



AFRICA MOBILE NETWORKS LTD

REQUEST FOR PROPOSAL (RFP)

FOR

**SUPPLY OF ELECTRICAL POWER SYSTEMS FOR RURAL
MOBILE NETWORK BASE STATIONS IN BENIN**

AMN REFERENCE: RFP1303-1

SEPTEMBER 28TH, 2013



CONTENTS

SECTION	TITLE	PAGE
1	INTRODUCTION	3
2	PROPOSAL CONDITIONS	3
3	RFP DUE DATE AND VALIDITY	3
4	EVALUATION CRITERIA	3
5	DELIVERY SCHEDULE	3
6	TECHNICAL REQUIREMENTS	4
7	COMMERCIAL REQUIREMENTS	5
7.1	PRICING REQUIREMENTS	5
7.2	PAYMENT REQUIREMENTS	6



1. INTRODUCTION

AMN has a contract with a licensed mobile network operator (the “MNO”) for the construction and operations & maintenance (O&M) of 200 mobile network base stations, all located in rural areas within Benin.

The contract in Benin is the first of 12 similar contracts that AMN will sign for different countries throughout sub-Saharan Africa for a total of approximately 5,000 base stations. All base stations will be deployed by December 2017.

This Request For Proposal (RFP), AMN reference RFP1303-1, is for the supply, delivery and installation of the photo-voltaic (“solar”) electrical power system (EPS) for communication base stations in Benin.

2. PROPOSAL CONDITIONS

Proposers are responsible for their own costs in preparing proposals. AMN accepts no responsibility for any costs incurred by proposers as a result of this RFP.

AMN reserves the right not to make any contract award, or to award part of the work described in this document.

3. RFP DUE DATE AND VALIDITY

Proposals are due by close of business on Friday October 18th, 2013. Proposals submitted after this date may not be considered in the evaluation. Proposals should be in English and emailed to md@africamobilenetworks.com.

Proposals should quote reference number RFP1303.

Proposals should be valid for 90 days.

4. EVALUATION CRITERIA

The successful bidder will be selected on the basis of the lowest compliant bid. Bidders are requested to provide a detailed capability statement to demonstrate

their qualifications for the work, and to provide reference examples. Proposals should include:

- Capability Statement
- Technical Proposal
- Commercial Proposal
- Reference Cases

AMN reserves the right to include additional criteria in evaluating bids and to make a selection based on the proposal it deems to be in the best interests of AMN.

5. DELIVERY SCHEDULE

The build phase is divided into 3 phases:

PHASE	MONTHS ARO	SITES PER MONTH	TOTAL SITES
1	2	1	1
2	7 TO 12 INCLUSIVE	10	60
3	13 TO 35 INCLUSIVE	6	138
	36	1	1
TOTALS			200

Where ARO means After Receipt of Order.

6. TECHNICAL REQUIREMENTS

The EPS supplied must generally be fit for the purpose of meeting the power requirements of mobile network communication services in rural areas in Benin, including but not limited to the requirements below.

General Requirements

- Base configuration of supporting a power consumption for the base station of 140W
- Easy and low-cost upgrade from 140W to 230W (additional PV panels and batteries only)
- Easy and low-cost upgrade from 230W to 320W230W (additional PV panels and batteries only)
- Tropical environment, maximum humidity of 100%
- Minimum overall design life of 15 years

- Annual power availability of 99.99%
- System controller (requirements below)
- Include support for installation, integration and inter-working tests with the MNO
- Include on-site training for AMN technical staff

System Controller Requirements

- Upgradeable from 140W to 320W
- Monitoring and data logging of solar array current, battery voltage, battery temperature, battery state of charge, load current
- Support for alarm monitoring for high and low voltage and out-of-temperature-range
- Ethernet interface
- Software application for remote monitoring and control of the EPS
- Include documentation and on-site training for AMN technical staff

PV Panel Requirements

- 15-year warranty
- Over-current protection on all inputs and outputs
- Transient suppression on all inputs and outputs
- Pole or frame mount for PV panels accommodating maximum (320W) upgrade

Battery Requirements

- Battery voltage -48V DC
- Deep-cycle battery (sealed)
- Warranty of >2 years
- Battery design life of >5 years (1,825 cycles) at 25 degrees Celcius with the design depth of discharge (DOD)
- Battery autonomy of >3 days to max 80% DOD
- Aluminium cabinet, supporting sufficient batteries to meet the maximum (320W) upgrade and additional space (size TBC) for VSAT IDU

7. COMMERCIAL REQUIREMENTS

7.1. PRICING REQUIREMENTS

All prices to be submitted in US dollars.

Prices should be broken down as follows:

- EPS unit price per site, FOB country of origin

- Shipping costs per site (consistent with the delivery schedule in Section 5)
- Import duties, taxes and customs clearance
- Option price for in-country logistics and installation/commissioning on site
- Any additional sales taxes which apply

The following upgrade pricing options are also requested

- Upgrade from 140W to 230W
- Upgrade from 230W to 320W

7.2. PAYMENT REQUIREMENTS

The invoice for the EPS for the phase 1 site should be deferred to month 6.

Letters of Credit will be issued for Phase 2 in month 6 and for Phase 3 in month 12.

Invoices for 50% of unit price should be issued

- On shipment
- On completion of installation.