



March 31, 2009

Dear County Communications Representative:

On behalf of the Kimball Interoperable Communications Team, thank you for this opportunity to discuss your county's public safety communications. The team will be arriving on site in Oklahoma within the next few weeks and they have a few documents they would like you to familiarize yourself with prior to their visit.

Below please find the survey questions the team would like to have answered during their upcoming visit. The questions are based upon individual "radio systems" and, therefore, we will need to complete a survey questionnaire for each separate system in your county. (Radio systems are usually defined as all channels that support a specific agency, such as "County Fire" or "County Sheriff".) It is understood that the answers may be the same for several different radio systems. Please note, we are not asking you to complete the survey and return it. We are merely providing you the questions in order that you might prepare for our visit and begin gathering the necessary data. In fact, you may wish to copy the questionnaire and distribute it to the various system owners (i.e., other agencies) in your county to assist in the data collection process.

Also prior to our visit you will receive a spreadsheet listing Federal Communications Commission (FCC) radio license information for public safety radio systems in your county. This information was gathered by downloading data from the FCC Internet website coupled with our knowledge of mutual aid channels in the State of Oklahoma. We will need to identify Channel Names, Type of Channel, Frequency Use and CTCSS Tones (also known as "PL" tones) for the sites and frequencies in this spreadsheet during our visit. Also as part of our survey, a team member will attempt to visit each primary dispatch tower site and any other large tower sites (approximately 100 feet high or greater) to photograph and visually observe the tower loading.

We will not need to collect information relative to system infrastructure from those agencies utilizing the State of Oklahoma trunked radio system. However, we will need data pertinent to dispatch equipment, subscriber radios and any legacy system equipment maintained for back-up.

A Kimball team member will be contacting you directly prior to the team's scheduled meeting in case you have any questions that need answering before their arrival. If you need to talk to someone at Kimball before a staff member contacts you, please feel free to call me at 804/869-9004 or email at curt.andrich@kimballcorp.com.

Sincerely yours,

Curt J. Andrich, PMP
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Enclosures

1. **Survey Point of Contact** (The person providing the information.):

Last Name:
First Name:
Middle Initial:
Title (e.g., rank):
Organization:
Job Title (duties):
Street Address:
City:
County:
State:
Zip Code:
Email:
Office Phone:
Cell Phone:
Fax Number:
Pager:
POC Type (Agency, IT, Operational, Technical or Other):
Primary Contact: Yes/No

2. **Radio Systems:** A radio system refers to the use of a single radio system infrastructure to provide service to one or several public safety agencies within the region. An example of this would be a countywide police system. A system can also be as simple as several radios talking among themselves (Simplex).

2.1. The system name is:
2.2. The system is owned or managed by:
Agency:
System Contact Last Name: (Same as above?)
System Contact First Name:
System Contact Middle Initial:
System Contact Title (e.g., rank):
System Contact Organization:
System Contact Job Title (duties):
System Contact Street Address:
System Contact City:
System Contact County:
System Contact State:
System Contact Zip:
System Contact Email:
System Contact Office Phone:
System Contact Cell Phone:

- System Contact Fax Number:
System Contact Pager:
System Contact POC Type (Agency, IT, Operational, Technical or Other):
- 2.3. The primary system manufacturer:
- Motorola
 - Kenwood
 - M/A-Com
 - General Electric
 - Tait
 - Other (Please specify)
- 2.4. Frequency range band the system operates in:
700/800 Bands
800 MHz Band
470–512 MHz Band
450–470 MHz Band
150–170 MHz Band
33–50 MHz Band
- 2.5. Does the System Use Trunking Technology?
- 2.6. Trunked Radio System Operating System Software Version?
- 2.7. Modulation Used by System's Voice Channels?
- Analog
 - Digital P25
 - Digital Proprietary (not P25)
 - Mixed Mode
- 2.8. Does the System Simulcast from Multiple Sites?
- 2.9. Radio System Operating Modes:
- Conventional Simplex
 - Conventional Duplex
 - Trunking
- 2.10. Number of Channels (if a Trunked Radio System)
- 2.11. Number of Channels (if a Conventional Radio System)
- 2.12. Connectivity Used by System is Primarily:
- Leased Telecom Copper
 - Leased T1
 - Microwave
 - Fiber
 - Radio RF Links
- 2.13. Number of Base Stations in System?
- 2.14. Number of Base Stations Narrowband Capable (Purchased 1997 or later; applicable only to VHF and UHF equipment)
- 2.15. Full-time Equivalent (FTE) Personnel Required to Manage and Maintain Radio System:
- 2.16. Self-Maintained or Contract Maintained:
- 2.17. Does System Support Voice Encryption?

- 2.18. Type of Encryption:
 - DES
 - Triple-DES
 - AES
 - Voice Inversion
 - Other (Please Specify)
- 2.19. Is Voice Encryption Used as Normal Operating Mode?
- 2.20. System Coverage:
 - 2.20.1. Service Area Mobile Coverage:
 - Greater than 95%
 - Less than 95%
 - 2.20.2. Service Area Portable Coverage:
 - Greater than 95% In-Street
 - Less than 95% In-Street
 - 2.20.3. Service Area In-Building Coverage:
 - Problems in all types of buildings
 - Problems in Medium/Heavy Construction Buildings
 - No in-building coverage problems
 - 2.20.4. System Capacity:
 - No Problems Accessing Channels
 - Occasional Problem Accessing Channel
 - Frequent Problems Accessing Channel
 - 2.20.5. Interference Problems (Noise/Foreign Traffic):
 - No Interference Problems
 - Occasional Problems--Not Serious
 - Occasional Problems—Serious
 - Frequent Problems
- 2.21. Estimated replacement date for system:
- 2.22. Number of Dispatch Locations for System:
- 2.23. Primary Dispatch Name:
 - 2.23.1. Primary Dispatch Street Address:
 - 2.23.2. Primary Dispatch City:
 - 2.23.3. Primary Dispatch State:
 - 2.23.4. Primary Dispatch Zip:
 - 2.23.5. Dispatch Radio Interface (e.g. Consoles):
 - 2.23.6. Dispatch Equipment Manufacturer:
 - 2.23.7. Model Name of Dispatch Equipment:
 - 2.23.8. Total Number of Dispatch Devices (e.g. Console Positions):
- 2.24. Secondary Dispatch Name:
 - 2.24.1. Secondary Dispatch Street Address:
 - 2.24.2. Secondary Dispatch City:
 - 2.24.3. Secondary Dispatch State:
 - 2.24.4. Secondary Dispatch Zip:

- 2.24.5. Secondary Dispatch Radio Interface (e.g. Consoles):
 - 2.24.6. Secondary Dispatch Equipment Manufacturer:
 - 2.24.7. Secondary Model Name of Dispatch Equipment:
 - 2.24.8. Secondary Total Number of Dispatch Devices (e.g. Console Positions):
3. **Radio Site(s) of the System:** A radio site is a location where the radio infrastructure is located. It usually consists of a shelter, tower and antennas for the radio equipment, such as repeaters and base stations. Data will be collected using the attached FCC Site Data Spreadsheet. FB and FB2 class stations are base station and repeater sites respectively.
- 3.1. Channel Name:
 - 3.2. Type of Channel:
 - Primary Dispatch
 - Secondary Operational
 - Tactical
 - Fire Ground
 - Mutual Aid (Please Specify)
 - 3.3. Frequency Use:
 - Simplex Base TX
 - Repeater Base TX
 - Repeater Input
 - Simplex Mobile TX
 - Mobile-Mobile Only
 - 3.4. CTCSS Tones (if Known):
 - 3.5. Space for Additional Antennas:
4. **Subscriber Radios on the System:**
- 4.1. Number of Portable Radios on the System:
 - 4.2. Estimated Number of Portables on the System Narrowband Capable (Purchased 1997 or later; applicable only to VHF and UHF equipment):
 - 4.3. Number of Mobile Radios on the System:
 - 4.4. Estimated Number of Mobiles on the System Narrowband Capable (Purchased 1997 or later; applicable only to VHF and UHF equipment):
 - 4.5. Number of Control Stations (Desktop) on the System:
 - 4.6. Estimated Number of Control Stations (Desktop) on the System Narrowband Capable (Purchased 1997 or later; applicable only to VHF and UHF equipment):
5. **System User Groups:** User groups are entities such as EMS, Fire, Police or other governmental agencies. Often these entities will also identify themselves within the larger group, such as Oklahoma City EMS, Fire and Police.
- 5.1. System User Group 1 (e.g., XXX City Police):
 - 5.1.1. System User Group 1 Category:
 - Law Enforcement
 - Fire

- EMS
 - Fire/EMS
 - Public Works
 - Local Government
- 5.1.1.1. System User Group 1 Portable Radio Primary Manufacturer:
- 5.1.1.2. System User Group 1 Mobile Radio Primary Manufacturer:
- 5.2. Added User Groups As Necessary.
6. **Radio Caches:** Radio cache refers to maintaining a cache of standby radios that can be deployed to support regional incidents. These radios may be from a regional cache or from a participating agency. These caches allow all responders to use a common, compatible set of radios during an incident.
- 6.1. Cache Location:
- 6.2. Agency Maintaining Cache:
- 6.3. Cache Portable Frequency Band:
- 6.4. Cache Portable Radio Manufacturer:
7. **Interoperability/Mutual Aid Operations**
- 7.1. Do users on this system have access to use any mutual aid channels?
- 7.1.1. Mutual Aid Channel 1 Name:
- 7.1.2. Mutual Aid Channel 2 Name:
- 7.1.3. Added Mutual Aid Channels As Necessary:
- 7.2. Other Agency's Channel Programmed into Radios for Mutual Aid:
8. **Gateways and Console Patching Capabilities:** Gateway systems interconnect channels of different systems (whether on different bands or modes), allowing first responders to use their existing radios and channels to be interconnected with the channels of other users outside of their agency. Systems such as the JPS ACU-1000®, TCB, M/A COM's VIDA® network and the Motorola Motobridge® are gateway systems. For the purposes of this survey, console patches have been included as gateway systems.
- 8.1. Are Console Patches Used for Mutual Aid:
- 8.2. Are Interoperable Gateway(s) Used for Mutual Aid:
9. **Interoperable Standard Operating Procedures (SOPs).** If there are any interoperable SOPs could we obtain a copy?
10. **Interoperability Governance.** Governance refers to establishing a shared vision and an effective organizational structure to support any project or initiative that seeks to solve interoperability issues by providing guidance and support through common policies, processes and procedures.
- 10.1. What best describes the interoperability governance for your county, service area or system?
- No formal agreements exist to address interoperability governance.
 - There is a formal organizational structure with authority to oversee interoperability policies and SOPs have been developed.
 - There are mutual aid plans that specifically address communications.

11. **Other Communications Systems:** Please list any other systems or devices that are used as part of this system for emergency communications:

- 11.1. Paging on the system?
- 11.2. Fire station alerting on the system?
- 11.3. Mobile data on the radio system?
- 11.4. Mobile data on a separate wireless system?

12. **Mobile Command Posts.** Is there an agency operated mobile command post?

13. **EMS**

- 13.1. Are your ambulances dispatched by your own staff or by another entity such as a law-enforcement provider?
- 13.2. Does a certified Emergency Medical Dispatcher (EMD) answer each of your emergency calls?
- 13.3. Does your dispatch have emergency medical dispatch protocols?
- 13.4. Does your dispatch have access to the EMSsystems website?
- 13.5. Does your dispatch record communications traffic?
- 13.6. Does your dispatch have access to the Hospital Emergency Administrative Radio (HEAR) frequencies?
- 13.7. Does your dispatch have a medical director?