



# Invitation to Submit Revised Proposal for the Provision of Power for the Shared Telecommunications Tower Infrastructure – Akhamb Island

The Office of the Telecommunications, Radiocommunications and Broadcasting Regulator (TRBR) is inviting revised proposals from power vendors that have participated in the tender for the provision of power for the Shared Telecommunications Tower Infrastructure on the Island of Akhamb, South of Malekula. This invitation extends to other vendors who are also interested in this opportunity.

The Shared Tower Infrastructure is a piloted project, jointly supported by the United Nations Capital Development Fund (UNCDF), the Vanuatu Government through the Department of Communications and Digital Transformation (DCDT), and the Office of the TRBR.

In 2023, TRBR sought proposals from various power vendors in the country. Unfortunately, TRBR was unable to advance the tender further due to unforeseen circumstances that prevented it from proceeding at that time. TRBR truly values the effort and solution submitted by the Vendors who have participated and appreciates their patience in this matter.

#### **Revise Power Scope and Capacity**

The Scope of power has changed. The initial power solution is an integrated system that includes Solar and a Diesel Hybrid Generator. The revised scope of power will focus only on the Diesel Hybrid Generator. The power for the Shared Telecommunications tower infrastructure will be supported by two different power sources. The main power will be provided by a mini-grid, supported by the Vanuatu Government through the Department of Energy (DoE). The other power source will be from the Diesel Hybrid Generator. The Diesel Hybrid Generator will serve as a supplement to the main power, meaning that whenever there is an issue with the mini-grid, the generator will automatically activate to provide continuous power, ensuring that the telecommunications operation remains uninterrupted. This system is designed to maintain reliability and efficiency in the event of power outages or disruptions from the primary source

The Power component is subsequently stated.

#### 1. Hybrid Diesel Generator

- a. Generator Specifications
  - I. X1 14KVA AC Generator with Automatic Transfer Switching (ATS)
  - II. Generator Fuel Consumption: 3.5L/H @ 100% load

# b. Mobile tower equipment consumption Specification

The power supply is only for the mobile tower equipment, as in the table below

Equipment	System	DC Power Details	AC Power Details
Mobile Radio / TX Equipment	Operation Voltage Current requirement	48V 90A	230v 10A
	Total Power Demand	4320Watts	2300Watt

# 2. Fuel Storage

a. 5 Fuel Drum – equivalent to 1000 litres

# 3. Shade for Housing Generator and Storage purposes

- a. Supply of Materials and Construction of Shade
  - I. Shade Specifications
    - Length & Width: 6 metre x 6 metre
    - Height: 2.5 metres
    - Floor Concrete
    - Wall Semi Permanent
      - o Concrete wall 1.25 metres
      - o Corrugated Iron Wall 1.25 Metre
    - Roofing: Corrugated Iron Roofing
  - II. Division x 2 Space
    - Space 1
      - Accommodate Generator
      - o Incorporate ventilation opening, allowing for air circulation
      - Use louvers or grills to prevent debris from entering
    - Space 2
      - o Accommodate fuel storage
      - o Include a Storage shelf
      - o Ensure space is well secured

# 4. Logistics

- a. Shipment of Generator and Shade Material from Port Vila to Akhamb Island
- Transportation on land for the Generator and Shade Material from the Beach (Akhamb Island) to the tower location (Inland of Akhamb Island, approximately 100 meters from the sea coast.

#### 5. Installation of Generator

a. The generator is installed inside the shade, configured to automatically start when the mini-grid backup power is down.

### 6. Training on the Operations and Maintenance of the Generator

- a. Training to be delivered to the caretaker of the power, on the operations and maintenance of the Generator
- b. Produce a manual to operate and maintain the generator

The Proposal must reach the Office of the TRBR by COB of 31st October 2025

#### **Contact Information**

For further details, including submission process, requirements or any clarifications, you may contact the Office of the TRBR on 27621, and talk to the UAS Coordinator or email at <a href="https://hansonwaki@trbr.vu">hansonwaki@trbr.vu</a>

It is advisable to reach out at your earliest convenience to ensure you have all the necessary information before the submission deadline.