Metro Region
Radio Encryption Best Practices

The following guide is meant to be used for direction for those entities planning to make the switch to encrypted radios. This guide is not a directive standard and can evolve over time. If you have any questions or concerns about this guide, please contact the MESB Radio Services Coordinator.

Prior to Cutover
- Consider partner entities who share talkgroups, especially mains. Communicate prior to the cutover, with recommendations for communication at the time of the decision made to cutover, six months prior to cutover, two months prior, one month prior, and once each week in the last month. A notice should also be sent to the ARMER System Managers list and the Metro PSAP Managers list within the month before cutover.
- Coordinate how entities will receive the DES or AES key. Note that a KVL *must* be kept secured, per SECB Standard LMR-50. If possible, consider having this information password protected.
- Verify capacity for logging and potential increase for logging needs

Programming Changes
- Consider adding an 'E' to talkgroup names that are encrypted. Note that, given some display limitations, this designation may not always be seen on the display.
- Emergency Button, Home Channel, and Key Loading should be considered for subscriber programming in different zones.
- The use of selectable encryption should be avoided; if used, radios must be encryption-capable. Special care should be taken to ensure transmissions are appropriate.

During Cutover
- Notifications sent out to documented partner entities on new permissions and how to share keys
- Consider how long to keep former talkgroups enabled and communicate the date that former talkgroups will be disabled
- Configure logger and load encryption keys, if new
- Remove clear channels from backup consolettes if those channels will be disabled
- Ensure channel capacity is understood (cannot patch encrypted to clear)

Concerns
- Be prepared for media requests
- If an encrypted talkgroup gets patched to a clear talkgroup, the transmission is no longer encrypted
- When an encrypted TG is patched to a clear TG, 2 repeaters are being used instead of 1 (overuse of system resources)