



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

Request for Quotation (RFQ)

Supply and Installation of Solar Equipment for Studios and Office in N'djamena, Chad

I General Information

Detail	Specification
RFQ Title	Supply and Installation of Solar Equipment for Studios and Office in N'djamena, Chad
Project	RNI N'djamena office
Issuing Authority	Okapi Consulting
Title of Work	Supply of solar equipment for N'djamena
Ref. No.	OKAPI/RFQ/SOLARNDJ/2025/01
Issue Date	14 November 2025
Submission Deadline	23:59, 30 November 2025
Clarification Deadline	12:00 noon, 20 November 2025
Contact Clarification Submission	for and tender5@okapi.cc



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II. Introduction and background

Okapi Consulting seeks comprehensive proposals from qualified service providers to deliver essential Solar Equipment for its office in N'djamena.

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 and installation** of the equipment detailed in Section IV and training of Ndarason staff in the use and maintenance of the equipment provided. 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 our N'djamena office.
- c **Installation and Commissioning** Installation and commissioning of the solar PV equipment at the site. Bidders must detail their plan for local transport, security, and insurance for the installation team.
- d **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.
- e **Warranty:** Bidders must state their guaranteed **response time** and the maximum guaranteed **repair/replacement timeline** for critical failures covered under the warranty. Bidders must include a 2-year installation warranty period.
- f **Maintenance:** Bidders **must include a separate, itemized quotation** for a **one-year preventative maintenance contract** following the 2-year installation warranty period.
- g **Training:** Bidders must include a minimum of one day of operational training for RNI staff upon commissioning.



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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	Qty	Description	Specifications
		Complete PV Solar System for N'djamena, including:	
1	24	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	24	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	4	12m - BLACK 4mm Single-Core Solar Cable with MC4's	4mm Diameter. MC4 Connectors Fitted
4	2	DC Isolator Switch (2 string)	2 STRING SWITCH DISCONNECTOR, IP66/67 ENCLOSURE, BLACK/GREY PADLOCKABLE HANDLE, Waterproof rating IP66/IP67
5	1	SCC145120510- Victron SmartSolar MPPT RS 450V/200A MC4 (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



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			(max 30A per MC4 conn.) Maximum PV open circuit voltage 250V absolute maximum coldest conditions 245V start-up and operating maximum Maximum efficiency 99%CHARGER Battery voltage 48 V Rated charge current 200 A Maximum charge power 11.5 kW at 57.6 V Charge voltage 'absorption' Default setting: 57,6 V (adjustable) Charge voltage 'float' Default setting: 55,2 V (adjustable) Programmable voltage range Minimum: 36 V Maximum: 60 V (7) Charge algorithm Multi-stage adaptive (adjustable) Battery temperature sensor Included Maximum efficiency 96 % Self-consumption 15 mA SOLAR Maximum DC PV voltage 450 V Start-up voltage 120 V MPPT operating voltage range 80 – 450 V (1)
6	1	70mm ² 200A Mega Fuse Kit - 10mm Lugs	70mm ² 200A Mega Fuse Kit - 10mm Lugs
7	8	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)



Diffusion dans toute la région du Lac Tchad
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			5.12Kwh is fully useable. BMS: PACE 100A BMS Maximum Discharge: 100A Balance Current: 0.5A Capacity: 100ah
8	2	Victron Inverter Charger PMP483150000 - MultiPlus-II 48V/15000VA 200-100 -230V or equivalent	Transfer switch 100 A Maximum AC input current 100 A INVERTER DC Input voltage range 48 V – 38-66 V Output Output voltage: 230 VAC $\pm$ 2 % Frequency: 50 Hz $\pm$ 0,1 % (1) Cont. output power at 25 °C (3) 15000 VA Cont. output power at 25 °C 12000 W Cont. output power at 40 °C 10000 W Cont. output power at 65 °C 7000 W Max apparent feed-in power 15000 VA Peak power 27000 W Maximum efficiency 95% Zero load power 55 W Zero load power in AES mode 39 W Zero load power in Search mode 6 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



**Diffusion dans toute la région du Lac Tchad
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			Max. battery charge current (4) 200 A 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	50mm sq BLACK Battery Cable - 1200mm - 8mm LUGS	
12	1	50mm sq RED Battery Cable - 1200mm - 8mm LUGS	
13	1	Mega Fuse Holder CRIMPED 200MM FROM LUG END OF REG CABLE	
14	1	300A Fuse CRIMPED 200MM FROM LUG END OF RED 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)	
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 EUROS or XAF (CFA).
- b **Pricing structure:** Quoted prices must be all-inclusive and cover delivery **to our office in N'djamena and installation**.
- c **Maintenance pricing:** Bidders **must include a separate, itemized quotation** for a **one-year preventative maintenance contract** following the 2-year installation warranty period.
- d **Delivery period:** A clearly stated and realistic delivery period for the full supply. Provide a detailed logistical schedule.
- e **Quotation letter:** Signed and stamped, guaranteeing validity for at least ninety (90) calendar days.
- f **Payment terms:** Clearly state the payment terms.
- g **Delivery terms, bank details, and contact details.**

VI. Submission and evaluation criteria

A. Submission instructions

- a **Clarification requests:** Send requests to tender5@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 tender5@okapi.cc not later than 23:59 on 30th November 2025. The subject line must include the RFQ number and Title.



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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.