



**Diffusion dans toute la région du Lac Tchad
Broadcasting throughout the Lake Chad Region**

Request for Quotation (RFQ)

Supply and Delivery of Solar Equipment for Field Sites in the Lake Chad Region, Chad

I General Information

Detail	Specification
RFQ Title	Supply and Delivery of Solar Equipment for RNI field sites in the Lake Chad region, Chad.
Project	Solar for Lake Chad sites.
Issuing Authority	Okapi Consulting
Title of Work	Supply and Installation of Solar PV equipment
Ref. No.	OKAPI/RFQ/LAKE-CHAD/2025/01
Issue Date	14 November 2025
Submission Deadline	23:59, 30 November 2025
Clarification Deadline	12:00 noon, 20 November 2025
Contact for Clarification and Submission	tender4@okapi.cc



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II. Introduction and background

Okapi Consulting seeks comprehensive proposals from qualified service providers to deliver essential Radio Equipment for its FM transmission RNI sites located in the Lake Chad region.

Radio Ndarason Internationale (RNI) is a critical information source, reaching over 7.5 million regular listeners on Shortwave and FM. RNI's programming, broadcast in the Kanuri, Kanembu, and Buduma languages, targets areas impacted by the Boko Haram insurgency and plays a pivotal role in promoting peace and stability in the region, aligning with the African Union's mandate. This procurement is vital to maintaining and expanding RNI's broadcast capacity.

III. Scope of Work (SOW)

The contract is for a complete for the **full supply** of the equipment detailed in Section IV. Bidders must account for the following mandatory elements:

- a **Supply:** Supply of all equipment listed in Section IV.
- b **Transport: Transport and logistics** Delivery of the solar PV equipment to the sites listed in Section IV (Baga Sola, Doumdoum, Ngouri and Bol)
- c **Transportation and Logistics (Delivery to Final Sites):** Transport and Logistics (Full Responsibility): The bidder is fully responsible for all transport and logistics from N'Djamena (or port of entry) to the final field sites: Baga Sola, Doumdoum, Ngouri, and Bol. Quoted prices must be **all-inclusive** and must cover all costs associated with this final leg of delivery. This includes all costs related to local customs clearance, storage, ground transportation, and handling until the equipment is accepted at the designated site.
- d **Security and Risk Management: Security and Site Access:** The bidder is responsible for ensuring the **safety and security of its personnel** and equipment during the transportation, installation, and commissioning phases at all field sites. Okapi Consulting/RNI will facilitate liaison with relevant local authorities to grant site access, but the bidder must detail their own security and risk mitigation plan for operating in the Lake Chad region. The bidder must account for all security-related costs in their financial proposal.
- e **Installation and Commissioning** Installation and commissioning of the solar PV equipment at their respective sites, as listed in Section IV. **The bidder must provide comprehensive final installation documentation and a minimum of one day of operational training to RNI site technicians upon commissioning.**



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- f Environmental Requirement:** All supplied equipment must be suitable for the harsh operational environment, including high heat and dust. Bidders should note that the container-based sites lack proper aeration, leading to excessive heat accumulation.
- g Warranty:** A minimum **2-year structural warranty** on the equipment and installation. Bidders **must clearly specify** their guaranteed **response time** (time until the vendor acknowledges and initiates action) and the maximum guaranteed **repair/replacement timeline** (time until the fault is fixed or the item is replaced) for any critical failure covered under the warranty.

IV. Equipment list and technical Specifications

Bidders must provide an itemized quote corresponding to the following complete equipment list. Bids should state whether the specified model or an equivalent is being proposed.

Item No.	Qty	Description	Specifications
		Solar equipment for Baga Sola	
1	1	Victron MultiPlus-II 48V/3000VA Inverter/Charger 35-32A GX or equivalent	Top of the range, 48V/3000W inverter, Operating temperature range -40 to +65 °C, Cont. output power at 25 °C 2400 W
		Solar equipment for Doumdoum – to add to existing 6 x 300W panels	
1	1	Victron MultiPlus-II 48V/3000VA Inverter/Charger 35-32A GX or equivalent	Top of the range, 48V/3000W inverter, Operating temperature range -40 to +65 °C, Cont. output power at 25 °C 2400 W with built in protection for low battery voltage
2	6	Solar Panels – 300W – Welion or equivalent	Pmax 300W, Operating Voltage Voc – 45.2V Dimensions (mm) 1956 x 992 x 45
3	6	Mounts for 300W Solar Panels listed above	Weather resistant, made out of solid metal to withstand local weather conditions around the Lake Chad basin.
4	2	Fogstar Energy 51.2V 32kWh Battery –	Cycle Life: 4000 Cycles at 1C to 80%



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		Lithium	(after 4000 cycles, you will still have a battery that can deliver 80% of the stated capacity) 5.12Kwh is fully useable. BMS: PACE 100A BMS Maximum Discharge: 100A Balance Current: 0.5A Capacity: 100ah – Lithium
5	1	35mm ² Bat to Reg Cables & Fuse Kit - 100A - 8mm Lugs	
6	2	Battery Joining Cable 20mm ² - Black (1x2m)	
7	4	16mm ² Cable Lug Ring size 8mm – CRIMPED	
8	2	Battery Joining Cable 20mm ² - Red (1x2m)	
9	1	125A Midi Fuse - CRIMPED	
10	1	MIDI Fuse Holder - CRIMPED	
11	2	100m roll of 6mm sq solar cable for solar panels	
12	10	Pair of MC4 Type Solar Connectors	
13	16	35mm sq Battery Cables (8 Black and 8 Red) with lugs for batteries	
14	1	Victron - SmartSolar MPPT RS 450V/100A-MC4 or equivalent	Rated charge current 100A Maximum charge power 5.8 kW at 57.6 V Maximum DC PV voltage 450 V
15	1	Any other cabling / installation hardware required to install the solar PV system above	
		Solar Equipment for Ngouri	
1	4	Victron (or equivalent) AGM 220 AH Batteries – 12V	Victron build quality and reliability Sealed for life and maintenance-free



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			Excellent high-current performance Low self discharge Long storage time without recharging Exceptional discharge recovery Approx. 600 cycles at 50% DoD M8 'bolt through' terminals on short edge: POS RHS / NEG LHS Suggested charge current range: 22-44A 2 year warranty with built in protection for low battery voltage
2	8	35mm sq Battery Cables (4 Black and 4 Red) with lugs for batteries	
3	1	Any other cabling / installation hardware required to install the PV system above	
		Complete PV Solar System for Bol, including:	
1	12	DH96NE- 450W Solar PV Module N-Type Bifacial - Black Frame (or equivalent)	Maximum Power (Pmax): 450W, Operating Voltage(Vmp/V) 30.02, Operating Current(Imp/A) 14.99 Efficiency: 22.5%, Output Cable: 4mm ² , cable length 1200mm (can be customized) Connector: Original MC4 Series, Length (mm)1,762 Width (mm)1,134 Thickness (mm)30 Product Weight (Kg)21.6
2	12	Mounts for 450W Solar Panels listed above (with the following weight and dimensions: Length (mm)1,762 Width (mm)1,134 Thickness (mm)30 Product Weight (Kg)21.6)	Weather resistant, made out of solid metal to withstand local weather conditions around the Lake Chad basin.
3	2	12m - BLACK 4mm Single-Core Solar Cable with MC4's	4mm Diameter. MC4 Connectors Fitted



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4	1	DC Isolator Switch (2 string)	2 STRING SWITCH DISCONNECTOR, IP66/67 ENCLOSURE, BLACK/GREY PADLOCKABLE HANDLE, Waterproof rating IP66/IP67
5	1	Victron SCC125110412- SmartSolar MPPT 250V/100A-Tr VE.Can (or equivalent)	Rated charge current 100A Nominal PV power, 12V 1a,b) 1450W Nominal PV power, 24V 1a,b) 2900W Nominal PV power, 36V 1a,b) 4350W Nominal PV power, 48V 1a,b) 5800W Max. PV short circuit current 2) 70A (max 30A per MC4 conn.) Maximum PV open circuit voltage 250V absolute maximum coldest conditions 245V start-up and operating maximum Maximum efficiency 99%
6	1	10mm ² Battery to Regulator Cables & Fuse Kit - 100A - 8mm Lugs	Cable Diameter 10mm ²
7	6	Fogstar Energy 51.2V 32kWh Battery or equivalent	Cycle Life: 4000 Cycles at 1C to 80% (after 4000 cycles, you will still have a battery that can deliver 80% of the stated capacity) 5.12Kwh is fully useable. BMS: PACE 100A BMS Maximum Discharge: 100A Balance Current: 0.5A Capacity: 100ah
8	2	Victron Inverter Charger PMP482306000 - MultiPlus-II 48/3000/35-32A GX or equivalent	Transfer switch 32 A Maximum AC input current 32 A INVERTER DC Input voltage range 38 – 66 V Output Output voltage: 230 VAC ± 2% Frequency: 50 Hz ± 0,1% (1) Cont. output power at 25°C (3) 3000 VA Cont. output power at 25°C 2400 W Cont. output power at 40°C 2200 W Cont. output power at 65°C 1700 W Maximum apparent feed-in power 2500VA Peak power 5500 W



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			Maximum efficiency 95 % Zero load power in Search mode 2 W CHARGER AC Input Input voltage range: 187-265 VAC Input frequency: 45 – 65 Hz Charge voltage 'absorption' 57,6 V Charge voltage 'float' 55,2 V Storage mode 52,8 V Maximum battery charge current (4)35A Battery temperature sensor Yes
9	1	ASS030064900- Victron RJ45 UTP Cable 0.3m (or equivalent)	
10	1	ASS030537010- Victron Energy VE.Bus Smart Dongle (or equivalent)	
11	1	35mm sq BLACK Battery Cable - 1200mm – 8mm LUGS	
12	1	35mm sq RED Battery Cable - 1200mm – 8mm LUGS	
13	1	Mega Fuse Holder CRIMPED 200MM FROM END OF REG CABLE	
14	1	Fuse 125A Mega Fuse CRIMPED 200MM FROM END OF REG CABLE	
15	1	BPP900450110- Victron Cerbo GX MK2 (or equivalent)	
16	1	BPP900455050- Victron Energy GX Touch 50 (or equivalent)	
17	1	ASS030064980- Victron RJ45 UTP Cable 3m (or equivalent)	
18	1	ASS030530230- Victron Energy VE.Direct Cable 3m (or equivalent)	



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19	1	ASS030720018- VE.Can to CAN-bus BMS type B Cable 1.8 m (or equivalent)	
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V. Vendor requirements and mandatory quotation contents

Bidders are requested to submit a detailed proposal (RFQ) addressing the project's objectives, scope, deliverables, timelines, and budget.

A. Company eligibility and experience

- a The bidder should be a reputable registered company with at least **three years of experience** providing similar services.
- b The bidder must have a **proven track** record of meeting delivery deadlines for at least **two (2) similar projects** in the last three years.
- c The bidder must be responsive to requests for clarification regarding the project.

B. Quotation requirements

Quotations shall be **signed, stamped, and scanned in colour**. The quotation must include the following mandatory components:

- a **Quotation currency:** All financial submissions MUST be in either XAF/EUR.
- b **Pricing structure:** Quoted prices must be all-inclusive and cover delivery costs to the final field sites.
- c **Delivery period:** A clearly stated and realistic delivery period for the full supply. Provide a detailed logistical schedule.
- d **Quotation letter:** Signed and stamped, guaranteeing validity for at least ninety (90) calendar days.
- e **Payment terms:** Clearly state the payment terms.
- f **Delivery terms, bank details, and contact details.**

VI. Submission and evaluation criteria

A. Submission instructions



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- a **Clarification requests:** Send requests to **tender4@okapi.cc** not later than 12:00 noon on 20th November 2025. The subject line must include the RFQ number and Title.
- b **Submission:** All quotations must be formally addressed to Okapi Consulting and sent via email to **tender4@okapi.cc** not later than 23:59 on 30th November 2025. The subject line must include the RFQ number and Title.

B. Evaluation criteria

Proposals will be evaluated based on the following weighted criteria for transparency and uniformity:

Criterion	Weight
Total Price (Value for Money)	60%
Quality of Equipment Proposed and Adherence to Specifications	20%
Experience and Track Record (Similar projects)	10%
Delivery and Logistics Plan (Detail and realism)	10%

VII. Okapi Consulting's rights

Okapi Consulting reserves the right to accept or reject any quotation, cancel the procurement process, and reject all quotations without prior notice or explanation.