



ORANGE COUNTY NORTH CAROLINA

REQUEST FOR PROPOSAL

RFP #5217 COUNTYWIDE RADIO COMMUNICATIONS INTEROPERABILITY AND SYSTEMS ENGINEERING SERVICES

ISSUED: January 29, 2016

DUE DATE: 5:00pm – February 18, 2016

Attn: Mr. David Cannell, Purchasing Agent

200 S. Cameron Street

PO Box 8181

Hillsborough, NC 27278

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Email: dcannell@orangecountync.gov

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1.0 GENERAL INFORMATION

1.A. Introduction and background

The purpose of this document is to provide interested parties with information to enable them to prepare and submit a proposal for Radio Communications Interoperability and Systems Engineering Services

The County, as represented by its Orange County Emergency Services Department, intends to use the results of this process to award a contract for Radio Communications Interoperability and Systems Engineering Services.

1.B. Scope of the Project

B.1.1. Project Description

Orange County is soliciting proposals to provide professional consulting, planning, and facilitation services relative to its short and long-term Radio communications and interoperability needs. The purpose of the study is to determine the most economical, efficient, reliable and state-of-the-art method for designing and provisioning a new countywide radio communications systems used by local government entities to meet the long term voice communications, paging, and voice interoperability needs of the emergency and non-emergency agencies serving residents, workers, and visitors of Orange County.

B.1.2. Objectives

Orange County seeks strategic and tactical plans that will review and analyze the current and future requirements for all law enforcement, fire, EMS, public works, schools, planning/inspections, transit, and other County and local government voice and interoperability communications requirements. Orange County requires a plan that will best meet short and long term interoperability needs and addresses other communications system(s) issues such as capacity, RF coverage, features and capabilities along with outlining how the County's current or envisioned systems will be able to migrate towards and integrate with future technologies. The ultimate output of the selected consultant's work shall be development of a **vendor-neutral** Request for Proposal (RFP) based on recommendations made by the consultant and approved by the committee, suitable to be released to the vendor community for the purposes of procuring the approved alternative, and the development of criteria for ultimate vendor selection.

B.1.3. Background

The Orange County Emergency Communications Center currently dispatches law enforcement, fire, EMS and all County and local municipality users.

The County's existing emergency services (public safety) radio system is a State owned and operated P25 trunked 800MHz system named VIPER. The County operates a VHF voice-tone paging system that is used to page out the fire departments. Much of the VHF infrastructure equipment is aging and is beyond or very near the end of its life expectancy.

In addition to the VIPER and County VHF Paging systems, there are numerous other radio systems in operation within the County that are in various stages of decay. Solid Waste and Orange County Transportation and local governments, including the Towns of Carrboro, Chapel Hill, and Hillsborough operate their own, distinct radio systems for various services such as Public Works, Transit, Schools, etc. The Orange Water and Sewer Authority (OWASA) also operate a distinct radio system.

Communications issues that have been problematic in many areas of the County including overloading the VIPER system, tower channel imbalance, lack of coverage in all areas of the county, lack of coverage inside buildings, lack of a clear direction on a system design, new partnerships creating changing needs, and cost of ownership have hindered Orange County in reaching a solution to its radio communications system needs. While the County has conducted numerous studies of radio communications, none of these studies has been definitive. None of these studies have provided enough information to provide a clear direction for the policy makers and decision makers in the County to identify a solution to the problem.

1.C. Procuring and Contracting Agent

This Request for Proposal (RFP) is issued by the Orange County Purchasing Agent, who is the sole point of contact for the County during the selection process. The person responsible for managing the procurement process is David Cannell, Purchasing Agent.

The contract resulting from this RFP will be administered by Orange County Department of Emergency Services.

1.D. Definitions

The following definitions are used throughout this RFP:

County: Orange County Emergency Services

Proposer/Vendor: Any firm submitting a proposal in response to this RFP

Contractor: The proposer that is awarded the contract

Date/Time: Date/time specified in this contract is Eastern Standard Time

1.E. **Clarification and/or revisions to the requirements of this RFP**

Questions concerning this RFP must be submitted in writing (mail or email) on or before February 11, 2016 at 4:00 pm to:

Mr. David Cannell, Purchasing Agent
200 S. Cameron Street
PO Box 8181
Hillsborough, NC 27278
Email: dcannell@orangecountync.gov (preferred)
Phone: 919 245-2651

Vendors are expected to raise any questions, exceptions, or additions they have concerning the RFP document at this point in the RFP process. If a vendor discovers any significant ambiguity, error, conflict, discrepancy, omission, or other deficiency in this RFP, the vendor should immediately notify the above named individual of such error and request modification or clarification of the RFP document.

In the event that it becomes necessary to provide additional clarifying data or information, or to revise any part of this RFP, revisions/amendments and/or supplements will be provided to all recipients of this initial RFP.

Each proposal shall stipulate that it is predicated upon the terms and conditions of this RFP and any supplements or revisions thereof.

1.F. **Calendar of Events**

Listed below are specific and estimated dates and times of actions related to this Request for Proposal (RFP). The actions with specific dates must be completed as indicated unless otherwise changed by the County. In the event that the County finds it necessary to change any of the specific dates and times in the calendar of events listed below, it will do so by issuing a supplement to this RFP. There may or may not be a formal notification issued for changes in the estimated dates and times.

DATE	EVENT
January 29, 2016	Date of issue of the RFP
February 11, 2016 at 4:00	Last day for submitting written inquiries
February 13, 2016 at 4:00	Notification to vendors of supplements/revisions
February 18, 2016 at 5:00pm	Proposals due from vendors
February – March 2016	Possible Oral presentation by invited vendors
March 2016	Notification of intent to award sent to vendors
April 2016	Contract start date

1.G. **Contract Term and Funding**

The contract shall be effective on the contract execution date and shall run until the contract for the request for proposals is finalized, approximately one year.

2.0 **PREPARING AND SUBMITTING THE PROPOSAL**

2.A. **General Instructions**

The evaluation and selection of a contractor and the contract will be based on the information submitted in the vendor's proposal plus references and any required on-site visits or oral presentations. Failure to respond to each of the requirements in the RFP may be the basis for rejecting a response.

Elaborate proposals (e.g. expensive artwork) beyond that which is sufficient to present a complete and effective proposal, are not necessary or desired.

2.B. **Proprietary Information**

Proprietary information submitted in a proposal, or in response to the RFP, will be handled in accordance with the applicable North Carolina State Statute(s). Proprietary information must be clearly stated and identified by the proposer.

To the extent permitted by law, it is the intention of Orange County to withhold the contents of the proposal from public view until such times as competitive or bargaining reasons no longer require non-disclosure, in the opinion of Orange County. At that time, all proposals will be available for review in accordance with the North Carolina Open Records Law.

2.C. Incurring Costs

Orange County is not liable for any cost incurred by proposers in replying to this RFP.

2.D. Submitting the Proposal

Proposers must submit and original and five (5) copies of all materials required as well as their proposal in a single .pdf file on a thumb drive or CD for acceptance of their proposal by February 18, 2016 at 5:00pm to:

Mr. David Cannell, Purchasing Agent
200 S. Cameron Street
PO Box 8181
Hillsborough, NC 27278
Email: dcannell@orangecountync.gov
Phone: 919 245-2651

Proposals must be received in the above office by the specified time stated above. All proposals must be time-stamped in by the County Purchasing Agent by the stated time. Proposals not so stamped will not be accepted.

All proposals must be packaged, sealed and show the following information on the outside of the package:

- ✓ Proposers name and address
- ✓ Request for proposal title as shown on this RFP
- ✓ Request for proposal number as shown on this RFP
- ✓ Proposal due date as shown on this RFP

2.E. Proposal Organization and Format

Proposals should be typed and submitted on 8.5 by 11 inch paper bound securely. Proposals should be organized and presented in the order and by the number assigned in the RFP. Proposals must be organized with the following headings and subheadings. Each heading and subheading should be separated by tabs or otherwise clearly marked. The RFP sections which should be submitted are:

- ✓ Introduction (Section 4)

- ✓ Response to general requirements (Section 4)
 - Organizational Qualifications
 - Staff Qualifications and Facilities
 - References
- ✓ Response to technical requirements (Section 5)
- ✓ Cost proposal (Section 6)
- ✓ Required Forms (Section 8)
 - Attachment A Signature Affidavit
 - Attachment B Vendor Data Sheet
 - Attachment C References
 - Attachment D Cost Summary
- ✓ Appendices (additional info the proposer submits)

2.F. Multiple Proposals

Multiple proposals from a vendor will be permissible however each proposal must conform fully to the requirements for proposal submission. Each such proposal must be separately submitted and labeled as Proposal #1, Proposal #2, etc. on each page included in the response. Alternate acquisition plans do not constitute multiple proposals.

2.G. Oral Presentations and Site Visits

Selected vendors may be required to make oral presentations and/or site visits to supplement their proposals, if requested by the County. The County will make every reasonable attempt to schedule each presentation at a time and location that is agreeable to the proposer. Failure of a proposer to conduct a presentation to the County on the date scheduled may result in rejection of the vendor's proposal.

3.0 PROPOSAL SELECTION AND AWARD PROCESS

3.A. Preliminary Evaluation

The proposals will first be reviewed to determine if requirements in Section 2.0 are met, and if additional mandatory requirements are met (see Section 4.0). Failure to meet mandatory requirements will result in the proposal being rejected. In the event that all vendors do not meet one or more of the mandatory requirements, the County reserves the right to continue the evaluation of the proposals and to select the proposal which most closely meets the requirements specified in this RFP.

3.B. Proposal Scoring

Accepted proposals will be reviewed by an evaluation committee and scored against the stated criteria. The committee may review references, request oral presentations, and conduct an on-site visit and use the results in scoring the proposals.

3.C. Right to Reject Proposals and Negotiate Contract Terms

The County reserves the right to reject any and all proposals and to negotiate the terms of the contract, including the award amount, with the selected proposer prior to entering into a contract. If contract negotiations cannot be concluded successfully with the highest scoring proposer, the County may negotiate a contract with the next highest scoring proposer.

3.D. Evaluation Criteria

The proposals will be scored using the following criteria:

1. General Requirements	80%
a. Prior experience and references	20%
b. Qualifications of firm and staff	20%
c. Project Schedule and work plan	20%
d. Project Approach	20%
2. Cost	20%
	TOTAL 100%

3.E. Award and Final Offers

The award will be granted to the offer that offers the best value to the County. The award may be granted to the highest scoring responsive and responsible proposer. Alternatively, the highest scoring proposer or proposers may be requested to submit final and best offers. If final and best offers are requested, they will be evaluated against the stated criteria, scored and ranked.

3.F. Notification of Intent to Award

As a courtesy, the County may send a notification of award memo to responding vendors at the time of the award.

4.0 GENERAL PROPOSAL REQUIREMENTS

4.A. Introduction

The proposer should first provide an explanation of their understanding of the tasks they believe to be necessary to accomplish the objectives outlined in the RFP. For each of these areas the proposer is to describe in a simple and straightforward manner the overall approach the consultant proposes to use when completing the study, as well as a discussion of how options and recommendations will be presented to the review committee and Orange County.

4.B. Organization Capabilities

State the full name and address of your organization, including the name, address and telephone number of the person in your organization who has primary responsibility for developing this proposal and to whom technical questions may be addressed.

4.C. Staff Qualifications

Proposals shall identify each member of the consultant's staff who would be assigned to work on the project, the role they will be performing, and the hourly rate to be charged to Orange County for their services, or alternatively a fixed price for services based on the established scope of work. Additionally, a resume' stating the background and qualifications of each individual should be attached. Particular attention shall be given to the individual named as the project coordinator.

4.D. Experience

Proposals shall identify each member of the consultant's staff who would be assigned to work on the project, the role they will be performing, and the hourly rate to be charged to Orange County for their services, or alternatively a fixed price for services based on the established scope of work. Additionally, a resume' stating the background and qualifications of each individual should be attached. Particular attention shall be given to the individual named as the project coordinator.

4.E. Statement of Objectivity

It is the intent of Orange County to hire a firm that is neutral with respects to radio communications companies or equipment. Proposals will be accepted only from independent consultants not engaged in or associated with the

business of selling, servicing, or renting communications equipment. Respondents must clearly state the independence and objectivity of the consultant. The selected firm shall not be allowed to provide provisioning services.

4.F. Project Schedule and Work Plan

As part of this proposal the vendor must submit a proposed project work plan and schedule. The vendor must identify all assumptions and constraints on which the project schedule and work plan are based.

4.G. Proposer References

Proposers must include in their RFP a list of organizations, including points of contact (name, address, and telephone number), which can be used as references for work performed in the area of service required. Selected organizations may be contacted to determine the quality of work performed and personnel assigned to the project. The results of the references will be provided to the evaluation team and used in scoring the written proposals.

5.0 SCOPE OF WORK

5.A. Introduction and Definitions

The following is intended to illustrate the types of services that will be required of the consultant. It is not intended to exclude other services that the consultant believes to be necessary and is able to provide. The actual scope of the work will be determined upon selection of the consultant and shall be mutually agreed upon by both parties.

For purposes of responding to this RFP the communications infrastructure shall be understood to include:

1. Two-way radio infrastructure and equipment (base, mobile, portable, pager, fixed receiver) for all County and Town end users serving the residents, workers, and visitors in Orange County that is interoperable with the State VIPER system, our surrounding Counties, and the University of North Carolina – Chapel Hill
2. Communications infrastructure backbone (microwave, fiber, or other)
3. New and/or upgrades to existing towers, supporting buildings, and backup power

4. The Orange County Communications Center, Orange County backup Communication Center location
5. Voice paging infrastructure
6. Fire and EMS station alerting infrastructure

5.B. Study Expectations

The scope of the study shall include a voice and paging communications infrastructure that enables operability and interoperability to best meet short and long term needs for all agencies served by the Orange County Emergency Communications Center

1. Recommendations as to a proposed approach to the overall study, including:
 - a. Identification of key project milestones.
 - b. Number of expected meetings with the review committee.
 - c. Recommended timeline for the project, mapped out for compatibility with the County budgeting cycles.
 - d. Recommendations on effective stakeholder engagement throughout the process.
2. Development of a comprehensive needs analysis addressing functionality, capability and needs of all current infrastructure users. Inputs shall include information obtained from current infrastructure users and previous studies completed for Orange County.
3. Presentation of infrastructure alternatives to the review committee for the purposes of narrowing the alternatives down to one (1) recommended solution to be approved by the committee that will be the basis of the balance of the project. Alternatives that will be presented shall include pros, cons, advantages, disadvantages, issues and considerations specific to the needs of Orange County users, including, but not limited to:
 - a. Frequency range (low band, high band, UHF, 700, 800), and analysis of spectrum availability within each frequency range
 - b. Wide band versus narrow band
 - c. Analog, digital or combination, including P25 Phase I and II air interface compatibility
 - d. Encryption options and capabilities

- e. Operating protocol (conventional, trunking, combination)
- f. One infrastructure or more, meaning:
 - i. A single infrastructure to serve the combined needs of all users in the County, or
 - ii. Two or more infrastructures (one or more to serve the urban/metro area, and/or one or more to serve the areas outside the urban/metro area) with appropriate interoperability capabilities
- g. Procurement scope, meaning:
 - i. County procures the core infrastructure, and each user entity (Town, OWASA, Schools, and other end users) must procure their own end-user equipment (base, mobile and portable radios, and pagers)
 - ii. County procures all core infrastructure and all end user entity equipment (based on the number of end user equipment items in service at the time of the needs analysis)
 - iii. County procures all core infrastructure and all end user entity equipment, but individual end user entities need to procure infrastructure enhancements to improve coverage or other issues above and beyond what is provided by the current infrastructure
- h. With respect to the potential options above, interoperability with:
 - i. Agencies serving Orange County residents both on a day-to-day and event related basis. Note: This includes State of North Carolina and University of North Carolina entities, and fire and EMS entities in adjoining Counties that serve territories in Orange County.
 - ii. Interoperability with adjoining County Emergency Service entities (for adjoining County units responding into Orange County, and for Orange County units responding into adjacent Counties).
- i. Options in (g) shall be presented with detailed propagation studies at standards levels consistent with identified end user needs as approved by Committee.

Options presented to the Committee shall include budgetary cost estimates associated with each.

Options analyzed, presented and recommended for consideration shall represent an enabling infrastructure, meaning the infrastructure needs to enable the end users to meet their identified needs, not adapt their needs to the recommended alternative.

4. Once an option in (g) is selected and approved by the review committee:
 - a. Develop a comprehensive cost analysis
 - b. Develop a comprehensive transition plan for all current infrastructure users to the new/proposed infrastructure. The plan shall be designed to ensure no loss of functionality and/or capabilities during the transition.
 - c. Develop a vendor-neutral Request for Proposal (RFP) suitable to be released to the vendor community for the purposes of procuring the approved alternative.

Facilitation of the RFP process, including staff support to the County in conducting a comprehensive evaluation of RFP responses received.

5.C. Work to Be Performed

Expectations of work to be performed include:

1. Meet with management personnel and end users of the current infrastructure to develop a comprehensive needs analysis addressing functionality, capability and needs of all current infrastructure users. A draft needs analysis shall be presented to the end-users for validation in at least two group meetings, and then to the committee for final approval.
2. Gather, analyze, and document operational, functional, and specific technical information of existing fixed sites and associated equipment for various emergency service departments that serve Orange County residents (may be an Orange County based agency or a Department in a County adjacent to Orange County that serves/protects geography within Orange County), or Orange County emergency service departments that serve residents outside Orange County in order to understand the present status of our communications capabilities.
3. Review interoperability needs with all agencies serving citizens and/or territory within the county and those law and fire/EMS agencies bordering Orange County, including gateway or P25 ISSI needs for users

not served by the proposed infrastructure (i.e.: ambulances from outside Orange County needing inter-communications with Orange County based hospitals) as may be identified.

4. Conduct and analyze coverage studies of proposed infrastructure based on multiple tower sites in order to provide countywide coverage including the potential of new communications sites, additional “satellite” receiver sites, and/or paging sites.
5. Develop a comprehensive migration plan for all current infrastructure users.
6. Recommend and submit a planned acquisition and implementation process based on the option approved by the review committee.
7. Development of a vendor-neutral Request for Proposal (RFP) suitable to be released to the vendor community for the purposes of procuring the approved alternative.
8. Facilitation of the RFP process, including staff support to the County in conducting a comprehensive evaluation of RFP responses received.
9. Create and submit computer aided design (CAD) drawings as required.
10. Obtain and submit budgetary costs for alternatives presented, and assist the review committee to prioritize acquisitions and implementation

5.D. Deliverables

1. Documentation and assessment of existing communications capabilities; including review, summarization and validation of previous documents and studies.
2. Analysis of interoperability gaps as provided through interviews of the various existing infrastructure users.
3. Coverage maps depicting current public safety infrastructure user performance for both mobile and portable radios, and paging receivers, to verify gaps as noted from the various interviews.
4. Propagation studies showing expected coverage of the recommended system at standards identified by end user needs and as approved by the committee for both mobile and portable radios, and paging receivers.
5. A comprehensive transition plan for all current infrastructure users to the new/proposed infrastructure. The plan shall be designed to ensure no loss of functionality and/or capabilities during the transition.

6. A vendor-neutral Request for Proposal (RFP), including recommended tower requirements suitable to be released to the vendor community for the purposes of procuring the approved alternative.
7. Criteria to be used for vendor selection.
8. CAD drawings as required.
9. Recommended training requirements for the new communications system

6.0 COST PROPOSAL

6.A. General Instructions on Submitting Cost Proposals

The cost proposal should show personnel classifications including sub-contractors, hourly wage, and anticipated hours on the project. A summary of personnel costs should accompany the cost proposal. Other Direct Costs (ODC) should include travel, lodging, and meals, printing, postage, and other non-personnel/sub-contract costs associated with completing this project. A summary of ODC costs should accompany the cost proposal.

Two (2) copies of the cost proposal should be submitted in a separate envelope with the written proposal. The proposal will be scored using a standard quantitative calculation where the most cost criteria points will be awarded to the proposal with the lowest cost.

6.B. Fixed Price Period

All prices, costs, and conditions outlined in the proposal shall remain fixed and valid for acceptance for 90 days starting on the due date for proposals.

7.0 REQUIRED FORMS

The following forms just be completed and submitted with the proposal in accordance with the instructions provided in section 2.0 Blank forms are in the following attachments:

Attachment A	Signature Affidavit
Attachment B	Vendor Data Sheet
Attachment C	References
Attachment D	Cost Summary Page

Attachment B

VENDOR DATA SHEET

1. Proposing Company Name _____

Telephone _____ Toll Free Telephone _____ Fax _____

Address: _____

City: _____ State: _____ Zip + Four: _____

2. Contact Person in the event there are questions about your proposal

Name: _____ Title: _____

Telephone: _____ Toll Free Telephone: _____

Address: _____

City: _____ State: _____ Zip + Four: _____

3. Mailing address where County purchase orders/contracts are to be mailed and person the Department can contact concerning orders and billing.

Name: _____ Title: _____

Telephone: _____ Toll Free Telephone: _____

Address: _____

City: _____ State: _____ Zip + Four: _____

Attachment C

REFERENCES

Provide company name, address, contact person, telephone number, and appropriate information on the product(s) and/or service(s) used for three (3) or more installations/services with requirements similar to those included in this solicitation document. If vendor is proposing any arrangement involving a third party, the named references should also be involved in a similar arrangement.

Company Name:
Company Address:
Telephone/email:
Contact Person:
Services provided by proposer/vendor:

Company Name:
Company Address:
Telephone/email:
Contact Person:
Services provided by proposer/vendor:

Company Name:
Company Address:
Telephone/email:
Contact Person:
Services provided by proposer/vendor:

Company Name:
Company Address:
Telephone/email:
Contact Person:
Services provided by proposer/vendor:

Company Name:
Company Address:
Telephone/email:
Contact Person:
Services provided by proposer/vendor:

Attachment D

COST SUMMARY SHEET (Submit only one copy, in separate envelope with Original copy of submittal)

Personnel Costs	\$
ODC Costs	\$
TOTAL COSTS	\$