

ZANZIBAR ENERGY SECTOR TRANSFORMATION AND ACCESS PROJECT
TERMS OF REFERENCE
FOR
CONSULTANCY SERVICES FOR HERITAGE IMPACT ASSESSMENT (HIA)

1. INTRODUCTION

The RGoZ has obtained funding from the World Bank to implement the Zanzibar Energy Sector Transformation and Access (ZESTA) Project to address key challenges in the sector arising from sole reliance on the limited submarine transmission capacity from mainland, which will, without additional supply options, result in supply rationing and load shedding during the peak demand period in Unguja. The other challenge in the sector is inadequate distribution system capacity that is causing high technical losses and preventing reliable and efficient supply and the acceleration of electricity access scale-up. The ZESTA Project thus aims to expand access to reliable and efficient electricity services and to scale up renewable energy generation in Zanzibar.

The project is implemented by the Ministry of Water, Energy and Minerals (MoWEM) and the government-owned Zanzibar Electricity Corporation (ZECO), which is responsible for generation, transmission, distribution, and the sale of electricity in both Unguja and Pemba islands. The project will support (i) development of Zanzibar island's first grid-scale 18MWp solar PV generation plant and battery storage infrastructure to improve security of supply in Unguja and help to meet the growing electricity demand in the near term, while paving the way for future scale-up of renewable energy; (ii) construction of the first 132kV high voltage transmission backbone infrastructure to meet the growing power demand, evacuate power from the solar PV power plant and improve power supply quality and reliability across Unguja, as well as investments for distribution network refurbishment and strengthening and last-mile household connectivity scale-up; and (iii) project implementation, sector institutional strengthening, and design and implementation of key planning, strategy, and regulatory frameworks.

Against this backdrop, ZECO will be implementing the investments for distribution network refurbishment and strengthening and last-mile household connectivity scale-up and intends to

procure a consulting firm or consortium to support the preparation, design, procurement, and supervision of the implementation of these investments.

2. DESCRIPTION OF THE DISTRIBUTION NETWORK REFURBISHMENT AND STRENGTHENING AND LAST MILE CONNECTIVITY INVESTMENTS

The expected activities under the proposed distribution network refurbishment and strengthening and last-mile household connections include: (i) the design, supply, installation, and commissioning of the new 33kV and 11kV medium voltage (MV) and 400V low voltage (LV) distribution networks extension works in Unguja and Pemba islands; (ii) refurbishment and upgrade works on the existing 11kV network facilities (cables, transformers, ring-main units, and control and metering panels) around **Stone Town**; (iii) procurement/supply of last mile connection materials for households around Zanzibar (both Unguja and Pemba islands) targeting 80,000 connections; and (iv) installation of the household connections materials through various models that involve contractors for the distribution extension/densification works, labor- only contractors, and inhouse installations by ZECO.

The proposed distribution network investments include the refurbishment of existing 11kV substations and the replacement/upgrade of existing 11kV underground cables within the Stone Town area. Construction activities, such as trench excavation and trench compaction, may have negative impacts and risks on cultural heritage assets that are near the construction sites, especially the old buildings that have weak structures. Other potential impacts include noise, dust, closing of roads and alleyways, restriction of religious activities, loss of livelihoods, etc. Construction activities may also expose the public and contractors' workers to safety risks such as collapsing buildings and falling in uncovered trenches.

3. OBJECTIVE OF THE CONSULTANCY ASSIGNMENT

The objective of the proposed consultancy assignment is to support ZECO to carry out the **Heritage Impact Assessment (HIA)** within Stone Town since part of the project activities will be to refurbish the distribution network in Stone Town area.

Specific objectives of the Heritage Impact Assessment (HIA) are:

- a) To undertake HIA in compliance with the International Council on Monuments and Sites (ICOMOS) guidelines and World Bank Environmental and Social Framework notably ESS8 Cultural Heritage so as to meet the United Nations Educational, Scientific and Cultural Organization (UNESCO) standard of HIA.
- b) To identify all the cultural heritage resources that may be impacted by the proposed investments.
- c) To identify and evaluate the impact of the construction of new 11kV underground cables and refurbishment of existing old 11kV cables in Stone Town on heritage resources relative to the sustainable social and economic benefits and propose adequate mitigation measures to protect cultural heritage from construction.
- d) To consult relevant stakeholders, including project affected persons (PAPs), institutions and governmental Ministries and authorities in order to get their views and concern about the project.
- e) Propose mitigation measures and monitoring requirements against any adverse impacts from mobilization, construction and operation activities.

4. SCOPE OF SERVICES

The scope of consultancy services for the HIA includes the following.

- i) Conduct an overview of Applicable Heritage Legislation, Policies and Guidelines.
- ii) Conduct field visit to the proposed construction site.
- iii) Conduct heritage impact assessment and suggest mitigation measure tailored by the outcomes of the on-site assessments, including the critical analysis of the specification of the construction of new 11kV underground cable and refurbishment of existing old 11kV cables and switchgear in Stone Town specifically on project activities (e.g. substations) which may have impacts on cultural resources (e.g. mosque) to ensure that the cultural significance in Stone Town is not affected by the proposed project.
- iv) Suggest and develop the approaches which will potentially inform decision making in the management process, especially with regards to the required measures to maintain the

authenticity conditions of the attributes that convey the cultural significance of the Stone town.

- v) Undertake an iterative fieldwork in Stone Town in collaboration with local stakeholders and authorities to achieve the following:
- To use existing map and provide a detailed description of all tangible and intangible heritage present in Stone town area to be quantified and characterized so as to assess their vulnerability to potential changes.
 - Assess the level of significance/importance of identified and described heritage in terms of their historical, scientific, social, religious, aesthetic and tourism values against defined criteria.
 - Assess and describe any actual and potential impacts (especially impacts of vibration and noise caused by drilling and excavation) and risks to described heritage baseline within the study area. The impact will need to be considered not only direct visual impacts but also indirect or derived impacts in Stone town.
- vi) Carry out relevant consultations with stakeholders such as the Stone Town Conservation and Development Authority (STCDA) and UNESCO and users of affected cultural sites. The client will provide all the relevant assistance within its powers, including full time cooperation from the relevant institutions, especially the Stone Town Conservation and Development Authority.
- vii) Develop HIA Report which includes the following; -
- a) Prevailing situation on heritage resources within stone town
 - b) Results of the stakeholder's consultation on the benefit and impacts of the proposed development in stone town as well as alternatives and the proposed mitigation and monitoring measures.
 - c) Review legal and institutional Framework for heritage resource in Zanzibar and the World Bank Environmental and Social Framework and any measures needed to address gaps.
 - d) An assessment of impacts (adverse and beneficial) and risks and the evaluation of their scale of severity with regards to the attributes and cultural significance in Zanzibar Stone town including but not limited to the House of wonders, Palace Museum, Central Market, Old Fort, Natural History Museum, Hamamni baths, Handcrafts /Arts Galleries, Slave

market, Old Dispensary, St. Joseph’s Roman Catholic Cathedral and Christ Church Anglican Cathedra.

- e) Alternative analysis (Considered Alternatives and Mitigation Measures): An assessment of alternative options, mitigation measures, and conservation methods that may be considered to avoid or limit the negative impact on cultural heritage resource(s), as per applicable legislation, policies and guidelines.
- f) Recommends adequate mitigation measure (including chance find procedure) in the context of the identified potential impacts. This includes recommendations for measures to be operational before, during and after the implementation of the proposed project.
- g) Develop Cultural Heritage Management Plan for implementation of the recommended mitigation measures which should include requirements for engagement during project implementation.
- h) Outline requirements for monitoring including against the required mitigation measures to be undertaken prior to during and after implementation of the Project including roles and responsibilities for the same.

The consultancy services under this assignment shall be provided within a period of 6 months from the signing of the Contract and will be a lumpsum contract.

5. CONSULTANCY SERVICES DELIVERABLES AND REPORTING REQUIREMENTS

The Consultant shall submit the following reports to the client:

Table 1: Deliverables and Reporting Requirements

Report/Deliverable	Description	Submission deadline (From contract effectiveness date)
1. Inception Report	<p>This will highlight the background, scope of the assignment, proposed approach and methodology, key deliverables, implementation schedule and project team structure and composition. The Inception Report will also include:</p> <ul style="list-style-type: none"> • Description of the proposed investment. • Description of the study area. • Criteria for assessing impacts to cultural heritage sites 	1 month

Report/Deliverable	Description	Submission deadline (From contract effectiveness date)
	<ul style="list-style-type: none"> • An assessment of the current situation of heritage resources in relation to the existing electrical distribution network in Stone Town • Flowcharts visualizing the proposed methodology. The inception report will be submitted for approval by ZECO and the Stone Town Conservation & Development Authority, before the Consultant proceed with the rest of the assignment. 	
2. Interim Draft report on identified potential impacts, Mitigations measures and stakeholder's consultation	The Interim Report will include baseline situation on heritage resources in stone town, legal institution framework for heritage resources in Zanzibar (including World Bank ESF), stakeholders' views and opinion, alternative analysis, identified impacts and their significance, propose mitigation measures and monitoring requirements and developed Cultural Heritage Management Plan as an annex.	3 months
3. Final Report on potential impacts, mitigations measures and stakeholder's consultation.	The Final Report will incorporate views, comments and inputs from ZECO, UNESCO, World Bank and other stakeholders.	6 months

6. CONSULTANCY SERVICES SCHEDULE

The consultancy assignment is expected to take 6 months after signing the contract.

7. MINIMUM QUALIFICATIONS OF THE FIRM AND THE TEAM

The consulting firm is required to have the following corporate experience:

- a) At least ten (10) years' experience in consulting services related to cultural heritage impact assessments.
- b) Relevant similar experience, which should specifically include successfully carried out at least five (5) assignments of similar nature and scope in heritage assessment in the Sub-

Saharan Africa region or similar conditions. Experience of working in Zanzibar and or Tanzania would be an advantage.

- c) Technical and managerial capability of the firm in heritage assessment, mitigation and monitoring measures.

8. PERSONNEL

The Consultant shall provide all personnel necessary for the execution and successful completion of the assignment. The tentative key personnel list shown below is only for guidance. The Consultant may propose a staffing plan and skills mix necessary to meet the objectives and scope of services based on its proposed technical methodology. If all the required skills are not available within the firm, consultants may associate with other firms.

Table 2: Tentative key experts list

SN	Key Expert	Qualifications	Role
1.	Project Manager	<ul style="list-style-type: none"> • At least ten (10) years' experience managing projects of a similar nature and scope (e.g. project(s) which likely have impacts on UNESCO Heritage for which assessment is needed). • Master's Degree in Cultural Heritage Management, archaeology, or similar relevant master degree level. • The Project Manager shall have managed at least Five (5) projects of similar assignment within the last ten (10) years, including study in heritage and mitigation measures within Sub Saharan region. • Demonstrable experience in team management and resource management, • Registration with professional bodies will be an added advantage 	Overall responsibility for the day-to-day activities of the assignment; main contact person between the client and the consultant's team.
2.	Archaeological Expert	<ul style="list-style-type: none"> • At least eight (8) years' experience in archaeological issues and experience in project(s) which likely have impacts on UNESCO Heritage for which assessment is needed. 	Responsible for the Archaeology works

SN	Key Expert	Qualifications	Role
		<ul style="list-style-type: none"> • Minimum Bachelor's Degree in Archaeology or similar bachelor's degree level • Shall have managed at least Five (5) projects of similar assignment within the last eight (8) years, including study in archaeology within Sub Saharan region. • Registration with professional bodies will be an added advantage 	
3.	Electrical Engineer	<ul style="list-style-type: none"> • At least eight (8) years' experience in the distribution network planning, simulation, and analysis. • Minimum Bachelor's Degree in Electrical Engineering, Electro - mechanical Engineering, or equivalent from a recognized institution. • Registration with professional bodies will be an added advantage 	Support the assessment of the current situation of heritage resources in relation to the existing electrical distribution network and new extension in Stone Town
4.	GIS Expert	<ul style="list-style-type: none"> • Minimum Bachelor's Degree in Geographical Information Systems and Remote Sensing or equivalent • At least five (5) years' experience as GIS and mapping expert • Must be able to manage data collection and electronic mapping. • The GIS Expert shall have worked on at least five (5) projects of similar nature and scope within the last seven (7) years. • Registration with professional bodies will be an added advantage. 	Responsible for carrying out all GIS and mapping activities of heritage sites accordingly.

9. TENTATIVE LEVEL OF EFFORT FOR THE KEY EXPERTS

Table 3: Tentative level of efforts for the assignment

SN	Key Expert	Level of effort(person-months)		
		Home/ Office	Field	Total
1	Project Manager / Cultural Heritage Expert	0.2	1.7	1.9

2	Archaeological Expert	0.2	1.5	1.7
3	Electrical Engineer	0.2	1.0	1.2
4	GIS Expert	0.2	1.0	1.2
TOTAL		0.8	5.2	6.0

10. **TENTATIVE PAYMENT SCHEDULE FOR CONTRACT**

Table 6: TENTATIVE PAYMENT SCHEDULE

MILESTONE/DELIVERABLE	PAYMENT (% Contract sum)
1. Submission of Inception Report	15
2. Approval of Interim Report	45
3. Approval of the Final Report	40
TOTAL	100

11. **INPUT AND SUPPORT TO BE PROVIDED BY THE CLIENT**

- a) The Client shall assign a Counterpart staff to coordinate the heritage impact assessment and to take all day-to-day decisions required for the implementation of the assessment. The counterpart staff will coordinate all the activities connected with the assessment and shall be the main link between the Consultant and the Client.
- b) The Client will provide the Consultant with all relevant and available documentation of the proposed new extensions of electricity distribution network and existing 11kV network in Stone Town area.
- c) The Client shall review all deliverables and provide comments within 14 working days from date of submission by the Consultant.
- d) The Client will assist the consultant to obtain from the Zanzibar authorities, the necessary visas, work permits, and other clearances required for performance of the services. The Consultant however remains responsible for adhering to relevant national procedures and requirements.