

# Transcript: TDMA Radio Programming

Welcome to this Alaska Land Mobile Radio training presentation on TDMA programming.

The ALMR system is an APCO Project 25 compatible radio system that uses those public safety standards. Currently, the system uses a radio frequency encoding type called FDMA, but we are transitioning to the use of TDMA which is an acronym for Time Division Multiple Access. TDMA is essentially a different way to use the radio spectrum. In combination with TDMA-capable radios, TDMA-capable site equipment, we are able to put more conversations within the same radio frequency. This allows us to add capacity to the system, essentially almost doubling it once all agencies have transitioned, as well as be able to provide some more advanced features that coincided with the system upgrade that allowed TDMA to happen.

Be aware for your agency that there are several changes that need to happen for TDMA before you can use this on the system, which include changes to your radio programming. We will briefly cover those changes in this training video.

In the last few years, the ALMR System Management and Operations Management offices have been working with our agencies to transition old, legacy, unsupported equipment out of the system and replace those units with TDMA-capable radios.

Before TDMA can be enabled to your system and to your agency, all subscriber units must be TDMA-capable, and that feature must be enabled. In addition, radios must be programmed for TDMA and FDMA use, so both types of functions can occur throughout the system. Lastly, the ALMR Help Desk must enable this for your agency before TDMA will activate.

One of the changes that must be made to radio code plugs is enabling phase two voice capability. In Motorola radios, you can see this option in the Trunking Configuration section. Find the trunking system for ALMR and find the option that says Phase 2 Voice Capable. Check the box or enable that function in your software to proceed.

The key programming difference for ALMR capable radios that use TDMA is a change in your trunking configuration setup. In Motorola radios, you can see under trunking configuration and trunking system, we will edit the channels that are accessible to the radio.

Other radio programming software may refer to this as a system configuration, trunk configuration, or a similar vein.

Check your documentation or with your radio programmer on where to find the channel setup for your particular radio. This graphic shows the programming that allows both TDMA and the older legacy FDMA programming to work on the ALMR system. Before updating any of your programming, contact the ALMR helpdesk to verify any changes or particular situations for your agency or talkgroups.

Once you have updated the channel programming to match the TDMA capability, the System Management Office and Operation Management Office will assist you and will transition your talkgroups over to TDMA settings. This is done in a controlled manner to ensure that all technologies work as appropriate and during the transition there is no technical issues or other difficulties that may impact service to your particular agency or usage.

We appreciate agencies switching over to TDMA as their radio fleets allow, as once TDMA is put into place throughout the system, the system capacity will increase, as well as additional features and benefits that will be available to all ALMR users.

If you are ready to explore TDMA or have any questions about the technology and the change, please contact the ALMR Help Desk or the Operations Management Office for further information.