. List of abbreviations

- AG Commissioning party
- AN Contractor
- AVB General Terms and Conditions of Contract for supplying services and work
- EPC Engineering, Procurement and Construction
- FK Expert
- FKT Expert days
- KZFK Short-term expert
- LEGCO Lesotho Electricity Generation Company
- PPA Power Purchase Agreement
- RE Renewable Energy
- ToRs Terms of reference



1. Context

Lesotho Electricity Generation Company (LEGCO) is a public company established by the Ministry of Energy and Meteorology (MEM) under companies' act of 2011 to increase generation capacity in Lesotho as one of its core mandates. Another mandate is to develop a 80MW solar generation project at Ha-Ramarothole in Mafeteng district of Lesotho. Ramarothole 80MW solar generation project is co-financed by the EXIM Bank of China through a concessional loan and the Government of Lesotho (GOL) through direct annual budget support.



LEGCO is mandated to develop an 80MW solar generation project at Ha-Ramarothole in Mafeteng district of Lesotho. In Phase I, a30 MW Solar plant and an upgrade of a sub-station was constructed, and completed in 2023, as shown in the picture above.

On behalf of the European Union Delegation of Lesotho and the Federal Ministry of Economic Cooperation and Development (BMZ), GIZ implements GET.transform programme activities in developing and emerging economies to support them in advancing their power sector transformation.

LEGCO has requested GET.transform to assist technically with a consultant. The consultant's role is to support LEGCO in carrying out phase II of the project with an emphasis on the different project components listed in this Terms of Reference. The consultant will act as a construction manager (Owner's Engineer) who will oversee and supervise the construction of the solar plant and monitor the construction work.

2. Tasks to be performed by the contractor

The Key Expert shall render and is responsible for providing the following services:



- (i) To review the provisions, designs and drawings of the EPC Contractor who is carrying out the construction of the solar plant, verify the provisions in respect of ground conditions, work out the deficiencies, revise the provisions, designs and drawings, if any required, submit the proposals containing deficiencies along with remedial measures for the consideration and approval of the Client;
- To ensure high quality construction with full compliance to Engineering Designs and Drawings, Technical Specifications and other Contract Documents within the specified time schedule;
- (iii) To monitor the Pre-construction activities of the contractor;
- (iv) To assist in taking remedial actions to avoid slippages, cost overruns and delays by the EPC Contractor;
- To ensure safety during construction and adherence to all Environment Management Regulations prescribed under the Contract and Environmental Clearance;
- (vi) To ensure that effective Contract Administration is achieved.

In addition to the reports required by GIZ in accordance with the AVB, the contractor submits the following reports:

Expert 1 shall render the following tasks:

Task 1 – Contract administration and preliminary project management framework

Execute the Consultancy services contract as governed by the Contract Management Framework (CMF): The main features of the CMF are as follows:

- Administer the contracts under the project, Client has assigned personnel that will be exclusively in-charge of the consultancy services under the Chief Executive Officer (CEO). The CEO will act as Employer for this consultancy. The CEO will be assisted by the Professional and Administrative staff of LEGCO. The CEO will award the contract, administer the contract, take management decisions and arrange payments, as per the contract agreements and obtain requisite approvals from the EXIM Bank.
- 2. Meet the CEO regularly and obtain promptly as needed, the decisions required on technical/contractual matters, assisted by the Legal Director.
- 3. Undertake all project management aspects related to the consultancy, draw preliminary report comprising baseline financial proposal and procurement plans and processes for the project and additional services that include production of contract agreements.
- 4. Certify all Contractor's/Consultants payments before processing by Finance Manager.

Task 2 – Draw up all manuals necessary for the completion of the construction of the plant



- Prepare, in consultation with the Client, a construction supervision manual outlining routines and procedures to be applied in contract management, construction supervision, cost control, quality control and monitoring and administration. This document is to be submitted to the Client within 60 days of the commencement of consultancy services.
- 2. Prepare a Maintenance Manual outlining routines and procedures to be adopted. This document is to be submitted to the Client 60 days prior to completion of the project under the consultancy services.

Task 3 – Construction management and monitoring during construction

- 1. Manage the contractor's technical specifications and co-ordinate, monitor, and assist the contractor, while also approving and signing off on designs and construction work after approval from the client, as stated in the works contract.
- Issuing/approving construction materials and material sources Technical Specifications and Approving new rates either for existing items of work which arises from the variation of quantities beyond the limit defined in the contract or fixing rates of non-priced works involving any extra item and certifying any additional cost determined under the provisions of the contract.
- 3. Issuing orders for special tests and costs not included in the contract.

Task 4 – Time management of the construction phase of the project

- 1. Ensure high quality construction within specified time schedule.
- 2. Prepare the variation orders and recommend the proposals for Extension of Time for the approval of the Client.
- 3. Review and approve contractor's work program including activity scheduling and resource programming and any updated programs
- 4. Evaluate all claims and extensions of time submitted by the contractor in accordance with the contract document and make judicious recommendations for the consideration of the Client.
- 5. Co-ordinate, monitor and assist the Client in shifting/relocation of obstructions to the project and instructing any acceleration measures to reduce delays.

Task 5 – Quality assurance of the construction of the plant

- 1. Ensure that the construction works are in accordance with the Technical Specifications and the construction methods proposed by the contractor follow best industry practices.
- 2. Ensure compliance with environmental and social impact mitigation measures.
- 3. Review and approve the Quality Assurance System/Manual of the contractor by inspecting and testing all installation methods, materials/final product to ensure compliance with Technical Specifications of the construction contract document.
- 4. Report the necessity of any modifications/design changes and need for any variation orders as early as possible to the Client with full details/reasons for approval of the Client as stated in the conditions of contract.



- 5. Periodically conduct a monitoring and Maintenance routine with the contractor and review the monthly progress reports submitted by the contractor.
- 6. Certify for the release of balance retention money to the contractor in accordance with the provisions contained in the contract document.

Task 6

- 1. Issue completion certificate/taking over certificate and performance certificate to the contractor observing the stipulations contained in the contract document
- 2. Produce 2 reports: Contract Completion Report and the Consultancy final report within 30 days of the completion of the consultancy.

Certain milestones, as laid out in the table below, are to be achieved during the contract term:

Milestones/process steps/partial services	Deadline/place/person responsible		
Milestone 1: Preliminary report comprising baseline financial proposal and procurement plans and processes for the project.	Expert 1: 1 month after project signed/ Lesotho		
Milestone 2: Routine and procedure manuals for the construction phase of the project within 60 days of the commencement of the consultancy, Monitoring and Maintenance manuals, progress reports	Expert 1: 2 Months after project signed/ Lesotho		
Milestone 3: Updated Technical project designs and construction work, design reports and update reports on construction with highlighted changes and deviations.	Expert 1: 3 Months after project signed/ Lesotho		
Milestone 4: Updated progress report with updated time schedule proposal to the client.	Expert 1: Quarterly after construction commences:1 st October 24, December 24, February 25, June 2025/ Lesotho		
Milestone 5: Quality assurance report, with environmental and finance considerations.	Expert 1: Quarterly after construction commences: 1 st October 24,1 st January 25, 1 st April 25,27 th December 2025.		
Milestone 6: Contract Completion Report and the Consultancy final report complete with the Client's input and suggestions.	Expert 1: 21 st December 2025/ Lesotho		

Period of assignment: from 01 August 2024 until 31 March 2026.

3. Concept

In the tender, the tenderer is required to show how the objectives defined in Chapter 2 (Tasks to be performed) are to be achieved, if applicable under consideration of further method-related requirements (technical-methodological concept). In addition, the tenderer must describe the project management system for service provision.

Note: The numbers in parentheses correspond to the lines of the technical assessment grid.



Technical-methodological concept

Strategy (1.1): The tenderer is required to consider the tasks to be performed with reference to the objectives of the services put out to tender (see Chapter 1 Context) (1.1.1). Following this, the tenderer presents and justifies the explicit strategy with which it intends to provide the services for which it is responsible (see Chapter 2 Tasks to be performed) (1.1.2).

The tenderer is required to present the actors relevant for the services for which it is responsible and describe the **cooperation (1.2)** with them.

The tenderer is required to describe the key **processes** for the services for which it is responsible and create an **operational plan** or schedule (1.4.1) that describes how the services according to Chapter 2 (Tasks to be performed by the contractor) are to be provided. In particular, the tenderer is required to describe the necessary work steps and, if applicable, take account of the milestones and **contributions** of other actors (partner contributions) in accordance with Chapter 2 (Tasks to be performed).

Project management of the contractor (1.6)

The Expert will be sourced by GIZ, under the GET.transform project, and for the duration of the project, will be reporting to the LEGCO team, in coordination with the GIZ project, GET.transform. The set timelines will be the guide to the delivery of the outputs from the consultants.

The tenderer is required to explain its approach for. In particular, the project management requirements specified in Chapter 2 (Tasks to be performed by the expert) must be explained in detail.

In the Tender, the tenderer shall draw up a plan of action that includes information on assignment dates (duration and expert months) and on-site working dates required, as well as the off-site days that will be required to complete the assignment with the allocation of work steps as set out in the schedule.

4. Personnel concept

Team leader – Key Expert

Tasks of the team leader

- Overall responsibility for the advisory packages of the contractor (quality and deadlines)
- Coordinating and ensuring communication with GIZ, partners and LEGCO in the project
- Regular reporting in accordance with deadlines

Qualifications of the team leader

- Education/training (2.1.1): university degree (German 'Diplom'/Master) in Electrical or Mechanical Engineering
- Language (2.1.2): C1-level language proficiency in English
- General professional experience (2.1.3): 7 years of professional experience in the electricity infrastructure projects, Solar PV installation and electricity generation sector
- Specific professional experience (2.1.4): 7 years in Construction Management in Solar PV projects, and 5 years' experience in World Bank/AfDB/EXIM Bank aided projects and planning and contract management



- Leadership/management experience (2.1.5): 7 years of management/leadership experience as project team leader or manager in a company
- Regional experience (2.1.6): 5 years of experience in projects in the SADC (region), of which 2 years in projects in Lesotho (country)
- Development cooperation (DC) experience (2.1.7): 3 years of experience in DC projects
- Costing requirements

Assignment of personnel and travel expenses

Per-diem and overnight accommodation allowances are reimbursed as a lump sum up to the maximum amounts permissible under tax law for each country as set out in the country table in the circular from the German Federal Ministry of Finance on travel expense remuneration (downloadable at <u>https://www.bundesfinanzministerium.de</u>).

Accommodation costs which exceed this up to a reasonable amount and the cost of flights and other main forms of transport can be reimbursed against evidence

All business travel must be agreed in advance by the officer responsible for the project.

GIZ will reimburse actual travel costs as per GIZ travel regulations up to this amount. The budget provides for our visits to Lesotho, per-diem and overnight expenses for a combined total duration of up to 110 days.

Fee days	Number of experts	Number of days per expert	Total	Comments
Designation of key expert	1	160 (110 in Lesotho and 50 home office)	160	Please use this maximum number of days to calculate professional fees in the financial proposal. Actual time must be documented in time sheets and used as a basis for invoicing
Travel expenses	Quantity	Price (EUR)	Total	Comments
Per-diem allowance in country of assignment	110			
Overnight allowance in country of assignment	110			For onsite days and overnight stays
Transport	Quantity	Price (EUR)	Total	Comments
International flights	12			South Africa to Lesotho
				For Consultants living in South Africa, 12 return flights will be

Specification of inputs



			covered in the 110 days on travel to Lesotho
CO₂ compensation for air travel	24		Against evidence ZAR/LSL
Link to working aid and table for determining the budget and Guidance for GIZ service providers on avoiding, reducing and offsetting GHG emissions on setting the budget.			
Transportation	110		Transportation costs in country of assignment and home country

Equipment

- Not applicable -

Operating costs in the country of assignment

The Expert must provide for her / his office operating costs related to the assignment in the proposed fee rate.

Workshops, education, and training

- Not applicable -

Local subsidies

- Not applicable -

Other costs

- Not applicable

5. Inputs of GIZ or other actors

GIZ and/or LEGCO are expected to make the following available:

• Transportation to and on site with project vehicle

6. Requirements on the format of the tender

The structure of the tender must correspond to the structure of the ToRs. In particular, the detailed structure of the concept (Chapter 3) should be organised in accordance with the positively weighted criteria in the assessment grid (not with zero). The tender must be legible (font size 11 or larger) and clearly formulated. It must be drawn up in English (language).



The complete tender must not exceed 10 pages (excluding CVs). If one of the maximum page lengths is exceeded, the content appearing after the cut-off point will not be included in the assessment. External content (e.g. links to websites) will also not be considered.

The CVs of the personnel proposed in accordance with Chapter 0 of the ToRs must be submitted using the format specified in the terms and conditions for application. The CVs shall not exceed 4 pages each. They must clearly show the position and job the proposed person held in the reference project and for how long. The CVs can also be submitted in English.

Please calculate your financial tender based exactly on the parameters specified in Chapter 5 Quantitative requirements. The contractor is not contractually entitled to use up the days, trips, workshops or budgets in full. The number of days, trips and workshops and the budgets will be contractually agreed as maximum limits. The specifications for pricing are defined in the price schedule.

7. Option

After the tasks put out to tender have been completed, important elements of these tasks can be continued or extended within the framework of a finalisation and follow-on assignment. Individual points:

- 1. **Type and scope:** The emergency measure concept is expanded to include additional interventions requiring approval of the PPA by the Utility (third party) or other approvals required from other third parties in the project.
- 2. **Requirements:** The option becoming effective is subject to the (interim) results of the original commission.

The option is exercised in the form of an extension to the contract based on the already offered individual rates.

Fee days	Number of experts	Number of days per expert	Total	Comments
Designation of key expert	1	30 (20 in Lesotho and 10 home office)	30	Please use this maximum number of days to calculate professional fees <u>for the option</u> in the financial proposal. Actual time must be documented in time sheets and used as a basis for invoicing
Per-diem allowance in country of assignment	20			
Overnight allowance in country of assignment	20			For onsite days and overnight stays

Quantitative requirements for the optional services



Transport	Quantity	Price (EUR)	Total	Comments
International flights	2			South Africa to Lesotho For Consultants living in South Africa, 2 return flights will be covered in the 15 days on travel to Lesotho
CO ₂ compensation for air travel	4			Against evidence
Link to working aid and table for determining the budget and Guidance for GIZ service providers on avoiding, reducing and offsetting GHG emissions on setting the budget.				
Transportation	20			Transportation costs in country of assignment and home country

It is assumed that the option for extension of the services will be exercised over an additional 3 months.

Provision <u>for the option</u> has been made in the budget for a further two visits to Lesotho with a combined total duration of up to 20 days and further home-based work of up to 10 days.

Please include a subsistence budget for travel (accommodation allowance, per diem allowance) <u>for the option</u> in the financial proposal as shown in the table above. GIZ will reimburse actual travel costs as per GIZ travel regulations up to this amount.

Requirements on the format of the tender for the option

Please submit two price schedules: one price schedule for the main service and one price schedule for the main service and the option (main service + optional service). Please designate each one in the file name.

8. Outsourced processing of personal data

9. -Not Applicable-

10. Annexes

-Not Applicable-