

SOUTHERN
TANZANIA
ELEPHANT
PROGRAM



Consultancy Opportunity

Radio Communication Expert for a Technical Study for a Landscape-Wide Radio Communications System in the Udzungwa Landscape

1. Background

Southern Tanzania Elephant Program (STEP) is an NGO that works collaboratively to conserve the incredible Udzungwa and Ruaha-Rungwa ecosystems of south-central Tanzania, through targeted support to key protected areas and the communities living around them. STEP is a member of a coalition implementing a major new initiative, the Udzungwa Landscape Strategy (ULS). The ULS is a 20-year commitment focused on ensuring the long-term preservation of the globally significant biodiversity found in the Udzungwa Mountains. The ULS focuses on three core biodiverse PAs in the landscape: Udzungwa Mountains National Park (UMNP), Kilombero Nature Forest Reserve (KNFR), and Udzungwa Scarp Nature Forest Reserve (USNFR) and 71 adjacent villages. The strategy fosters collaboration across PAs, with PA managers from the Tanzania National Parks Authority (TANAPA) and Tanzania Forest Services Agency (TFS) actively co-developing and aligning efforts. The ULS aims to fill critical resource gaps and enhance the capacity of the three protected areas. A key gap identified is the need for a reliable ecosystem-wide radio communication system to enhance coordination across UMNP, KNFR, and USNFR. This system will enable real-time information sharing and facilitate coordinated actions and response among PAs and other relevant stakeholders, thereby improving situational awareness and security across the landscape.

2. Objectives

The main objective of this consultancy is to conduct a feasibility study to inform the design and implementation of an effective radio communication system across the Udzungwa Landscape. The consultant will:

- i. Conduct a study that will inform the implementing partners of the existing situation.
- ii. Identifying current communication gaps and providing actionable, practical suggestions for addressing these.
- iii. Recommending appropriate radio and repeater systems.
- iv. Determining mast locations and line-of-sight for enabling communications within and between the three core PAs.
- v. Providing specifications and cost estimates for infrastructure, radios, installation, training, operations, and maintenance.
- vi. Developing a landscape-wide Communication Strategy and SOPs.
- vii. Producing a final technical report, including georeferenced maps and an M&E plan.

3. Scope of Work

The assignment covers UMNP (199,000 ha), KNFR (134,511 ha), and USNFR (32,763 ha). In close collaboration with STEP's Protection Team, PA staff, LGAs, and the Tanzania Communications Regulatory Authority (TCRA), the consultant will:

- Assess existing communication systems and gaps.
- Map key stakeholders and audiences, proposing engagement strategies.
- Identify information gaps, and communication barriers.
- Recommend suitable radio technologies, mast locations, and system design.
- Develop a Communication Strategy (2025–2030), SOPs, and implementation matrix.
- Provide a costed plan and technical specs for radios, repeaters, masts, fencing, and training.
- Develop M&E tools for impact tracking and reporting.

4. Deliverables

The consultant will deliver the following during the consultancy period:

1. An inception report detailing the assignment's scope, methodology, and timeline.
2. A communications gap analysis report.
3. A Protected Area Radio Communication Strategy (2025–2030) with an implementation matrix.
4. Standard Operating Procedures (SOPs) for communication protocols, radio room operations, and communication channels (within and between protected areas).
5. Control room registers following TANAPA/TFS guidelines
6. A technical report that includes, among other items, the georeferenced mast locations, line-of-sights, hardware and software specifications, fencing, power needs, radio coverage, system details, repeaters, handheld radios, reliability, signal strengths, response times, permit processes, repair costs, integration of developed radio system in the Nature Reserves with the National Park, control room setup, staff training needs, ecological impacts, and proposed mitigation measures, and total costs estimates.
7. A monitoring and evaluation framework with control room staffing needs, key communication performance indicators, training costs, reporting schedules, impact analytics on illegal activities, and a maintenance plan.
8. Draft Communication Tools, including control room registers, training plans, and response protocols.
9. A presentation of findings to PA representatives, incorporating feedback into the final report.

5. Reporting and Supervision

- The consultant will report directly to the STEP's Protection Manager.
- STEP will schedule weekly check-ins to review progress, and the project team will provide feedback on content and strategy.
- The consultant will be supervised by Protection Officers and Head of Protection at respective PAs.

6. Duration

The task will take no longer than **45 days** and commence in **mid-April 2025**.

7. Budget description

The maximum available budget for this study is Tzs. 8,000,000, inclusive of all costs such as fees, travel, accommodation, subsistence, communication, taxes, and any other applicable expenses. The consultant is expected to prepare a detailed budget encompassing all these and to provide invoices and legal EFD receipt(s) and or equivalent documentation for the expenses incurred.

8. Key competencies/technical background and experience required

- Minimum of Bachelor's degree in Telecommunication engineering, Communication Engineering, or related field.
- Minimum five years' experience in designing and implementing radio systems.
- Strong technical knowledge of radio protocols, infrastructure, and hardware.
- Demonstrated experience in developing communication strategies and tools.
- Experience conducting feasibility studies and M&E design.
- Excellent analytical, interpersonal, and report-writing skills.
- Prior experience in Tanzania and working with conservation organizations is preferred.

9. Application Criteria, Submission Requirements, and Timeline

Interested consultants are invited to submit the following:

- Cover letter outlining suitability for the assignment.
- A 5-page proposal with an understanding of the consultancy objectives, tasks, approach, methodology, work plan, and deliverables.
- CV(s) of the lead consultant and key team members highlighting key qualifications and experience.
- Provide a portfolio or links to relevant past similar assignments/work conducted.
- List of past clients and recommendation letters (optional but encouraged).
- Detailed budget and expected timeline.
- Any other relevant information.
- Interested candidates should submit their application on or before **05th April 2025**
- Applicants should submit their applications to applications@stzelephants.or.tz with the subject line "Radio communication consultant" in the subject line of your email. We appreciate all applications, but we will contact only shortlisted candidates for further steps in the selection process.