



Enterprise - Upgrade of Analogue PMR to Digital Tetra Radio Communications Systems



Private Mobile Radio (PMR) is widely used as a very convenient way of communicating. Organizations such as taxi firms, utility workers and the like all used these systems as they enabled them to maintain contact with their office. Additionally the emergency services used their own systems. The basic concept has been in use for many years and was firmly established prior to the introduction of the first cell phone systems. It enables mobile users to maintain contact with a base. These systems were only able to communicate over relatively short distances and are analogue based, thru restricting PMR systems with limited capabilities.

The cellular telecommunications industry moved to digital technology to provide improved efficiency of spectrum usage along with a variety of new facilities. So too did the PMR industry with the induction of a system known as TETRA. This system provided a far more flexible service along with all the other advantages of using a digital system such as voice quality, RF coverage, non-voice services, security and costs.



Owners of older PMR systems eager to upgrade to TETRA are constrained with the following:

1. Dismantling of the entire Antenna Feeder System with a new system
2. Operating frequency change from 400 MHz to 800 MHz on a new TETRA system
3. Differences in coverage area due to frequency and off-air path loss
4. Interruption to the day-to-day operations of the building

5 Bar Coverage has a unique ability to provide solutions that eliminate or minimize the following constraints. We shall perform a study and analysis on the existing system and seek the most optimum method to perform an upgrade. Our methodology is based on maximum re-use of the existing system, retain antenna locations, compensate difference of EIRP power output of the antenna and zero downtime on the existing services.

If you have a need to upgrade a TETRA system for your building, send us the existing schematics and actual layout of the antenna feeder system, and we shall provide a design and an option to supply, install and commission the system.