Radio Ndarason Internationale (RNI)

Broadcasting throughout the Lake Chad Region

REQUEST FOR QUOTATION (RFQ)

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

I. General Information

Detail	Specification
RFQ Title	Supply, Delivery and Installation of Solar Equipment for RNI Field Sites in the Lake Chad Region, Chad
Project	Solar Equipment for RNI Field Sites in the Lake Chad Region, Chad – Financed by the French Development Agency (AFD)
Issuing Authority	Okapi Consulting
Scope of Contract	This contract covers the supply, delivery, installation and commissioning of photovoltaic solar equipment for RNI field sites in the Lake Chad Region, Chad
Reference No.	OKAPI/RFQ/LAKE-CHAD/2026/01
Date of Issue	1 June 2026
Submission Deadline	23:59, 26 June 2026
Deadline for Clarification Requests	12:00, 19 June 2026
Submission Address	tender1@okapi.cc

II. Introduction and Background

Okapi Consulting is inviting comprehensive technical and financial proposals from qualified suppliers for the supply, delivery and installation of photovoltaic solar equipment at RNI FM transmission sites located in the Lake Chad Region.

Radio Ndarason Internationale (RNI) is a vital source of information, reaching more than 7.5 million regular listeners through FM and shortwave broadcasts. RNI's programming, broadcast in Kanuri, Kanembu and Buduma languages, is primarily directed at communities affected by the Boko Haram insurgency and actively contributes to the promotion of peace, social cohesion and stability in the region, in accordance with the mandate of the African Union.

This contract aims to strengthen energy continuity and the operational capacity of RNI broadcasting sites through the installation of reliable photovoltaic solar systems adapted to the challenging environmental conditions of the Lake Chad Region.

III. Terms of Reference (ToR)

This contract covers the supply, delivery, complete installation and commissioning of the equipment detailed in Section IV. Bidders must take into account the following mandatory requirements:

a. Supply of Equipment

The supplier shall ensure the supply of all photovoltaic solar equipment and accessories listed in Section IV.

b. Transport and Logistics

The supplier shall be responsible for the transport, handling and delivery of equipment to the RNI field sites located at Baga Sola, Doumdoum, Ngouri, Liwa and Bol.

c. Transport and Logistics – Full Responsibility

The supplier shall assume full responsibility for transport and logistics from N'Djamena (or the point of entry) to the final field sites. Quoted prices must be all-inclusive and shall cover:

- Warehousing;
- Overland transport;
- Handling;
- Final delivery through to acceptance of equipment at designated sites.

d. Security and Risk Management

The supplier shall be responsible for the security of its personnel, equipment and operations throughout the transport, installation and commissioning phases.

Okapi Consulting / RNI will facilitate liaison with the relevant local authorities for site access; however, the supplier must submit a detailed security and risk mitigation plan appropriate to the operational context of the Lake Chad Region. All security-related costs must be included in the financial proposal.

e. Installation and Commissioning

The supplier shall be responsible for:

- Complete installation of photovoltaic solar systems at the relevant sites;
- Integration of existing equipment already held by RNI, in strict accordance with the specific baseline configurations and notes provided for each station under Section IV (Equipment List and Technical Specifications).
- Technical testing and commissioning;
- Submission of complete installation documentation;
- A minimum one-day operational training session for RNI site technicians.

f. Environmental Requirements

All proposed equipment must be suited to the harsh climatic and environmental conditions of the region, in particular:

- Extreme heat;
- Dust;
- Constraints arising from equipment installed in containers with limited ventilation and significant heat build-up.

g. Warranty

The supplier must provide:

- A minimum warranty of two (2) years covering the equipment and installations;
- **A guaranteed response time of under twenty-four (24) hours** from the moment a critical system failure is reported by RN

A guaranteed maximum turnaround time of seventy-two (72) hours for the complete repair, deployment of a temporary loan unit, or full replacement of defective equipment covered under the warranty to ensure immediate broadcasting continuity.

h. Acceptance and Liability

Final payment shall be conditional upon receipt and validation of a signed commissioning report.

Any material damage occurring during transport, handling or installation shall remain entirely the supplier's responsibility.

IV. Equipment List and Technical Specifications

Bidders must provide a detailed technical and financial proposal covering all equipment and services required under this contract. Proposals must clearly specify models, quantities and technical specifications for each item.

Site: Baga Sola

Description	Model	Qty	Specifications
Panel Support Structure	UPN Tube	16	Weather-resistant, manufactured in solid metal to withstand local meteorological conditions in the Lake Chad Basin.
Distribution Board	12-way	2	
Circuit Breaker	DC 125 A	3	
Circuit Breaker	DC 16 A	2	
Solar Cable MC 2 x 4	1 x 50 mm² (metres)	20	
Battery Cable	1 x 70 mm² (metres)	20	
RJ45 UTP Cable	UTP	1	
Flexible Power Cable	3 x 10 mm² (metres)	20	
Battery Terminal (Round)	70 mm	4	
Parker Screws	Box	1	
Cable Trunking	2/10	3	
Plywood Panel (11 mm)	Plywood	2	
Junction Box	Steel	1	
Nut Ø15 mm	—	15	

Description	Model	Qty	Specifications
Solar Air Conditioner	9,000 BTU	1	9,000 BTU
Lightning Protection System Installation	—	1	
ICTA Conduit Reel	ICTA	1	
AC Protection		1	
Combiner box / Busbar		1	
Solar Panel cable - Roll	3 x 6mm²	1	
16A Timer, 2p		1	

Note: *Please note that we already have 16 x 580 W panels, 1 x Félicity 25 kWh lithium battery and 1 x Deye 16 kVA hybrid inverter which must also be installed as part of this installation at Baga Sola.*

Site: Ngouri

Description	Model	Qty	Specifications
Panel Support Structure	UPN Tube	16	Weather-resistant, manufactured in solid metal to withstand local meteorological conditions in the Lake Chad Basin.
Hybrid Inverter	Deye 48V 16kVA	1	High-end 48V / 16,000 W inverter. Operating temperature range: -40 to +65°C. Single-phase. Nominal AC output power: 16 kW. Maximum apparent power: 17.6 kVA. Nominal battery voltage: 48 V (range: 40–60 V). Maximum battery charge current: 290 A. Maximum battery discharge current: 290 A. Number of MPPT trackers: 3. Inputs per MPPT: 2 strings. Total PV inputs: 6. Maximum PV power: 32 kW.
Distribution Board	12-way	2	
Circuit Breaker	DC 125 A	3	
Circuit Breaker	DC 16 A	2	
Solar Cable MC 2 x 4	1 x 50 mm² (metres)	20	
Battery Cable	1 x 70 mm² (metres)	20	
RJ45 UTP Cable	UTP	1	
Flexible Power Cable	3 x 10 mm² (metres)	20	
Battery Terminal (Round)	70 mm	4	
Parker Screws	Box	1	

Description	Model	Qty	Specifications
Cable Trunking	2/10	3	
Plywood Panel (11 mm)	Plywood	2	
Junction Box	Steel	1	
Nut Ø15 mm	—	15	
Solar Air Conditioner	9,000 BTU	1	9,000 BTU
Lightning Protection System Installation	—	1	
ICTA Conduit Reel	ICTA	1	
AC Protection		1	
Combiner box / Busbar		1	
Solar Panel cable - Roll	3 x 6mm²	1	
16A Timer, 2p		1	

Note: *Please note that we already have 16 x 580 W panels and 1 x Félicity 25 kWh lithium battery which must also be installed at Ngouri.*

Site: Doum Doum

Description	Model	Qty	Specifications
Photovoltaic Solar Module	DH96NF 580W	12	Monocrystalline, 580 W, 48 V.
Panel Support Structure	UPN Tube	16	Weather-resistant, manufactured in solid metal to withstand local meteorological conditions in the Lake Chad Basin.
Hybrid Inverter	Deye 48V 16kVA	1	High-end 48V / 16,000 W inverter. Operating temperature range: -40 to +65°C. Single-phase. Nominal AC output power: 16 kW. Maximum apparent power: 17.6 kVA. Nominal battery voltage: 48 V (range: 40–60 V). Maximum battery charge current: 290 A. Maximum battery discharge current: 290 A. Number of MPPT trackers: 3. Inputs per MPPT: 2 strings. Total PV inputs: 6. Maximum PV power: 32 kW.
Distribution Board	12-way	2	
Circuit Breaker	DC 125 A	3	
Circuit Breaker	DC 16 A	2	
Solar Cable MC 2 x 4	1 x 50 mm² (metres)	20	

Description	Model	Qty	Specifications
Battery Cable	1 x 70 mm² (metres)	20	
RJ45 UTP Cable	UTP	1	
Flexible Power Cable	3 x 10 mm² (metres)	20	
Battery Terminal (Round)	70 mm	4	
Parker Screws	Box	1	
Cable Trunking	2/10	3	
Plywood Panel (11 mm)	Plywood	2	
Junction Box	Steel	1	
Nut Ø15 mm	—	15	
Solar Air Conditioner	9,000 BTU	1	9,000 BTU
Lightning Protection System Installation	—	1	
ICTA Conduit Reel	ICTA	1	
AC Protection		1	
Combiner box / Busbar		1	
Solar Panel cable - Roll	3 x 6mm²	1	
16A Timer, 2p		1	

Note: *Please note that we already have 4 x 580 W panels and 2 x Aurora 16 kWh lithium batteries which must also be installed at Doum Doum.*

Site: Liwa

Description	Model	Qty	Specifications
Photovoltaic Solar Module	DH96NF 580W	16	Monocrystalline, 580 W, 48 V.
Panel Support Structure	UPN Tube	16	Weather-resistant, manufactured in solid metal to withstand local meteorological conditions in the Lake Chad Basin.
Distribution Board	12-way	2	
Circuit Breaker	DC 125 A	3	
Circuit Breaker	DC 16 A	2	
Solar Cable MC 2 x 4	1 x 50 mm² (metres)	20	
Battery Cable	1 x 70 mm²	20	

Description	Model	Qty	Specifications
	(metres)		
RJ45 UTP Cable	UTP	1	
Flexible Power Cable	3 x 10 mm² (metres)	20	
Battery Terminal (Round)	70 mm	4	
Parker Screws	Box	1	
Cable Trunking	2/10	3	
Plywood Panel (11 mm)	Plywood	2	
Junction Box	Steel	1	
Nut Ø15 mm	—	15	
Solar Air Conditioner	9,000 BTU	1	9,000 BTU
Lightning Protection System Installation	—	1	
ICTA Conduit Reel	ICTA	1	
AC Protection		1	
Combiner box / Busbar		1	
Solar Panel cable - Roll	3 x 6mm²	1	
16A Timer, 2p		1	

Note: *Please note that we already have 2 x Aurora 16 kWh lithium batteries and 1 x Deye 16 kVA hybrid inverter which must also be installed at Liwa.*

Site: Bol

Description	Model	Qty	Specifications
Photovoltaic Solar Module (New supply)	JAM66D46 720W	3	Monocrystalline, 720 W, 48 V.
Solar Panel cable - Roll	3 x 6mm²	1	
Panel Support Structure (UPN Tube)	Custom/Standard	1	Heavy-duty, weather-resistant metal structure **engineered to securely mount four (4) 720W panels** (3 new panels supplied here + 1 existing panel already on site).
16A Timer, 2p		1	

Note: *Please note that a photovoltaic system with 8 x 720 W panels has already been installed at Bol. The requirement is to add 4 further panels (1 panel is already available on site for installation).*

Site: N'Djamena (NDJ)

Description	Model	Qty	Specifications
Portable AC Blower	300 W	12	Portable AC blower, 300 W.

Note: The requirement for the N'Djamena site is strictly for the supply and physical delivery of the equipment to the RNI main office. No solar array design, integration, or field installation is required for this specific lot.

V. Supplier Requirements and Mandatory Submission Contents

Bidders are invited to submit a detailed proposal covering the project objectives, scope, deliverables, timelines and budget.

A. Eligibility and Company Experience

a. Legal Status and Experience

Bidders must be legally registered and recognized companies with a minimum of three (3) years of experience in the supply, delivery and installation of photovoltaic solar equipment or in comparable services.

b. References for Similar Projects

Bidders must have successfully completed at least two (2) similar projects within the past three years and must provide corresponding references or certificates of satisfactory completion.

c. Responsiveness and Communication

Bidders must be able to respond promptly to clarification requests and communications relating to this project throughout the evaluation period.

B. Quotation Requirements

Submissions must include the following elements:

a. Formal Validity of Quotations

Quotations must be duly signed and stamped, and submitted in colour scanned format.

b. Currency of Submission

All financial proposals must be expressed in Euros (€ / EUR) or in CFA Francs (XAF).

c. Delivery Terms

Prices must be quoted on a DDP (Delivered Duty Paid) basis directly to the individual RNI field stations specified in Section IV. Quoted prices must be comprehensive and fully inclusive of all customs duties, import clearances, local overland transit, handling, and required security escorts from N'Djamena to the final remote installation sites.

d. Delivery Timeline

Bidders must specify a clear, realistic and detailed delivery and installation schedule.

e. Mandatory Energy Balance

Bidders must provide a detailed energy balance demonstrating that the proposed solar and battery system is capable of simultaneously powering:

- A 9,000 BTU air conditioning unit;
- The radio transmitter **continuous load of 1,000 W / 220 V**;
- This load combination must be sustained for a minimum period of five (5) hours at full load without the battery state of charge dropping below 20% of its total capacity. Bidders must clearly show all calculation steps, including inverter efficiency losses and battery depth of discharge (DoD) safety margins..

f. Submission Letter

Bidders must include a duly signed submission letter, valid for a minimum period of ninety (90) days from the submission deadline.

g. Administrative and Financial Information

Proposals must also specify:

- Payment terms;
- Delivery conditions;
- Bank details;
- Full supplier contact information.

VI. Submission Instructions and Evaluation Criteria

A. Submission Instructions

Clarification requests must be sent to tender1@okapi.cc by **12:00 on 19 June 2026**, with the RFQ reference number and title in the subject line.

All submissions must be formally addressed to Okapi Consulting and transmitted by email to tender1@okapi.cc by **23:59 on 26 June 2026**.

B. Evaluation Criteria and Selection Methodology (AFD QCMD Method)

In accordance with the AFD Procurement Guidelines, this contract will be awarded using the selection method of **Qualified, Substantially Compliant Lowest Bidder (QCMD)**. Evaluation will be conducted strictly in two consecutive stages using the matrix below. No partial points, weighted scoring, or competitive technical ranking will be applied.

Stage 1: Technical Evaluation Matrix (Pass / Fail Threshold)

*Bidders must achieve a rating of **"PASS" on all five (5) mandatory criteria** to be deemed "Substantially Compliant". Failure to fulfill any single criterion will result in immediate technical disqualification, and the financial proposal will remain unopened.*

#	Mandatory Technical Criterion	Detailed Requirement Baseline	Required Submission Document / Proof	Evaluation Result

1	**Mandatory Energy Balance**	Verifiable engineering calculations proving the proposed solar and battery configuration can simultaneously sustain: One (1) 9,000 BTU air conditioning unit. A continuous transmitter load of **1,000W / 220V**. Runtime must hit a minimum of **five (5) hours** at full operational load without the battery State of Charge (SoC) dropping below **20%** of total capacity.	Detailed system sizing report including mathematical calculation steps, inverter efficiency loss allowances, and battery depth of discharge (DoD) data sheets.	**Pass / Fail**
2	**Environmental Resilience**	All core hardware components (including Photovoltaic Modules, Hybrid Inverters, Lithium Batteries, and Charge Controllers) must be robustly engineered and certified to operate reliably in the extreme environmental conditions of the Lake Chad Basin.	Manufacturer technical specification sheets verifying hardware certifications for ambient operating temperatures **up to +65°C** and severe dust/ingress exposure ratings (IP ratings).	**Pass / Fail**
3	**Warranty & Support Commitment**	Binding operational service level agreements (SLAs) guaranteed by the supplier to minimize broadcasting downtime across remote stations.	1. A minimum **two (2) year** comprehensive hardware warranty. 2. An emergency response time **under 24 hours** from incident report. 3. A maximum repair or hardware replacement turnaround time of **72 hours**.	**Pass / Fail**
4	**Experience & Track Record**	Proof of the bidder's legal standing, corporate maturity, and specialized capacity to execute large-scale photovoltaic solar projects.	1. Copy of company legal registration documents proving **3 years** of active operations. 2. Copies of at least **two (2) signed reference letters** or official completion certificates from clients for similar solar projects successfully executed within the last three (3)	**Pass / Fail**

			years.	
5	**Logistics, Timeline & Security Plan**	Demonstrable capacity to safely manage cross-border overland transport, equipment delivery, assembly, and turnkey commissioning in high-risk zones.	1. A detailed, realistic week-by-week deployment schedule (Gantt chart or timeline table) covering milestones for all five (5) field stations. 2. A written, tailored security and risk mitigation plan addressing convoy safety, asset transit, and personnel protection in the Lake Chad Basin.	**Pass / Fail**

Stage 2: Financial Evaluation and Final Selection

- **Financial Opening Eligibility:** Financial proposals will **only** be unsealed and evaluated for bidders who successfully obtained a straight **"PASS"** across all five technical assessment criteria above.

Award Rule: The contract will be awarded to the qualified, technically compliant bidder who proposes the **lowest total turnkey DDP (Delivered Duty Paid) price** for the equipment, transport, security, and installation across the designated sites. No financial scoring formulas or weighted points apply.

C. Ethics, Integrity, and Right to Appeal

Okapi Consulting and the French Development Agency (AFD) require adherence to the highest standards of ethics and integrity during the procurement process. Bidders are strictly prohibited from engaging in any corrupt, fraudulent, collusive, or coercive practices.

Any bidder who suspects irregularities, bias, or unfair treatment during the evaluation process retains the right to file a formal appeal. Complaints must be detailed in writing and sent directly to management via email at **compliance@okapi.cc** within seven (7) calendar days of the publication of the award notice.