



Dave Freudenthal
Governor

Steve DeCecco
Chairman

State of Wyoming

Public Safety Communications Commission

WyoLink Operations Work Group October 30, 2006 Meeting

Members present: Jerry Kennedy – Chairman, Kim Lee, Mark Harshman, Dan Perko, Pat Byrne, Jim Archerd, Tom Mahon, Dave Mattis – Phone, Patty Bauer – Phone, and Bob Symons.

Others in Attendance: Dave Thompson, Rich Hillegas, Rob Cleveland, Bill Westerfield, Kent Drummond, Marty McCoy, Dale Pawling, Barb May, Jeff Schultz, William Fleming, Gary Caprioglio, Jim Frank and Jeff Pallak.

Chairman Jerry Kennedy called the meeting to order at 1:02 pm.

Portable radio coverage in Cheyenne and Laramie County

Pat Byrne – Laramie County Combined Communications Center – presented a memo from the Laramie County Public Safety Agencies on their expectations of portable radio coverage in Cheyenne and unincorporated Laramie County. Pat stated that the Laramie County first responders strongly support the efforts of WyoLink to provide an interoperable mobile and portable statewide radio system. The minimal requirements for portable radio coverage, as discussed by the Laramie County first responders are:

1. WyoLink should provide at least the same level of portable radio coverage as the current radio system provides, hopefully the portable radio coverage would be better.
2. The chosen system should be easily expandable for future growth..
3. They understand it is not practical to provide coverage in every location; however it is essential to provide portable radio coverage in Cheyenne and the area surrounding Cheyenne for an approximate 4 to 5 mile radius. “D” Zone
4. Would like in-building coverage in the residential housing within the stated area, Downtown governmental complex, Dell Range Retail corridor, Cheyenne Regional Medical Center, Local Schools, Community College and Lowe’s and Wal-Mart Distribution Centers.
5. Laramie County first responders realize basement portable radio coverage may not be possible or practical.

Law enforcement uses the portable radios on the hip with speaker microphones. A map was presented to Motorola showing the “D” zone for portable radio coverage and the buildings that need to have in-building coverage. All frequency options – VHF or 800 MHz – should be on the table and studied for the coverage expected.

Discussion on the budgetary constraints. What has not been answered is the question on the costs for the coverage improvement and who is going to pay for the upgrades. The local entities need to know what their costs are going to be and be part of the decision on which solution is the

most feasible, costs and coverage. The best choice may be staying within the VHF band, because of compatibility with other agencies, but if this solution does not provide the coverage or the costs are higher than 800 MHz, the choice may be made to change to 800 MHz. If an 800 MHz solution is decided upon, Cheyenne Police Dept would most likely keep VHF portable radios for interoperability with Laramie County.

What is meant by expandable? Does this mean more channels or does this mean the portable coverage area will expand or does this mean that if there is no spectrum availability for future upgrades? Cheyenne is currently expanding to the north, northwest and east. The expansion for VHF may have to include the local agencies providing frequencies. As agencies migrate to WyoLink and are no longer using their legacy systems, if they expect expansion they may have to provide spectrum for the expansion. Laramie County does have some Homeland Security funds still available, but those funds have been reduced in the next grant cycle. Any budget requests will have to be presented to the Laramie County Commissioners and Cheyenne City Council. The Laramie County first responders have some options available for swapping radios between agencies. The project does have one VHF radio site available for the Cheyenne/Laramie County area. Will the Laramie County first responders help with identifying and acquiring possible radio sites?

The solution for portable radio coverage is a statewide solution. Once the WyoLink system expands to the other parts of the state, those areas will be asking for portable radio coverage just like Cheyenne.

Spectrum availability may be the driving force for technology. The best solution will be the best coverage with the available best costs – right solution/right costs.

Cheyenne Fire has been on an 800 MHz for 5 to 6 years. They currently own their system but originally leased a system. Casper Fire Department has been on an 800 MHz system for approximately 20 years. Natrona County has migrated all agencies into the 800 MHz system with one radio site on Casper Mountain. They have used all of their Homeland Security funding toward communication equipment. At the PSWN Conference in 2003 it was noted that the future statewide system would include tying the Natrona County 800 MHz and the Cheyenne Fire 800 MHz systems into the statewide system. How far out into Laramie County does the Cheyenne Fire 800 MHz system reach today?

Discussion on the different systems types: VHF, 800 MHz and simulcast. Each frequency band has advantages and disadvantages when dealing with coverages, costs and equipment needs. 800 MHz has less Db loss for building penetration than VHF does.

Discussion on where to locate a radio site in Cheyenne. The WyoLink project is going to need the help of the local agencies in defining locations and helping acquire sites. The City and county have buildings that could be explored for the installation of a radio site. Assisting with the potential locations of radio sites will help in identifying solutions for the portable radio coverage. The requirements for a radio site and antenna location were discussed.

By 2013 all radio systems will have to be narrow-banded. All of the current radio systems will have to be replaced and the costs for this replacement are not known. A hybrid solution may

become the best solution due to the lack of VHF spectrum and the costs associated with building VHF sites when compared to other frequency bands. The technology exists to connect VHF and 800 MHz systems together to make a seamless connection. There are many states that are currently building hybrid systems.

WyoLink will be working with Motorola to help identify the potential solutions for portable radio coverage. The funding for this upgrade will need to be identified after the potential solutions are identified. This will be the first of many areas where the PSCC will have to work with local entities on finding solutions for local area portable radio coverage.

When Motorola has completed the engineering study on potential solutions and the costs associated with the solutions the WyoLink Operations Work Group will have another meeting before presenting the information to the PSCC.

Being no further business the meeting adjourned at 2:30 pm.

Respectfully Submitted,

Robert Symons
PSCC Administrative Support