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# COUNTY OF NORTHAMPTON

## Department of Administration Division of Emergency Management Services

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## Narrowbanding Technical Bulletin

### Update 5/7/2012

Northampton County is in the process of narrowbanding the entire radio infrastructure to meet the FCC mandate to have narrowbanding in place by January 1<sup>st</sup> 2013.

#### **FCC Mandate:**

“On January 1, 2013, all public safety and business industrial land mobile radio systems operating in the 150-512 MHz radio bands must cease operating using 25 kHz efficiency technology, and begin operating using at least 12.5 kHz efficiency technology. This deadline is the result of an FCC effort that began almost two decades ago to ensure more efficient use of the spectrum and greater spectrum access for public safety and non-public safety users. Migration to 12.5 kHz efficiency technology (once referred to as Refarming, but now referred to as Narrowbanding) will allow the creation of additional channel capacity within the same radio spectrum, and support more users.

After January 1, 2013, licensees not operating at 12.5 KHz efficiency will be in violation of the Commission's rules and could be subject to FCC enforcement action, which may include admonishment, monetary fines, or loss of license.”

#### **Steps the County has already taken:**

All County FCC licenses have been modified to meet the narrowbanding requirements.

Created Radio Authorization and programming requirement on March 1<sup>st</sup> 2007, which provided notice to users.

We have been working with our vendor to test and prove out a narrowband transition path. Our vendor has successfully tested and proven that a wideband and narrowband radio can exist and function properly with minimal difference between the two on a

narrowbanded radio infrastructure with the newly created programming and tuning parameters. This should create a smooth and seamless transition to narrowbanding.

Currently all fire and EMS channels are narrowbanded with no degradation to field unit operations. Police Channels are in the process of being narrowbanded.

Testing has been done on Dispatch-1 with positive results, activating field pagers with no issues. Motorola Minitor V are capable of narrowband; extensive bench testing and field testing have proven a pager listening to wideband will activate reliably on a narrowband system. Departments should continue to transition older pagers to narrowband capable pagers.

Some agencies have already voluntarily narrowbanded their radios with no issues reported.

The County has set May 7, 2012 as the official acceptable time to start programming field radios and pagers for narrowband.

The County is setting a deadline of September 30<sup>th</sup> 2012 to have all field radios narrowbanded. The County understands that some agencies may have difficulty in doing this and has allowed a three month buffer window until the January 1<sup>st</sup> 2013 FCC deadline.

### **What field Agencies Need to do:**

Review current equipment to determine what can be converted to 12.5 kHz and what will need to be replaced before January 1, 2013. Most new equipment has the capability for both 25 kHz and 12.5 kHz operation because any VHF/UHF radio equipment accepted by the FCC after February 14, 1997 had to have 12.5 kHz capability. If unsure if your radio equipment is capable of operating in the 12.5 kHz mode contact your radio vendor.

Program pagers, portable and mobile radios to meet the narrowbanding requirements of 12.5kHz mode by September 30, 2012

Notify the County if you are unable to meet the County deadline of September 30<sup>th</sup> 2012

Notify the County once you have met the FCC Narrowbanding requirements.

If your agency maintains their own channel and holds a FCC radio license your agency is responsible to comply with the FCC mandate to narrowband.

Northampton County Emergency Management Services can assist in some programming of pager, portable and mobile radios, please contact us to see if we can assist in programming.