

Ray
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Deep Requirements

The FCC Narrowbanding Mandate: What You Need to Know to Assure Radio Communications in 2013

Who is Affected

The FCC narrowbanding rules affect all operators of land mobile radios (LMR) that use channels between:

- 150 and 174 MHz
- 421 and 512 MHz

What will Happen

- Wideband LMR systems (i.e., two-way voice radio operating on the 25 kHz channel-widths that have been the standard for the last few decades) will experience **increasing interference** as other radio operators switch to narrowband channels that may overlap older wideband channels. (Note: interference issues may already be noticeable.)
- As of January 1, 2011, all new radios sold in the US must be narrowband-capable – thus MY2011 radios/buses may not be able to communicate with wideband LMR systems.
- As of January 1, 2013, LMR systems still using wideband channels risk:
 - **loss of radio communications**
 - **substantial FCC fines**
 - **revocation of FCC licenses**

What Needs to be Done

- 1. If you operate under an FCC license that is under another group's name:** ask your license-holder about their plans for narrowbanding, and proceed to step 3.
- 2. If you operate under an FCC license that is in your agency's name:**
 - Check the license expiration date, if the license is expired, you must renew your license (through your frequency coordinator) before modifying it for narrowband.
 - Check the license emissions designator, if any of the LMR channels on your license has an emissions designator of 25 MHz, your license needs to be modified (through your frequency coordinator) for narrowband operations.
 - Set a date prior to January 1, 2013 for changing to narrowband operations -- consider coordinating your change with groups you communicate with, and consider setting an earlier date to reduce future radio interference and allow time to address any unforeseen issues prior to the deadline. The license emissions designator is a "do not exceed" value, so you can operate narrowband channels under a wideband license.
- 3. Check your radio equipment for narrowband capabilities and begin any necessary procurement.**
 - All voice radio equipment should be capable of 12.5 kHz voice channels
 - Confirm adequacy of radio channel "step-ups" – radios with step-ups greater than 2.5 kHz will not be able to tune to all narrowband channels in range. Make sure your radios will be able to tune to all the channels your agency will need.
 - Plan for the longer-term – to meet later mandates planned by the FCC, consider new equipment that is capable of 6.25 kHz channels. These very narrowband systems are digital – your license should specify digital operations prior to use of this equipment.
- 4. Set and re-tune your radio equipment to narrowband channels on the date set for beginning your narrowband operations.**