

# **Tender for Supply of Communication Test Equipments**



**MR 71/2017**

**Supply of Communication Test Equipment**

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## **1.0 THE COMPANY – FEA**

Fiji Electricity Authority (FEA) is a government owned company solely responsible for supplying power throughout the Fiji Islands through Hydro, Diesel and wind mill generators which are located in different parts of Fiji.

The operations of the company are organized into three geographically defined divisions which correspond to the national administrative divisions as:

- Central Eastern Division based in the capital Suva
  - ✓ Suva, Lami, Navua, Tailevu, Levuka and part of the Coral Coast
- Wertern/Nothern Division based in Lautoka
  - ✓ Lautoka, Tavua, Ba, Sigatoka, Vatukoula, Northern Division (Labasa, Savusavu)

## **2.0 Purpose and description of the Tender**

The Fiji Electricity Authority (FEA) is requesting for bids from reputable Companies for the Supply of Test Equipment's to be used for operational and maintenance work.

## **3.0 Test Equipment to be purchased**

The Brand and Model of test equipment to be purchased are stated below:

- 3.1 Battery Analyzer (Fluke BT521)**
- 3.2 Site Master (Anritsu S331L)**
- 3.3 2 X UHF Hand Held Transceivers**
- 3.4 3 x VHF Hand Held Transceivers**

## 4.0 Technical Specifications of Test Equipment

All technical Specifications stated below should be followed during the purchasing of each Test Equipment:

### 4.1 Battery Analyzer (Fluke BT521)

#### Specifications

Functions	Range	Resolution	Accuracy	BT510	BT520	BT521
Battery resistance/Strap resistance <sup>1</sup>	3 mΩ	0.001 mΩ	1 % + 8	•	•	•
	30 mΩ	0.01 mΩ	0.8 % + 6	•	•	•
	300 mΩ	0.1 mΩ	0.8 % + 6	•	•	•
	3000 mΩ	1 mΩ	0.8 % + 6	•	•	•
Vdc	6 V	0.001 V	0.09 % + 5	•	•	•
	60 V	0.01 V	0.09 % + 5	•	•	•
	600 V	0.1 V	0.09 % + 5	•	•	•
	1000 V	1 V	0.09 % + 5			•
Vac (45 Hz to 500 Hz with 800 Hz filter)	600 V	0.1 V	2 % + 10	•	•	•
Frequency (displayed with Vac and Aac) <sup>2</sup>	500 Hz	0.1 Hz	0.5 % + 8	•	•	•
AC voltage ripple (20 KHz Max)	600 mV	0.1 mV	3 % + 20	•	•	•
	6000 mV	1 mV	3 % + 10	•	•	•
Adc/Aac (with accessory Fluke 1410)	400 A	1 A	3.5 % + 2			•
Temperature	0 °C to 60 °C	1 °C	2 °C (4 °F)			•
Meter mode	999 records for each measurement position with time stamp					
Sequence mode	Up to 100 profiles and 100 profile templates (Each profile stores up to 450 batteries) with time stamp					

<sup>1</sup>The measurement is based on ac injection method. The injected source signal is <100 mA, 1 kHz.

<sup>2</sup>Trigger level VAC: 10 mV, Aac: 10 A

#### Measurement modes

	BT510	BT520	BT521
Resistance (mΩ)	•	•	•
Battery voltage	•	•	•
Voltage dc	•	•	•
Voltage ac and frequency (Hz)	•	•	•
Ripple volt	•	•	•
Temperature of negative battery post			•
DC and ac current (and frequency)			•
DMM mode	•	•	•
Sequence mode	•	•	•
Discharge measurement mode	•	•	•
Automatic measurement save	•	•	•
Wireless communication			•
Memory view	•	•	•

#### **4.2 Site Master(Anritsu S331L)**

Handheld Cable and Antenna Analyzer Featuring Classic and Advanced Modes  
(2 MHz to 4 GHz Cable & Antenna Analyzer with 50 MHz to 4 GHz Power Meter)

- ✓ 2 MHz to 4 GHz Handheld Cable and Antenna Analyzer, impact, dust, and splash resistant
- ✓ More than 8 hours of continuous battery operation
- ✓ Standard built-in InstaCal™ module and Power Meter
- ✓ FlexCal™ maintains calibration with frequency changes
- ✓ Familiar S331D-like Classic Mode and S331E-like Advanced Mode
- ✓ Built-in one button Help function
- ✓ 800 x 480 7" TFT touch screen display and multiple USB ports
- ✓ Internally store >1000 files with fast preview of stored traces
- ✓ Industry standard \*.dat format compatible with Line Sweep Tools (LST) and HHST
- ✓ Optical Connector Inspection (requires Visual Inspection Probe)
- ✓ SkyBridge Tools™ Trace Manager Empowered

#### **1-port RF Cable and Antenna testing 2 MHz to 4 GHz such as:**

- ✓ Cellular
- ✓ Public Safety
- ✓ Radio and TV broadcasting
- ✓ Aerospace and defence

#### **Measurements include:**

- ✓ Return Loss
- ✓ VSWR
- ✓ Cable Loss
- ✓ Smith Chart (50/75 ohm selectable)
- ✓ 1-port Phase
- ✓ Distance-to-Fault Return Loss
- ✓ Distance-to-Fault VSWR
- ✓ RF Power (50 MHz to 4 GHz)



- 4.3 **2 X UHF Hand Held Transceivers**
- 4.4 **3 x VHF Hand Held Transceivers**

- ✓ Dust/Water Protection
- ✓ Powerful Audio and Wide Communication Range  
Reliable Mechanical Design
- ✓ Monitor  
Allows users to monitor the activity on the current channel. The feature is especially helpful for receiving a weak signal.
- ✓ Battery Save  
The Battery Save feature is automatically activated once no activity on the channel and no operation performed, for extended operation time.
- ✓ Low Battery Alert  
Alert users to recharge the battery should the battery level run low.
- ✓ Busy Channel Lockout  
A channel already in use is not available to other users.
- ✓ Time-out Timer  
The feature allows for more efficient use of channels by limiting the amount of time of each transmission.
- ✓ PC Programmable  
Able to customize the features of each radio for each user.

**5.0 Cost Details**

Bidders shall use the table below to list the item with its associated cost.

<b>Test Equipment</b>	<b>Descriptions</b>	<b>QTY</b>	<b>Unit Price, (FJ \$) VIP</b>	<b>Total Price, (FJ \$) VIP</b>
5.1	<b>Battery Analyzer (Fluke BT521)</b>	7		
5.2	<b>Site Master (Anritsu S331L)</b>	1		
5.3	<b>2 X UHF Hand Held Transceivers</b>	2		
5.4	<b>3 x VHF Hand Held Transceivers</b>	3		

**Specification:**

12.3 General Requirement – Material supplied and installation

- a). Warranty – not less than 12 months
- b). Services provided to be of high standard.
- c). Work done as per the details provided.
- d). After service and support.

**5.0 Eligibility / Selection Criteria of the Bidder**

The bidder shall be qualified and well versed with purchasing of Communication equipment as per specifications.

The vendors shall submit the names/contacts, references of local companies, utilities or projects where they have previously undertaken the purchasing which are similar in nature.

**6.0 Bidder Details**

The Bidder shall provide all the necessary information specified in the tables below:

<b>General</b>
<b>The registered name of the Bidder:</b>
<b>Business address for correspondence:</b> <i>(Location, Street , Locality City, Pin Code, Country, Telephone, Facsimile, Email Other)</i>
<b>Contact name of the Authorised Person:</b>
<b>Contact’s position:</b> <b>Contact addresses if different from above</b> <i>Locality City, Pin Code</i> <i>Location, Street, Country, Telephone, Facsimile, Email, Web address</i>
<b>Business structure:</b>
<b>Include the organisations years of experience in this field and reputation in the market place.</b>
<b>Financial standing</b> <i>(Information designed to give client confidence in the financial competence of the BIDDER.)</i> <i>Audited financial accounts for past three years shall be included in appendix.</i>
<b>Total Employees:</b>

Sales Total	2014	2015	2016
Net Profit before Tax	2014	2015	2016
<b>Company Profile(s)</b>			
Reference Sites.			
[Details of at least <b>two</b> similar Purchasing in the last 5 years (including contact details) which will demonstrate the Bidder ability to carry out the process in a timely and professional manner]			

**7.0 Other value added services**

The bidder is open to include any other information that may add value to their product or after sales services.

**8.0 Technical Support**

1. Bidder should provide details of what technical support is available to FEA to make better use of supplier’s product.
2. Include relevant manuals/drawings and instructions for proper care and handling of test equipment’s.

**9.0 Product Information**

Bidders must include the following document together with their Bid:

- Specification/drawings and diagrams.
- Relevant Test Certificates where applicable.
- Standard Compliance Certificate where applicable.

**10.0 Defects warranty period**

All goods shall be supplied with a Warranty Period of not less than 12 months from the date of the receipt of the Goods by FEA. During the Warranty Period, defective parts shall be replaced by the supplier.

**11.0 Price Validity**

The price shall remain valid for acceptance within 3 months from the date of opening of bids and bidders shall not withdraw or amend their proposal prior to the expiration of the validity period.

In exceptional circumstances prior to expiry of the original validity period, the Authority may request the supplier for an extension in the period of validity. The request and the response



thereto shall be in writing. A supplier agreeing to the request will not be permitted to amend the tender price.

### **12.0 Payment Terms**

FEA shall pay the invoice amount in foreign currency to the overseas bank account nominated by the successful supplier within 30 days of receipt of the invoice subject to the materials being received in good order and condition for overseas bidders. The local bidders will be paid in Fijian dollars.

### **13.0 Tender Evaluation**

After the bids are received, it will go through a normal tender evaluation process as per FEA's Tender Policy and Procedures. The successful and unsuccessful bidders will be advised of the outcome after completion of the Tender evaluation process.

The successful bidder will enter into a contract with FEA as mutually agreed. All terms & condition, and pricing details will be stipulated in contract documents.

The evaluation of the tender submissions will be weighted as such:

<b>No.</b>	<b>Components</b>	<b>Weighting (%)</b>
1	Financial Components	40 %
2	Technical capability	35 %
3	Delivery timeframe	15 %
4	Proven background on repeater station equipment & Accessories	10 %



## **14.0 Submission of Tenders**

It is mandatory for Bidders to upload a copy of their bid in the **TENDER LINK** Electronic Tender Box no later than **4:00pm, on Wednesday 5th April, 2017.**

To register your interest and tender a response, view 'Current Tenders' at:

**<https://www.tenderlink.com/fea>**

For further information contact The Secretary Tender Committee, by e-mail

**[TDelairewa@fea.com.fj](mailto:TDelairewa@fea.com.fj)**

In additional, hard copies of the tender, one original and one copy must be deposited in the tender box located at the FEA Head Office, 2 Marlow Street, Suva, Fiji no later than **4:00pm, on Wednesday 5<sup>th</sup> April, 2017**- Addressed as

**Tender – MR 71/2017 – Supply of Communication Test Equipment**

**The Secretary Tender Committee**

**Fiji Electricity Authority**

**Head Office**

**Suva**

**Fiji**

- **Hard copies of the Tender bid will also be accepted after the closing date and time provided a soft copy is uploaded in the e-Tender Box and it is dispatched before the closing date and time.**

Tenders received after **4:00pm** on the closing date of **Wednesday 5<sup>th</sup> April, 2017.**

- Will not be considered.
- Lowest bid will not necessarily be accepted as successful bid.
- **It is the responsibility of the bidder to pay courier chargers and all other cost associated with the delivery of the hard copy of the Tender submission including any Duties/Taxes. Hard copies of the Tender submission via Post Box will not be considered.**