

Narrow Band: Are You Ready for the Switch?

There has been much discussion regarding the switch to narrow band from wide band radio equipment. This transition applies to both pre-hospital EMS as well as hospital communications equipment.

All VHF and UHF radio systems must operate in narrowband by January 1, 2013. This is a Federal Communications Commission requirement.

The good news is your radios may already be compliant, or simply need a small programming change.

In most cases, radios purchased in recent years have narrowband capability already installed.

It just needs to be enabled.

What is narrow band? Currently, VHF wide band channels occupy 25 kHz of bandwidth. The federal plan is to reduce these channels to 12.5 KHz of bandwidth, thus allowing room for additional channels. In simple terms, narrow band doubles the amount of channels available.

What if my radio is already narrow band capable? That is good. However, capable means that it has the ability to transmit to on narrow band, but this narrow band capability needs to be enabled through reprogramming. Your radio vendor can tell you if your radio is both narrow band capable and narrow band enabled.

How do I change to narrowband? You will need to have your radio vendor come in and reprogram your radio. The reprogramming usually takes about one hour.

Important: Since your radio may be down for a brief period of time, it will important to alert EMS of the down-time of your radio so that EMS can tell you what alternate communications they will use during the time your radio is being reprogrammed, e.g. cell phone. Since EMS will also need to reprogram their radio, both hospitals and EMS need to coordinate down-times so that there are not missed communications.

How much does reprogramming cost and how long does it take? A local Motorola shop estimated down time of 30 minutes for hook-up, reading and reprogramming with a cost of around \$45.00 per radio. These are, of course, estimates of both time and costs and may not include all charges, e.g. trip charge, etc.

Important: The hospital should contact its radio vendor soon because many agencies are making this change and it may take a while to get an appointment.

Will there be a problem if the hospital has reprogrammed their radio and EMS has not or vice versa? Tests have been conducted with various wide band versus narrow band scenarios to determine the outcome. With only a slight reduction of range, the transmissions should still be received. Some have reported no issues at all; some have reported poor or no transmission ability (rare); some have experienced small changes in volume.

Important : Once EMS or hospital has made the transition to narrow band and while the radio vendor is on site, it is important to test the radio transmission with your communication partners, e.g. hospital and EMS.

What if I have an old radio? There may be some older radio models which are capable of making the change. Your radio vendor should have a list of brands and model numbers that are narrow band capable. If your radio is not narrow band capable, you may have to purchase a radio that is narrow band capable and then have it reprogrammed (or it may come narrow band enabled).

Is there funding available to help with the purchase of new radios? Hospitals may use FY 2011 Cafeteria Funds for this purpose. (FY 2011 begins July 1, 2011 and ends June 30, 2012). The Wisconsin Hospital Emergency Preparedness Program will also have information available in July 2011 about the specification for radios that are necessary to access the new state WISCOM system. It is recommended that you defer the purchase of a radio until more information is available, unless a radio purchase is absolutely necessary.

Will I need a new FCC license once I convert to narrow band? You must provide a certification to the FCC of narrowband operation prior to 1/1/2013. If you are already operating with 12.5 kHz or less bandwidth, you need to update your license. If you have already up-dated your license, no further action is necessary. To search for your current license information, go to <http://wireless.fcc.gov> and choose "license search" in the right column under "Licensing".

See attachment: *FCC Instructions for Filing a License Modification*

Is there technical assistance available? Yes. You are invited to work with your Regional Interoperability Coordinator as this transition takes place. See the following link for more information on these interoperability regions:

<http://www.interop.wi.gov/section.asp?linkid=1693&locid=166>

FCC Instructions for Filing a License Modification

To update or add technical data to a license, you will need to file a modification. In order to file an online modification to a license, you will need to go to the Universal Licensing System web site, <http://wireless.fcc.gov/uls>

At the Online Filing section, click the Log In button and enter your FRN (FCC Registration Number) and password.

- If you do not have your password and you have previously set a Personal Security Question (PSQ), go to website <http://esupport.fcc.gov/password.htm> and select Reset Password.
- Enter your FRN and answer the PSQ which will allow you to reset your password.
- If you have not set the PSQ go to web site <http://esupport.fcc.gov/index.htm> and submit a reset password form or call (877) 480-3201 for assistance.

If you have saved applications, the system will open to a page titled “My Applications”. From this page choose the “My Licenses” link in the side navigation menu at the left side of the screen.

On the “My Licenses” page, select the Update Licenses link from the navigation menu at the left side of the screen.

Note: For additional help with this process, click on the Common Questions links that appear on most pages of ULS License Manager, or click the Help link at the top right of each page. Alternatively you may select an individual call sign from the list of your licenses and, once the “license at a glance” page has loaded for that call sign, select update license from the “Work on this License” menu at the right side of the screen.

On the Select Updates screen, check the Technical Data box, then click the Continue button.

This will then load the FCC 601 form. You can navigate the application by clicking the various tabs located at the top of the screen, or by clicking the Next Page or Previous Page buttons located in the lower right-hand corner of the screen.

- Click the “Submit” button at the bottom right hand side of the page.
- Print confirmation page or jot down File number. The Confirmation screen also provides a Print Preview button which enables you to print your completed application.
- To print your application, click the Print Preview button. The system displays your application data in an application form format suitable for printing.
- To print the formatted application, select Print command from your web browser. This command can be found in the file menu of most common web browsers. If

your web browser has a toolbar, you can also print the page by clicking the Print button.

- To close the print preview window, click the Close (X) button, located in the top right corner of the window. (The license is displayed in a separate browser window).

If any application fees are due, ULS will calculate those fees. Fees for online filing MUST be received within 10 calendar days of the filing. Click "Continue For Payment Options" button to make selection of "Pay By Credit Card" or "View Form 159". FCC highly recommends online electronic payment, by credit card, using our secure website.

If you have any further questions, or need additional information, please submit a request through <http://esupport.fcc.gov/index.htm> or call the ULS Customer Support Hotline at 877-480-3201 and select option 2 at the main menu recording.