

# Cherokee Nation

[www.cherokee.org](http://www.cherokee.org)

## REQUEST FOR SEALED BIDS

**MOBILE AD Hoc NETWORKING RADIOS  
FOR CHEROKEE NATION EMERGENCY MANAGEMENT**



**Bid Due Date: March 26, 2025**

### CHEROKEE NATION

P.O. Box 948  
Tahlequah, OK 74465  
(918) 453-5000

# **CHEROKEE NATION REQUEST FOR SEALED BIDS MOBILE AD Hoc NETWORKING RADIOS**

The Cherokee Nation is accepting sealed bids from interested parties for fifteen (15) mobile ad hoc networking radios for the Cherokee Nation Emergency Management. The specifications are included in this bid packet.

Interested parties are to provide a sealed bid to furnish product equal to or better than the specifications provided. Interested bidders must follow all directions outlined in this bid packet including the utilization of mandatory bid response sheet to be considered fully responsive.

The lowest most responsive, responsible bid will be the determining factor in awarding this bid taking Indian Preference into consideration in accordance with Cherokee Nation Acquisition Management Policy & Procedures. The successful bidder will be issued a purchase order incorporating the bid response.

**Sealed Bids are due March 26, 2025 by 3:00 p.m.**

The Cherokee Nation invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the NATION at the **Acquisition Management Department until March 26, 2025 at 3:00 p.m.** The envelopes containing the bids must be sealed, addressed to Cherokee Nation, Attn: Pam Jumper, Acquisition Management Department, P.O. Box 948, Tahlequah, Oklahoma, 74465. Bids may also be hand delivered to Cherokee Nation Acquisition Management, Attn: Pam Jumper, 17665 S. Muskogee Avenue, Tahlequah, Oklahoma 74464. **BIDS MUST BE RECEIVED ON OR BEFORE MARCH 26, 2025 AT 3:00 P.M. CT TO BE CONSIDERED. BIDS MUST BE SEALED AND CLEARLY MARKED “SEALED BID, DO NOT OPEN, SOLICITATION: “MOBILE AD Hoc NETWORKING RADIOS FOR CHEROKEE NATION EMERGENCY MANAGEMENT”. A PUBLIC BID OPENING WILL BE HELD ON MARCH 26, 2025 @ 3:00 P.M. IN THE FINANCIAL RESOURCES CONFERENCE ROOM LOCATED IN THE FINANCIAL RESOURCES BUILDING (DIRECTLY BEHIND THE MAIN COMPLEX) 17665 S. MUSKOGEE AVENUE, TAHLEQUAH, OKLAHOMA.**

**Interpretation of the Bid Documents:** All questions or requests for interpretation of the bid must be submitted in written format to Cherokee Nation Acquisition Management. Requests maybe e-mailed to [pam-jumper@cherokee.org](mailto:pam-jumper@cherokee.org).

- a) To be given consideration, questions and interpretation requests must be received no later than **March 13, 2025 by 5:00 p.m.**
- b) Any and all such answers and interpretations and any supplemental instructions will be in the form of written addenda to the bid which, if issued, will be communicated in written format to all prospective bidders not later via a posting on the NATION’S

website, [www.cherokeebids.org](http://www.cherokeebids.org) with bid announcement. Due date for interpretations for this bid shall be **March 20, 2025 by 5:00 p.m.**

- c) No answers or interpretation of the bid documents will be made to any bidder orally.
- d) Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under his bid as submitted. All addenda so issued shall become part of the contract documents.

**Bid Acceptance:** Bids will be accepted from Indian and Non-Indian bidders. Cherokee Nation reserves the right to reject any and all bids. Cherokee Nation reserves the right to determine if a bid meets stated requirements, and to award a purchase order for the bid that is in the best interest of the Cherokee Nation including but not limited to the total cost and capability of the bidder. Bidders are responsible for any and all costs associated with the preparation and submission of bids. To be considered, bids must be received by the specified date and time; any bid received after stipulated date and time will be returned unopened. No bidder may withdraw their bid within 30 days after proposal due date.

**TERO Certification:** Indian preference will be given only to bidders who provide proof of current certification from the Cherokee Nation Tribal Employments Office (TERO) located in Tahlequah, Oklahoma, telephone number (918) 453-5000. Proof of TERO certification must accompany and be included in bid submittal.

**Conflict of Interest and Restrictions:** If any contractor, contractor's employee, subcontractor, or any individual working on the proposed contract may have a possible conflict of interest that may affect the objectivity, analysis, and/or performance of the contract, it shall be declared in writing and submitted to Cherokee Acquisition Management (Attn: Pam Jumper) no later than **March 13, 2025 by 3:00 p.m.** The NATION will determine in writing if the conflict is significant and material and if so, may eliminate the contractor from submitting a proposal.

**Verbal Instructions:** Interested parties shall not initiate or execute any negotiation, decision, or action arising from any verbal discussion with any Cherokee Nation employee. Only written communications from the designated Contact Person at Cherokee Nation may be considered a duly authorized expression on behalf of the NATION regarding this RFP. Additionally, only written communications from interested parties are recognized as duly authorized expressions on behalf of the vendor. The same instructions shall apply to any subsequent award and agreement communications.

**Qualifications of Bidder:** The NATION may make such investigations as deemed necessary to determine the ability of the bidder to perform the work, and the bidder shall furnish to the NATION all such information and data for this purpose as the NATION may request. The NATION reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the NATION such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.

**Method of Award – Lowest Bid That Contains Lowest Most Responsive/Reasonable Offer From Qualified Bidder:** After consideration of price and other factors, the purchase order will be awarded to the bidder whose bid is determined to be the lowest most responsive/reasonable offer taking Indian Preference into consideration and in the best interest of the Nation to accept. Award shall be to the lowest, most responsive/reasonable bid in accordance with Cherokee Nation Acquisition Management Policy and Procedures. Indian/TERO Preference will be given only to bidders who provide proof of current TERO certification from the Cherokee Nation Tribal Employments Office (TERO) in accordance with current Cherokee Nation Policy. Proof of TERO certification must accompany and be included in sealed bid submittal.

**Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters:** The responding party certifies to the best of its knowledge and belief that the person, the firm, or any of its principals are not presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency or Indian tribe. The bidder will also certify they have not, within a three-year period preceding this Request for Proposal, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, Local or Tribal) contract or subcontract; violation of Federal or State antitrust statutes relating to the submission of offers; or commissions of embezzlement, theft, forgery, bribery, falsifications or destruction of records, making false statements, and are not presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in this provision. The responding party certifies they have not, within a three-year period preceding this Request for Proposal, had one or more contracts terminated for default by a Federal, State, Local or Tribal agency. The responding party shall provide immediate written notice to the Cherokee Nation if, at any time prior to contract award, the person learns its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

**General Information:** Cherokee Nation reserves the right to waive any informalities or to reject any and all bids. Award of purchase order will be to the lowest most responsible responsive bidder and will be subject to availability of funds. All sums due to any suppliers utilized by successful bidders must be paid or will be paid within ten (10) days of receipt of any money received from the Cherokee Nation under any purchase order. Indian preference will be given to Contractors certified as an Indian-Owned firm by the Cherokee Nation Tribal Employment Rights Office (T.E.R.O.). Proof of certification must accompany all bids. No bidder may withdraw their bid within thirty (30) days after bid opening date.

A prospective contractor seeking to receive Indian Preference under this contract must be certified as an Indian-owned firm by the Cherokee Nation Tribal Employment Rights Office (TERO) and submit proof of that certification with their bid.

**MANDATORY BID RESPONSE SHEET**  
**MOBILE AD Hoc NETWORKING RADIOS**

<u>Product Description</u>	<u>QTY</u>	<u>UNIT COST</u>	<u>TOTAL</u>
Mobile AD Hoc Networking radios	<u>15</u>	_____	_____

**DELIVERY CHARGE** \$\_\_\_\_\_

**GRAND TOTAL BID** \$\_\_\_\_\_

**LEAD TIME ARO:** \_\_\_\_\_

**ALL SPECIFICATIONS ARE FULLY MET: \_\_\_\_\_ YES \_\_\_\_\_ NO**

**\*\*Cherokee Nation will consider bids for product equal to or better. All bidders are to provide complete details and specifications for product must be submitted with bid.\*\***

NOTE TO BIDDERS REGARDING INDIAN PREFERENCE:

TERO Certified Contractor: \_\_\_\_\_ Yes \_\_\_\_\_ No

(Proof of certification must accompany all bids)

SUBMITTED:

Company Name

Company Address

Authorized Signature

Print Name &amp; Title

Phone &amp; Fax Numbers

## Product Specifications and Requirements

**The Cherokee Nation Emergency Management is seeking bids for fifteen (15) mobile ad hoc networking radios. The desired make and model of product information/specifications are provided below; the Nation will accept EQUAL TO OR BETTER THAN SPEC'S PROVIDED.**

### **Mobile Ad Hoc Networking Radio Specifications:**

#### **Quantity: 15**

##### **Dimensions (Chassis Only)**

1.5 x 2.6 x 4.6 in.

3.8 x 6.7 x 11.7 cm

##### **Weight (Chassis Only)**

13.8 oz

391 g

##### **Coating**

Anodized Black

##### **Mounting**

(3) #4-40 0.15" Mounting Holes

##### **Environmental**

###### **IP68 Rated**

Waterproof to 20m for 30 mins

Dustproof

##### **MIL-STD-810G**

Shock/Vibe/Salt Fog/Explosive Atmosphere

##### **Emissions**

MIL-STD-461F

FCC certified

##### **Operating Temperature**

-40° to +85° C

-40° to +185° F

##### **Manufacturing**

Manufactured in USA

ISO 9001:2009 Certified

Designed to MIL-STD

##### **Input Voltage**

8 to 28 VDC

**Battery Connector**

3-Pin Fly Wheel Twist Lock

**Battery Compatibility**

MPU5 Battery

AN/PRC-148 Battery

AN/PRC-152 Battery

**Battery Eliminator**

AC Wall Adapter

BA2590 Battery Adapter

**Power Status**

Low Battery Alarm

LED Low Battery Indicator

**RF Connectors**

(3) RP-TNC Female

**GPS Connector**

(1) SMA Female

**Video In**

(1) HD-BNC

SD and HD sources

**Status Indicator LED**

Blue: Booting

Red: Zeroized

Yellow: Running, no neighbors

Green: Running, neighbors

Orange: Low Battery

Purple: Loading Firmware

**Multifunction On/Off Knob**

2-Handed Key Zero

**Side Connectors**

(3) 22-Pin Side Connectors

**PTT/EUD**

(2) Channels PTT

Serial RS-232

USB Host

MyDP Video Output

**DATA**

10/100 Mbps Ethernet

Serial RS-232

USB On-the-Go

**RoIP**

PTT, Speaker, and Microphone Serial RS-232

USB Host

Carrier Sense

**Processor**

1 GHz Quad Core ARM

**RAM**

2GB

**Storage**

128GB of Flash

**OS**

Wave Relay OS

**Management**

Web-browser based

Developer API for customization.

**Ethernet**

10/100 Mbps

Integrated serial-to-Ethernet

**Integration and Extension**

Seamless layer 2 network

Cloud Relay™ compatible

**Protocols**

Advanced multicast algorithms

IPv4 and IPv6 compatible

Integrated DHCP server

USB RNDIS Host and Device

**Web Management Interface**

Web-browser-based

Secure

Remotely accessible

**Firmware and Software**

Network Firmware upgrade

Network APK Installation

**Security**

Local or over-the-air rekey

Local or over-the-air key zero

**Video Input**

3G-SDI

Composite



**Video Output**

HDMI

**Video Compression**

H.264 Encoding and Decoding

Native Scaling

MPEG Transport Stream

**Bit Rates**

250 Kbps – 5.25 Mbps

**Frame Rates**

30 fps

60 fps available at 720p

**Resolutions**

1080p (1920×1080)

720p (1280×720)

Standard (720×480)

VGA (640×480)

QVGA (320×240)

**Network Protocols**

UDP Multicast

UDP Unicast

RTP

**Display**

External display via cable

Supports commercial EUDs

Supports TVs or Monitors

**Push-To-Talk**

16 Talk Groups

2 Channel Simultaneous Operation

**PTT Tones**

Pressed

Released

Channel Busy

Flash Override

Low Battery

**Compatibility**

Cisco IPICS/Twisted Pair WAVE

**RoIP**

Tether LMR Radios

**Compatibility**

Cisco IPICS/Twisted Pair WAVE

**Crypto Modes**

CTR-AES-256 Encryption  
SHA-256 HMAC

**Keys**

30 day hold-up battery

**Hardware**

Cryptographic Acceleration  
CNSA Algorithms

**2-Handed Key Zero**

Key zero with no power

**MANET**

Wave Relay<sup>®</sup>  
Self Forming/Healing  
Peer-to-Peer  
No Master Node

**Node Entry Time**

<1 sec

**Max. Number of Hops**

No Limit

**Max. Number of Nodes**

No Limit

**Max. Distance between Nodes****Frequency Range**

4400 – 5000 MHz

**RF Modulation**

OFDM (64QAM, 16QAM, QPSK)

**Antenna Chains**

3 Independent RF Chains

**TX/RX Operating Modes**

All MIMO modes from SISO to 3×3

**Channel Bandwidth**

5, 10, and 20 MHz  
Software Configurable

**Peak TCP Throughput**

150 Mbps at 20 MHz Channel

**MIMO Techniques**

Maximal Ratio Combining  
Space-Time Block Coding  
Spatial Multiplexing

**Max. Aggregate Transmit Power**

6W (2W per RF Chain)

**Antenna Ports**

(3) SMP (50 Ohms)

**TX Power Control**

33 to 16.5 dBm, 0.5 dB per step

**Power Control Accuracy**

+/- 2 dB

**Frequency Accuracy**

+/- 4 ppm, max.

**Minimum Receiver Sensitivity**

-94 dBm at 5 MHz bandwidth, QPSK

**Max. Peak Power Consumption, TX**

50W

**Max. Peak Power Consumption, TX**

50W

**Power Consumption, RX**

5W

**Operating Temperature**

-40°C to +85°C

**ESD Protection**

+/- 8KV Contact discharge, per IEC 6100-4-2

**Dimensions**

4.0 x 2.6 x 1.4 in.

10.3 x 6.6 x 1.4 cm

**Weight**

7.2 oz.

204 g