



Loss of FCC License Because of the T-Band “Giveback”

Are you impacted? Are you ready?

Dear Radio System Manager,

Please read this letter in its entirety, it has important information on the Federal Communications Commission radio license(s) used in your radio system, or used by agencies dispatched by your agency. *The current Federal FirstNet Act requires Public Safety to move off their T-Band frequencies (470-512MHz), as early as the 2021 – 2023 timeframe.*

First, Illinois FirstNet is part of the Illinois Terrorism Task Force under the Illinois Emergency Management Agency. We are NOT a private company, and we are NOT selling any products or services.

As you may know, FirstNet is a Federal initiative to implement a nationwide Public Safety cellular data network dedicated to Public Safety and Emergency Responders. This network will provide prioritized data and cellular phone services to Public Safety. FirstNet has the potential to revolutionize Public Safety operations using new data and video applications.

However, it will NOT take the place of current Public Safety Land Mobile Radio (LMR) systems. LMR systems used by Public Safety will continue in their present form for many, many years.

Please plan to attend one of our three informational sessions held by Illinois FirstNet, in conjunction with ILEAS.

We will explain the details and implications of the FirstNet legislative requirements to give back T-Band, especially as it applies to your agency. We are looking forward to seeing you at one of our sessions:

- February 28, 2017, 14:00 to 16:00, Cook County DHSEM, 15901 S. Cicero, Oak Forest, IL. 60452
- March 1, 2017, 10:00 to 12:00, Oakbrook Village Hall, 1200 Oak Brook Rd., Oak Brook, IL. 60523
- March 3, 2017, 10:00 to 12:00, Lake County Permit Facility, 500 W. Winchester Rd., Libertyville, IL. 60048

We realize this is a very complex issue for most agencies, and in our informational sessions we will be discussing topics such as:

How was FirstNet started?

FirstNet was created by federal legislation, specifically, the “Middle Class Job Creation and Tax Relief Act of 2012” (“The Act”). That legislation allocated a large amount of spectrum to Public Safety, to be utilized by FirstNet to operate the Public Safety Broadband Network.

Why is this important to my agency?

Unfortunately, as part of the Federal Act that formed FirstNet, it *requires Public Safety to give back the T-Band spectrum currently used for LMR operations.* We believe that this issue affects at least part, if not



all, of your Public Safety radio system(s). (Interestingly, Business Band users and television stations operating in the T-Band are NOT required to relocate under the Act.)

When is this going to happen?

Basically, starting around *the 2021 – 2023 timeframe, you will not be able to operate your radio systems in the T-Band portion of the spectrum. Your agency will be required to cancel your FCC license(s) for this spectrum, and will be required to move operations to some other spectrum.*

How do I know if I am using T-Band frequencies at my agency?

This letter specifically addresses agencies in Illinois who are listed in the FCC license database as using T-Band. On your FCC licenses, any frequency that starts with 470 MHz to 512 MHz is T-Band, and is affected. Only frequencies in the T-Band range are affected, and other frequencies used by your agency are unaffected.

How is this going to be funded?

Importantly, the Act did NOT provide any funding at this point in time to help agencies fund their relocation efforts. This deadline is only five to seven years away. When you take into account budget approvals, procurement times, design, engineering, and implementation times, just to name a few, there is not much time at all to find a solution to the funding dilemma.

What are the options for my agency?

We have come up with four possible solutions, all have a level of risk and costs associated with them.

- **Lobbying to remove, or at least delay, the deadline to vacate the T-Band spectrum.** Since FirstNet was enabled by Federal legislation, this would be a good time to have a frank discussion with your US Representatives and Senators (and your Illinois legislators also) about the disruptions and especially costs involved with relocating your agency’s radios system(s) off the T-Band spectrum. The results of this option are hard to predict, although there have been informal discussions at the Federal level about modifying the deadline. This carries a risk, if lobbying is not successful, agencies would still need to move their systems.
- **Waiting for FirstNet to complete their network buildout, and moving radio operations to FirstNet.** This option carries a very high level of risk, as the network is not projected to be completed until late 2021 at the absolute earliest. In addition, FirstNet has been concentrating on building out the network as a data network, and the standards for “Mission Critical Push to Talk” (MC-PTT) are not fully developed yet. We believe that for these reasons, and many more, it is extremely unlikely that FirstNet will be ready to take over the LMR function for quite some time. There is also a cost component, as current radio equipment would not work on FirstNet, replacement with specialty devices supporting MC-PTT would be required.
- **Replacing your current T-Band system with a new radio system using other spectrum.** This option would involve considerable time, effort, and funding. Some background; in 1971, the FCC recognized how crowded the airwaves had become in 11 major metropolitan areas, including the Chicago Metro area. The FCC allocated unused television channels for LMR use to relieve the crowding. (Hence the name “T-Band”). If anything, the crowding is even worse today and available Public Safety frequencies are next to impossible to find. The FCC did allocate the move of some 700 MHz frequencies for current T-Band licensees. However, from an engineering perspective, this is not a one-to-one swap. T-Band and 700 MHz frequencies behave differently



in actual use, and moving to an entirely new frequency band will require re-engineering current systems. This will also require replacement of the radios and base stations currently in use today.

- **Moving to existing wide-area shared systems such as Cook County, Lake County, DuPage County, or Starcom21.** This option could be implemented quickly, as these systems are already designed and built. Shared systems are very cost-efficient, as well as spectrum-efficient. However, there will be a cost component, as new radios will be required, and there could be monthly fees per radio for use of the system. While system maintenance and upgrade costs are included in the monthly fees, there is an element of loss of control of your radio system that agencies find disconcerting.

In summary, with the exception of possibly getting the Act changed at the Federal level by Congress, all of the options above involve significant amounts of time, effort and funding. The unfortunate reality is that affected agencies should start planning now for what they plan to do to address this very pressing issue. As stated earlier, time is growing short, especially considering the budgeting and procurement processes most agencies follow.

Where can I get more information?

The National Public Safety Telecommunications Council (NPSTC) has published a very comprehensive report, plus an update, that more fully explain the implications of the T-Band issue.

- The original 2013 report can be found at:
http://www.npstc.org/download.jsp?tableId=37&column=217&id=2678&file=T_Band_Report_20130315.pdf
- The 2016 update report is at:
http://www.npstc.org/download.jsp?tableId=37&column=217&id=3696&file=T_Band_Update_Report_Final.pdf

We highly recommend these reports; they contain easy to read executive summaries, as well as detailed information.

Whom can I talk to about this issue?

If you have any questions, or need any help at all addressing this issue please contact Bill Springer, waspringer@ileas.org, 630-386-6038, or the Illinois FirstNet team at 217-531-0499, or at ljbelle@ileas.org. Please feel free to check the Illinois FirstNet web page at: <https://www.illinois.gov/firstnet>

Sincerely,

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