

Simulcast 2 Way Radio Project Vendor FAQ's

1. Please describe the intended use of the microwave system.

a) Is it just to support the radio system or will there be other systems using it?

[It will be used for the radio and other data/voice applications](#)

b) The OC3 capacity is much greater than needed for the radio system. Does the County want a microwave system that can be upgraded expended to support this level of capacity if needed down the road to keep the initial cost down for the linking system or does the County want this capacity as part of the initial system that is delivered?

[No, the County would like an OC3 system](#)

2. If the County is looking for the OC3 capacity as part of the original system, is the OC3 level of throughput needed to all the sites or is the County looking to put in a OC3 loop using a few of the primary sites and then have lower capacity links (spurs) out to the other radio sites?

[All the sites](#)

3. The County has outlined and requested a Simulcast System within the RFP to meet the needs for improved coverage, system reliability, efficient use of frequencies and a simpler end users experience to access and hear calls, would the County consider a steered voted system instead of a simulcast system if it would reduce the cost of the system at the expense of talk-out (transmit) coverage to all the users for every call?

[No, based on the Kimball Associates study that simulcast is the only option the County will accept](#)

a. If so, would the steered voted system have to automatically select the sites required for retransmission of mobile and dispatcher originated responses or is manual selection by the dispatcher acceptable?

[N/A](#)

4. Is the Zetron console going to be upgraded to P-25? Is it capable of doing that?

No, not at this time. Yes it is capable of being upgraded to P25

5. What are the specifications for the radios and the portables? We need to know such things as what options should be included such as power, battery type, front of trunkmount mobiles, any DES or AES, immersion, display, etc. Also the minimum technical specifications.

The County specified from four major manufactures the model numbers for mobile and portables. The County expects to receive a price on those particular model ranges to include any and all offerings from each manufacture. The County idea behind this is that it will allow local two way radio shops to be able to sell directly to the County and get them the equipment specified to the Counties needs.

6. Is there any information as to how many radios would be needed? Or at least an estimate?

No. The County stated in the RFP that there will be no initial order.

7. Are the 3 VHF frequencies firm?

Yes.

8. Does the County own them?

Yes.

9. Are the current subscriber units in use VHF-P25 capable?

No.

10. Will the County consider bids from Systems Integrators? (rather than Manufacturers)

Yes, if the performance bond comes from the manufacture.

11. Page 7 states that Manufacturers can bid subscriber units only. We assume that since there is not minimum specification, that

bidding a discount from list price would be acceptable?

Yes. It would be the County wish to be able to have the manufactures list price book and a discounted price off list as this would include all accessories.

12. If bidding subscriber units only, we assume that no performance bond is required?

There is no performance bond needed for this item in the RFP

13. We assume that the County wants departments to have flexibility in purchasing the subscriber units of their choice and from whom they want. Is it acceptable for a Manufacturer to bid a fixed price discount for a year, with any orders being placed at that fixed price through a local factory authorized sales and service dealer?

Yes, see the last part of the answer to question #5

14. Are the subscriber units also to have a 3 year warranty?

No. Whatever is standard with the options to go for additional years at time of order pricing.

15. (General) Are there customer price sheets available to provide pricing for this project in a standard format?

No.

16. (General) Is there a response format requested for the proposal to be provided in?

No, but the County would like all of the following information asked about in this question.

- a. Company history, experience, resume, bidder qualifications?
- b. Technology Approach?
- c. System Engineering and Project Management Approach?
- d. Executive Summary

18. (General) Will a company be able to bid as a System Integrator representing the manufactures of the radio equipment

See answer to question #10

19. (Page 6) As FCC licensing, permitting activities and general engineering design activities will take up more time than is allotted for the entire project roll out – suggest to expand the project completion from 6 months to 1 year minimum.

The County has purchase FCC frequencies for this project.

20. (Page 6) Will a bid bond be required?

Yes.

21. (Page 6) Requesting clarification on statement regarding Equipment to be digital capable– please clarify intent as to whether equipment in proposal should be proposed as operating in both analog/P25 modes; or should the equipment operate in analog mode only with the ability to be upgraded to P25 through either software or hardware means?

A simple upgrade to P25 as long as the serial number of the equipment remains the same

22. (Page 7) Please provide a quantity (rough or otherwise) for subscriber units. Pricing will be dictated based on quantity of subscribers purchased in a single procurement.

See answer to question #6

23. (Page 7) Please define 90% mobile and portable coverage thresholds?
- a. Will portable coverage be considered using a portable radio mounted at the hip?
Face Height
 - b. What power mobile radio will be utilized for talk back coverage?
50 watts
 - c. What losses shall be used for building coverage considerations?

The County was basically looking for 90% terrain coverage

as for a public safety radio system

- d. Will buildings be considered in the 90% coverage requirement?

No.

24. (Page 7) Request clarification regarding statement for “all links should be redundant” under the fractional T microwave section – would this indicate a MHSB configuration for all proposed microwave? Will a protected loop configuration be acceptable?

The County has decided to make the microwave OC3 and therefore there will be no fractional T1's at this time. Will a protected loop configuration be acceptable? The protected loop will be acceptable.

25. (Page 7) County is requesting both fractional T and full rate T1 radios both in the licensed band for deployment, is there a preference as to which capacity radio is utilized from which site? Are there other capacity requirements beyond the RFP analog radio transmission that the County would like to consider at this time?

See answer to question #1

26. (Page 9) Automatic adjustment section – will a vendor be compliant if proposed solution offers continuous adjustment of phase and delay timing, not just at a discrete time during the day?

Yes, but County will want to see the manufactures specifications on the equipment for this feature for a simulcast LMR solution.

27. What are the TERMS and CONDITIONS OF SALE? What are the Cumberland County Terms of Payment? Does the County have a Vendor Contract for this type of implementation involving equipment and Services?

Generally the County has the bidder submit its terms and conditions with the RFP.

28. Are there progressive terms (25% upon contract signing, 25% upon delivery of equipment, 40% upon installation of equipment, 5% upon completion of acceptable coverage testing, 5% upon final acceptance)

Generally the County has the bidder submit its terms and conditions with the RFP. The progress payment terms can be worked out during the contract negotiation.

29. What is the payout back to the successful vendor...Net 10 days as billed, Net 30 days as billed etc. ?

NET 30 days

30. What constitutes Final Acceptance of the System?

All LMR and Microwave radio equipment and infrastructure is as specified in the RFP for this equipment. Successful bidder will have to demonstrate the LMR radio simulcast coverage; both talk out and talk back, with mobiles and portables. A radio communication DAQ test as described in the RFP, radio bit error rate coverage testing (narrowband Digital), radio signal strength testing (analog wideband), and a complete system functional test. The duration of this test shall be for a thirty (30) continuous calendar day period. Microwave testing will consist of a standalone test on each path and include both static and dynamic performance tests. Each path shall demonstrate zero seconds of errors at 10⁻⁶ BER performance at full bandwidth capacity over a continuous 24-hr period. The second test is an integrated test of the longest path. The system shall demonstrate zero seconds of error at 10⁻⁶ BER performance at full bandwidth capacity over a continuous full 7-day period. The final acceptance certification shall include a checklist of all equipment, software, completed inspection checklists, test reports, data, and documentation.

31. The coordinates for Phippsburg in the RFP are different than the ones in MAP10 (PDF files)... Which one of them is correct?

The RFP coordinates. The Phippsburg site was just in theory only in the Kimball study.

Kimball Study **Appendix "C" Map 10 six sites** shows the coordinates for Phippsburg as :

N43 47 23.5 W69 48 35 see attached maps KS identifies the Kimball Study location.

From visiting the site the coordinates are: **N 43 50 01.74 W69 49 40.26**

Some of the original Kimball Study coordinates were slightly off as well. The coordinates in the RFP are more accurate.

32. Is the Prime site going to be the CCRCC?

It can be the CCRCC but does not have to be. Cumberland County did not want to make this decision up front as it would like the vendors to be able to design what is best for their particular system.

33. Do you know if we are going to have a period of dates for site walks?

Not scheduled at this time. Vendors can request and it can be arranged.

34. Coverage tests: Since multiple vendors can bid on individual aspects of the proposal – m/wave transport, antennae and lines, RF simulcast equipment, perhaps even installation of sub systems, and subscriber radio units...How will the responsible validity of the coverage tests be judged?

The County understands the need for the microwave backhaul and the LMR two way radio manufactures needs. It would be up to each successful manufacture (LMR or microwave) to validate the submitted engineering plans.

35. As electrical specifications and performance (audio and voice quality) vary from manufacturer, who will have the final say as to what units are used for the test?

County and Manufacture