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TO: Municipal and County Elected Officials
Municipal Budget Officials
Public Safety Officials
Communications Directors & Supervisors

FROM: Adel Ebeid, CTO, Chair, Public Safety Communications Commission 

SUBJECT: FCC Narrowbanding Mandate Deadline

By way of background, the Federal Communications Commission (FCC) has imposed deadlines to upgrade the two way radio equipment that may be in use by your public safety agencies, public works departments and even your school system. After January 1, 2013 you will no longer be permitted to use what is known as wideband frequencies in your radios. Daily fines may be assessed on wideband users after that date. Additionally, if you don't file a modification to your license the FCC will be issuing narrowband licenses on your former frequencies.

The above paragraph should have gotten your attention if you have not yet taken any action to upgrade your FCC Licenses and equipment to operate with narrowband frequencies. This issue did not emerge overnight; the FCC is faced with a severe shortage of radio spectrum for land mobile radios operating in the 150 MHz to 512 MHz frequency bands. Much of Public Safety and Public Service users operate in these bands. For well over 10 years the FCC has been evaluating the benefits of reducing the bandwidth being used in those bands to allow more users to operate in the same amount of spectrum. The FCC has determined that they could cut the licensed bandwidth in half and ultimately to one quarter of the currently used bandwidth and still maintain adequate communications. This would allow two times or even four times the number of users in the existing spectrum. The technology is mature for the two for one split and is evolving for the four for one split. There is no set date for the four for one split.

Unfortunately this upgrade will require a modification of your license and a replacement of all equipment that is not capable of operating in the narrowband mode. Equipment in the Very High Frequency (VHF) band currently operating with a bandwidth of 15 KHz must operate at 7.5 KHz and at Ultra High Frequencies (UHF) currently operating with a bandwidth of 25 KHz must operate at 12.5 KHz of bandwidth or demonstrate equivalent efficiencies in the use of the bandwidth to continue operation. In 2004 the FCC issued a

report and order setting out the above listed deadlines, essentially no equipment would be accepted after January 1, 2011 and no wideband equipment can be used after January 1, 2013. With respect to most Public Service and Public Safety Agencies this means there are only three budget cycles to phase in the funding of the licenses and equipment before the deadline. For the most part equipment purchased after the year 1997 is capable of narrowband operation with a relatively modest firmware upgrade. Older equipment may have to be replaced. There may be some coverage issues due to the slightly reduced coverage capabilities of narrowband radios and some VHF radios may not be able to program on every 7.5 KHz spaced frequency. Your staff should inventory all of your equipment currently being used and check with your vendor as to the viability of the radios, this mandate also applies to pagers in use by many volunteer Fire & EMS agencies. Some vendors have been trying to gain advantage from this upgrade by advising that replacements are necessary when firmware upgrades can do the job. If in doubt check with more than one vendor or visit the manufacturer's website for verification.

It is extremely unlikely the FCC will delay the implementation of the regulation. The order has been published for over six years. The FCC has indicated that adequate time has been granted to amortize the cost of radio equipment and should not present a hardship. Remember in most cases only equipment over 10 years old will have to be replaced. Many municipalities have indicated they thought this upgrade applied only to Public Safety users. In fact it applies to all users in the above listed bands. This includes municipal utilities, school districts as well as some business users.

If you have not done so, the time is now to develop a plan to phase in the implementation of this regulation. It may be difficult or impossible to change out your equipment in the last quarter of 2012. Failing to meet the deadline will result in heavy fines and the loss of your valuable frequencies.

The National Law Enforcement and Corrections Technology Center Communications Technologies Center of Excellence will be hosting a webinar on the FCC's narrowbanding mandate and what it means to public safety on Tuesday, June 1st at 1:30 PM EDT. Information on registering for this can be found at www.commtechcoe.org.

This letter omitted many of the technicalities involved in the upgrade but has covered the essentials of how the narrowband upgrade will impact your operation. In the event you have any questions on this issue please contact our Office of Emergency Telecommunications, Craig Reiner, Director, at craig.reiner@oit.state.nj.us.

c: Charles McKenna, OHSP
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