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Addendum #2 - Issued January 22, 2013

Regarding Bids for **Microwave System Replacement (ITB 12-037P)** for Lucas County Emergency Medical Service, bid opening originally scheduled for January 3, 2013 at 2:00 P.M. (local time) and rescheduled for January 30, 2013 (Addendum #1).

This document becomes a fully incorporated part of the specifications, and this letter constitutes legal notice of this requirement.

The entire original Bid Packet including this addendum must be submitted prior to the Bid Opening Date and Time.

The bid opening has been rescheduled for February 6, 2013 at 2:00 P.M. (local time).

Please see the attached questions and answers.

- 1) Would it be possible to migrate some of the 6 GHz links to 11 GHz as long as 99.995% availability performance requirements is met? Some of these links are very short and the FCC will need for the county to show cause if the links are attempted to be coordinated in the highly congested 6 GHz band. **A: It is possible, but for what reason? 6 GHz is already licensed the vendor should explain the cost benefit of migrating to 11 GHz.**
- 2) In addition to replacing the DS1's, what is the data throughput requirement? Our recommendation is to license either 30 MHz wide 6 GHz channels; or 40 MHz wide 11 GHz channels (providing an acceptable outage time is possible) to maximize the IP throughput of the hops. **A: The current system is made up of 2 T-2s, (approximately 12 MHz), we would expect a reasonable increase in bandwidth from this level. See Question 9B under Microwave Project-Additional Information, in Invitation to Bid.**
- 3) Since these are existing paths are path surveys required? **A: The current links are up and running, but it is the responsibility of the bidding company to ensure their solution works as promised, if this can be done without a path survey then so be it.**
- 4) Can you provide a DS0 channel plan detailing the circuit type and end points for each DS0 channel in the system? **A: No formal document exists to our knowledge. Typically each hospital site will have 1 4-W E&M drop for a UHF Repeater, 1 4-W E&M drop to a tone remote control deskset, and 1 2W POTS telephone drop.**
- 5) Since most modern telecommunications equipment operates from a -48 VDC power source we are planning on proposing a new power system (chargers & batteries) operating at -48 VDC. Is there any equipment currently operating from the existing -24 VDC DC power that will still remain and need a -24 VDC power source after the microwave is replaced? **A: No. (Existing Channel Banks are 24 VDC but will be replaced in this bid).**
- 6) What are the specifications to which we should size the DC power system? Normally for public safety system we use 8 hours of battery backup with a 24 hour recharge time (including existing current load). It is our understanding that every site has a back-up generator so an 8 hour back-up design may not be necessary. **A: Current system has approximately 8 hours back-up, we expect no less than current system.**
- 7) Are the batteries required to be 10 year or 20 year rated? **A: We would like system batteries rated for 10 years minimum.**
- 8) Should an allowance for future devices be made in the design of the DC power system? If so, how much of an allowance? **A: Because it's a critical system we do not expect to add anything during the system life cycle.**
- 9) What type of level of alarm does the county monitor, e.g. critical, major, minor? **A: We are satisfied with the level of alarm reporting that the current FARSCAN system provides (system & local, major & minor, individual site and radio alarms).**

- 10) Are there any site housekeeping alarms needed, e.g. smoke detectors, open door, high temperature, etc.? If so, can you provide a list of these alarms? **A: Yes, dehydrator, entry, generator run)**
- 11) If the microwave radio is MOSCAD compatible would the county consider sending the radio alarms to the public safety system MOSCAD system in lieu of providing a separate NMS/EMS system for the EMS microwave system? **A: It is not our current intent to send alarms to MOSCAD. We may consider an alarm reporting system that is provided by the manufacturer of the microwave equipment.**
- 12) If the answer to the above question is yes, will you have a MOSCAD RTU take care of those or should we propose an alarm unit?
- 13) Will structural analysis be required for the tower sites? **A: This requirement should be addressed by the vendor in the response. Our perception is that we are asking for just a 1 for 1 switch with possibly smaller dishes so structural analysis shouldn't be necessary, but if the vendor recommends it they should so state.**
- 14) Will new dehydrators be required for the new installs or are the existing dehydrators and line monitors to be re-used? **We want new dehydrators.**
- 15) Staging (Storage for replacement Microwave material) Does Lucas County have the ability to provide receiving storage for Microwave and associated material for the Project? Can you Provide the receiving address and associated information for this location? It is estimated that the complete network will require 700sqft of floor space with a ceiling height of 8ft. All of the material will require dry indoor storage. Yes, we have storage space at our EMS Annex 129 21st Street. However we do not have lift equipment on site.**
- 16) Channel Banks Please confirm that the current channel banks will be replaced but their function and configuration will be preserved including all downstream wiring to existing LMR and Phone systems. **Yes, we want we want the channel banks replaced. Their function and configuration will be preserved.**