



MISSOURI DEPARTMENT OF PUBLIC SAFETY  
MISSOURI INTEROPERABILITY CENTER

**Missouri Statewide Interoperable Network (MOSWIN) Best Practices**

Version: 1.0

Issued: September 2013

Revised:

**Mobile Phone Chargers Introduce Noise** - The use of mobile phone USB car chargers and other 12 volt accessories can impact the ability of the MOSWIN radio to receive signals from the MOSWIN base station. It is recommended that to ensure optimum MOSWIN radio system coverage, charging cellular phones or other devices via the vehicle's lighter adapter is kept to a minimum.

**Wait for Channel Grant** - When using the PTT button the MOSWIN network, it is recommended that the user wait to start talking until the system has provided a channel grant via the channel grant indicator (chirp).

**Channel Grant PTT's** - If the PTT button has been pressed and the channel grant has not occurred, there is a delay in your channel grant request. The system will provide a channel grant as soon as a channel is available. DO NOT again depress the PTT button as your channel request will be "reset" and your first request will lose its place in the queue. Most channel grants will occur in a second or two after the button is depressed. NOTE: In previous systems, there was no confirmation provided to the user that they have received a channel grant and a clear voice path. MOSWIN provides confirmation of each PTT by its users.

**Talk Group Announcement** - Radios that operate on the MOSWIN network have access to a greater number of talk-groups than they ever had channels in their previous radios. Many users scan a number of pertinent talk-groups and unless they are watching the screen of the radio, may not know which talk-group the calling party called on. Subsequently, it will benefit all users when users preface their call with an acknowledgement of which talk-group they are calling on. An example of this practice would be "Barry County 123 calling Stone County Dispatch on Region D I/O 3"

**Unity Gain Wide Band Antenna (148-174 MHz) and Antenna Placement** - The MOSWIN network utilizes spectrum between 148-174 MHz. Mobile radio antennae should utilize antennae that are capable of operating in this band to ensure optimum system performance. A Unity Gain quarter wave  $\frac{1}{4}$  antenna mounted to the roof of a vehicle with a transmit power of 50 watts and an ERP of 45 watts is the optimum antenna configuration for the MOSWIN network. A 5/8 wave or other gain antennae can be utilized in the MOSWIN network but the antenna gain must be offset by a reduction in transmit power (TPO) in the mobile radio to comply with MOSWIN FCC licensing.

**Keep MOSWIN Communications Professional** - MOSWIN is a network designed to support public safety communications. The usage and viability of the network is represented by the manner in which it is used. All communications on the MOSWIN network reflect the professionalism of the network's users. Keep in mind, the PUBLIC IS LISTENING!

**How to clear the emergency button** - If the emergency button is activated on your MOSWIN radio notify dispatch and co-workers of your status and the need for declaring the emergency. After the emergency subsides, acknowledge and cancel the emergency by pressing and holding the emergency button until it clears the emergency.

Any questions, contact MOSWIN System Administration at [mosysadmin@dps.mo.gov](mailto:mosysadmin@dps.mo.gov) or 1-855-4MOSWIN