

# Rusk County, Wisconsin

## REQUEST FOR PROPOSAL (RFP)

### To provide simulcast enhancements to the Rusk County Radio System

ISSUED: February 12, 2024

The County of Rusk (hereafter referred to as the "County") requests proposals from Vendors to supply enhancements and replacement of equipment to the county's existing two-way radio system.

Except as otherwise specified, it is the intention of the County to enter into a single contract with the selected vendor for the entire scope of work. Vendors submitting proposals must have the capability of providing the products and services requested in this RFP. Vendors may use joint ventures or subcontractors, but must disclose these in their RFP response.

The County assumes no obligation of any kind for expenses incurred by any respondent to this solicitation prior to execution of an agreement.

The County reserves the right to reject any or all proposals, including determining any or all submittals to be non-responsive.

All specifications and data produced for a County project belong to the County. No specifications or data shall be supplied to any third party unless permission in writing is obtained from the County. Unless otherwise specified, all products will be delivered to Rusk County.

Proposals will be evaluated on: Vendor experience and technical qualifications, Vendor record of past performance, project approach, proposed implementation schedule, and fee proposal.

Proposers must mail one (1) bound copy of the proposal and a PDF on a flash drive. Proposals shall be clearly marked "PROPSAL FOR SIMULCAST ENHANCEMENTS" on the outside of the envelope.

Proposals must be delivered by Friday, March 8th, 2024 at 12:00 PM and should be addressed to: Sheriff Jeffery S. Wallace, Rusk County Sheriff's Office, 311 Miner Ave E Suite L100, Ladysmith WI 54848.

Vendors may request to inspect the existing radio system equipment and facilities prior to submitting their proposal. The County will make reasonable efforts to accommodate any such requests.

Questions concerning this RFP must be submitted by February 28, 2024 and should be directed to Captain George Murray, Rusk County Sheriff's Office, 311 Miner Ave E Suite L100, Ladysmith, WI 54848 715-532-8523. Addendums to this RFP will be available on the County's website. It is the responsibility of the proposers to check the website. No verbal modifications will be binding.

### **Project Overview:**

The County reserves the right to delete, modify, or add to any of these services prior to selection of a firm for this project.

Rusk County currently operates on several different technologies on two different channels. Rusk County is utilizing VHF and Digital for all sites.

The Sheriff channel is a mixed-mode conventional VHF or Digital repeater system that consists of four transmit and receive standalone sites operating under the FCC license WQS862. The first site is (Central), located in the City of Ladysmith, 311 Miner Ave E, Ladysmith. The second site (West) is located in Atlanta Township, N5861 Norwegian RD, Bruce. The third (East) is located in the Township of Richland at N5591 Hwy 73, Glen Flora. The fourth (South) is located in the Township of Ruby-Chippewa County, 30603 CTY VV, Sheldon. The new system will utilize mixed-mode technology and will utilize analog and P25 Digital.

The Fire channels are analog narrowband VHF or Digital repeaters consisting of four transmit and receive standalone sites operating under the FCC license KNAO343. The first site is (Central), located at 311 Miner Ave E, City of Ladysmith. The second site is (West) located in the Township of Atlanta, N5861 Norwegian RD, Bruce. The third site is (East) located on the water tower in Village of Hawkins. The fourth site is located in the Township of Ruby-Chippewa County 30603 CTY VV, Sheldon. The new system will continue to use analog narrowband. All Rusk County Fire/EMS use 154.205 paging and talking.

The County desires to improve the entire system performance by simulcasting all of Law and Fire. The County desires to have a new "South West" tower, in the Township of Big Bend, W13552 Mud Lake Rd, New Auburn with the same frequency on the new simulcast network while leaving the existing repeaters in place.

The County's plan is to upgrade to a conventional simulcast radio system by replacing all current dispatch equipment, in-squad mobile radios, repeater equipment, coax, temperature-controlled equipment shelters and antennas at all sites with new equipment and install the necessary equipment to create a microwave back haul network with redundant paths between repeater sites.

#### **New Equipment requested:**

- a. Motorola APX8500 All Band HP Mobile Radio, with all required accessories (20)
- b. Guardian Analog Vehicular Repeater 136-174 MHz 15KHz (20)
- c. P25 Mode-Option SFK for SVR-350 Guardian (20)
- d. Avtec Scout Dispatch Operator positions (3)
- e. Outdoor temperature controlled 10x12 cabinet (5)
- f. Conventional VHF digital Consolettes (4)
- g. GTR Repeaters, Network equipment (10)
- h. GRV 8000 Comparators (10)

- i. Antennas and coax cabling (10)
- j. Stand-alone emergency backup generator at each tower site (5)

The repurposing of old equipment is not included in the scope of work for this RFP.

Old Equipment:

- a. Motorola MCC 5500 Dispatch Counsel (3)
- b. Motorola Astro 25 XTL2500 P25 Mobile Radios (20)
- c. Pyramid VRS vehicular repeater (20)
- d. Motorola Quantar repeaters (8)
- e. Conventional VHF digital Consolettes (4)
- f. Outdoor cabinets (3) Current ones are not temperature controlled, we don't own them, and are not critter resistant-mice, snakes, bees.
- g. Antennas and coax cabling (8)
- h. Battery back ups at each tower site

This proposal will include any and all tower load studies.

This proposal will include all FCC license handling and fees.

This proposal will include a 3-year 24x7 radio service/maintenance support.

This proposal will include any end user training for the purchaser in order to successfully operate any new equipment.

Any proposal must maintain the functionality of all current communication infrastructure until the system "go live" date.

#### **General System Requirements:**

All site equipment supplied by the Vendor shall be of high-quality Motorola, and designed to provide high reliability to support mission critical communications. The system shall have a high degree of redundancy and survivability.

The simulcast system shall operate without the need for frequent manual optimization and alignment. All alignment and adjustments shall be automated where possible.

The microwave network should ideally have two paths to each site for redundancy in the event one path fails.

Should any of the sites fail, or a loss of connectivity occur between sites, the rest of the system should continue to function with the loss of a site (diminished coverage would be expected).

Receiver voting equipment shall monitor all receivers in the system, both simulcast transmit/receive and present the most usable signal for the dispatch consoles and simulcast retransmission use.

All radio and simulcast interconnection equipment at each tower site shall be capable of battery-backup operation in the event of an AC power failure. Ideally, a stand-alone generator should be at each site for long term outages.

#### **System Supervision and Monitoring:**

The system supplied shall be self-monitoring and have a method of automatic reporting/notification of faults. Desired monitored events/elements include TX/Simulcast failure, remote site AC power loss, and remote site under/over ambient temperature. The automatic reporting should be visible on the dispatch consoles at the Rusk County Sheriff's Office. Email notification would also be desirable.

#### **Quality Assurance:**

The Vendor shall comply with applicable provisions of the following standards, rules, regulations and industry guidelines, presented here alphabetically with no priority implied:

- American National Standards Institute (ANSI)
- American Society of Testing Materials (ASTM)
- Electronic Industry Association (EIA)
- Institute of Electrical and Electronics Engineers (IEEE) National Electric Code (NEC)
- National Electrical Manufacturer's Association (NEMA) National Fire Protection Association (NFPA)
- Telecommunications Distribution Methods Manual (TDMM) Telecommunications Industry Association (TIA)
- Underwriters Laboratories, Inc. (UL)

If the requirements of this specification conflict with those of the governing codes and regulations, then the more stringent of the two shall become applicable.

The Vendor shall comply with industry best practices for system installation, grounding, bonding, and transient voltage surge suppression (TVSS). Either of the following standards are acceptable:

- Motorola R56 — Standards and Guidelines for Communications Sites
- Grounding and Lightning Protection Guidelines AE/LZT — 123 4618/1

### **Licensing:**

The Vendor shall obtain the required FCC licensing and FAA authorizations on behalf of the County for the scope of this project.

### **Operations During Installation:**

The County realizes that some interruption to the current radio system may be necessary during installation. The Vendor shall work with the County's representative to minimize these interruptions. The County does not have alternative communication(s) methods available other than the sites listed above.

### **Progress Meetings:**

Progress meetings shall be scheduled when deemed advisable by the Vendor or County representative. Meetings are intended to have change orders signed, review progress of the work, identify and mitigate impediments to timely completion, or otherwise facilitate a successful project outcome.

### **Payment:**

Payment to the Vendor for equipment and services provided shall be as follows:

- 10% upon acceptance of the Vendors proposal
- 40% upon delivery of equipment
- 40% upon completion of installation and system activation
- 10% upon final acceptance of the system by the County as meeting all RFP requirements, and upon completion of any punch list items.

### **Contents of Proposal**

The following shall be provided within the proposal:

1. Letter of Introduction
  - a. Narrative (no more than one page) explaining why firm is especially qualified to undertake the project.
  - b. Name, address, phone number, and website of the firm
  - c. Acknowledgement of receipt of RFP addenda, if any
  - d. Name, title, address, telephone, and email address of contact person during the period of evaluation.

- e. Statement to the effect that the proposal shall remain valid for a period of not less than 90 days from the date of submittal.
  - f. Signature of person authorized to bind the offering firm to the terms of the proposal.
2. Project Approach Briefly describe the project understanding and approach that will be used by your firm. Give a brief description of challenges you believe may be significant on this project; your approach to needed Board/Committee participation; how you intend to use existing equipment or infrastructure to help limit project costs; any unique options that may be pursued for this project; and a brief outline of your project approach to include implementation schedule.
- a. Other Information
    - a. Include other information you believe may be valuable in reviewing qualifications of your firm.
  - b. Fee Proposal
    - a. The Fee Proposal should be submitted as a one (1) page summary with support information on additional pages only if necessary.
    - b. Outline your firm's not-to-exceed cost for the Project based upon the equipment, services, etc. described in this RFP. The Project cost should be expressed as a dollar amount and should include a not-to-exceed amount for itemized reimbursable expenses, also expressed as a dollar amount.
    - c. Provide your firm's hourly rate schedule and note the number of hours allocated per week during the duration of this Project.

**Additional Requirements:**

Along with their proposal, Vendors shall identify three (3) recent projects where they have supplied a similar public safety simulcast radio system, including the name of a contact person at each identified agency.

The Vendor shall include detailed specification sheets/manuals for all supplied equipment. In addition to all manufacturer's documentation the chosen Vendor, upon completion of the project, shall supply a system block/functional diagram to the County.

The Vendor shall provide three coverage maps showing the anticipated levels of transmit and receive coverage for their proposed simulcast system.

- The first map should be based upon a standard 100-watt mobile radio, and a 99% coverage probability
- The second map should be based upon a standard 5 watt portable on-hip operation, no speaker-mic antenna, and a 99% coverage probability and 20 dB of building attenuation.
- The third map should be based upon a standard analog fire pager on-hip operation and a 99% coverage probability and 20 dB of building attenuation.

### Contract Terms and Conditions

The County will prepare a contract with the selected firm. The contract will include the County's standard insurance terms, which includes Certificates of Insurance for the following:

1. General Liability Insurance (minimum of \$1,000,000 and County of Rusk must be listed as an additional insured)
2. Worker Compensation Insurance (Statutory Limits)
3. Professional Liability Insurance (\$1,000,000 per Loss, \$1,000,000 Aggregate)
4. Umbrella Coverage
5. Automobile Liability (\$1,000,000 Each Accident)

The selected firm must be willing to sign a contract that will incorporate the RFP plus attachments, the submitted proposal, and any other terms negotiated by the parties. The term of the contract awarded under this RFP will be from the date executed by all parties until services are complete.

### Selection Schedule

Rusk County anticipates that it will maintain the following schedule for the firm selection:

Issue RFP: February 12, 2024

Questions Due: February 28, 2024

**Proposals Due: March 8, 2024**

Interviews with Project Team: March 2024

Selection: March or April 2024

Selection of a firm is dependent on approval of the Rusk County Board of Supervisors.