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NARROWBANDING

Complying with two FCC deadlines

Managers may not be aware of it yet, but another unfunded mandate is waiting just around the corner. Because of the increase in wireless communications, the nation's airwaves are becoming crowded. To better accommodate current needs and future projected telecommunications growth, the Federal Communications Commission (FCC) is taking steps to more efficiently allocate the limited airwaves (or spectrum) available. The changes include how land mobile radio (LMR) systems operate.

LMR systems use portable, mobile, hilltop base and repeater stations as well as stations connected to dispatch consoles for field radio communications. They operate on various channels, many of which are 25 kilohertz (kHz) wide, also known as wideband.

FCC is requiring LMR users in certain bandwidths to reduce their voice and data channel operations to 12.5 kHz.

Important Dates

FCC's order requiring narrowbanding, which was adopted in December 2004, includes two important dates:

January 1, 2011. FCC will not license new wideband applications for radio systems operating in the 150–174 megahertz (MHz) or 421–512 MHz bands. FCC also has prohibited the manufacture and importation of any wideband equipment designed to operate in the 150–174 MHz and 421–512 MHz bands.

January 1, 2013. LMR licensees operating in the 150–174 MHz and 421–512 MHz bands must move to 12.5 kHz channels for voice and data transmissions.

Implementation Plan

The deadline to convert to narrowband systems may appear distant, but in the world of local government procurement it might not be as far away as it seems.

Managers are urged to review FCC radio licenses and determine whether any 25 kHz systems are operating in the affected bands. If a manager is having difficulty verifying which licenses exist, the radio communications system vendor, a qualified FCC licensing assistance service, or an FCC-certified frequency coordinator can be contacted for assistance.

When inventorying radios, make sure to include portable radios, mobile radios in vehicles, base stations, and repeat-

BASED ON THE FINAL SCHEDULE, DON'T FORGET TO APPLY TO FCC TO MODIFY LICENSES TO REFLECT THE CONVERSION FROM WIDEBAND TO NARROWBAND.

ers. It is also important to identify any supervisory control and data acquisition (SCADA) systems that may be using 25 kHz radio systems.

SCADA systems are commonly found in wastewater treatment plants, water systems, electric facilities, and civil defense siren systems. It can be helpful to build a spreadsheet containing the make, model, and serial number of each radio, and it is extremely important that this information is copied exactly as it appears on the radio. Dropping a digit from a model number can make the difference between a need to replace a piece of equipment or merely retuning it for the correct frequency.

Next, craft a strategy for replacing and retuning radios. Ask staff members questions about how many radios are really needed and to whom they should be assigned. Does every vehicle and piece of equipment in a fleet need a radio? Who is assigned portable radios and why? It is common for systems to grow over the years without adequate planning. This is a time to size a system to meet an organization's needs.

Secure the necessary funding and follow required procurement processes. Start soon, as orders may become backlogged the closer it gets to January 1, 2013. Make sure the vendor has a firm understanding of the final time frame for conversion.

This will also need to be communicated clearly to employees and area agencies. Select one point person to respond to questions or address issues as they occur. Having a single point of contact will lessen the chance of miscommunication and misunderstanding.

Based on the final schedule, don't forget to apply to FCC to modify licenses to reflect the conversion from wideband to narrowband. Again, don't wait until the last

minute to apply, as FCC may experience delays with the volume of license modifications that are requested nationwide.

Compliance Is Required

FCC's narrowbanding mandate is not negotiable. All licensees operating in the 150–174 MHz and 421–512 MHz bands must comply. It is not anticipated that waivers or extensions will be granted. Failure to comply may result in the issuance of monetary fines and even the revocation of FCC licenses.

In addition, if a local government "narrowbands" before a neighboring one, users may experience interferences that hamper an agency's communications. Do not delay compliance.

For more information, visit FCC's webpage on narrowbanding at www.fcc.gov/pshs/public-safety-spectrum/narrowbanding.html. **PM**



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