

DATE: February 24, 2020
FROM: MCM Consulting Group, Inc.
TO: Luzerne County 911
SUBJECT: Subscriber Radio Requirements for Luzerne County P25 Radio System

Listed below are the minimum requirements for all radios operating on Luzerne County's P25 radio system. Only radios which are "certified and approved for use" on the PSP system are authorized on the LC911 radio system (appendix A), once operational:

1. All radios will need the following capabilities:
 - a. P25 conventional
 - b. P25 Phase I and Phase II
 - c. Over-the-air programming (OTAP)
 - d. Digital CAI operation
 - e. P25 9600 baud trunking
 - f. TDMA operation
 - g. Multi-site roaming
 - h. Alpha-numeric display (front mounted)
 - i. Over-the-air remote disabling
 - j. Delta T or equivalent (which includes waterproofing/submersion of 2m for 2 hours and temperature transfers from high to low temperature environments)
 - k. Man Down
 - l. Data Capable
 - m. Portable radios must meet the Mil-STD-810C-D-E and F as a minimum requirement

2. Intrinsically safe (IS) rating for radios is as follows:
 - a. LMR Device for HAZ LOC is certified by UL to standards ANSI/TIA 4950 and CAN/CSA C22.2 NO. 157-92
 - b. Classification Rating Division 1, Class I, Groups C, D; Class II Group E, F, G; Class III. T3C. ANSI/ISA 12.12.01-2015 and CAN/CSA C22.2 No.213-15 Division 2, Class I, Groups A, B, C, D.
 - c. Tamb = -25°C to +60°C. Intrinsically Safe when used with Motorola battery NNTN8560, 7.4V. or equivalent.

3. Radios for communications with Luzerne County law enforcement, law enforcement departments (PD, county sheriffs, county detectives, school resource officers, etc.) will need:
 - a. 256-bit AES encryption standard
 - b. Over-the-air rekeying (OTAR) and multi-key capabilities
4. GPS equipped on all radios.
5. All programing hardware, software, training and programming cables must be provided to Luzerne County 911 for any non-Motorola radios operating on the system.