



XETAWAVE USER PROFILE

Large Water and Wastewater Utility Migrates from GE MDS 9710/SD9 Network to XetaWave

Challenge

A large metropolitan water and wastewater utility was experiencing failures within its communication system consisting of multiple networks with hundreds of GE MDS 9710/SD9 radios and PLCs. The failures continued for 3 weeks and were intermittent and thus very difficult to diagnose. A team was working 16 hours/day for 5 days trying to resolve it. They thought perhaps there was interference within the network, so they began sweeping the lines to see if anything was stepping on the signal. They finally determined that the source of the failure was a new SD9 radio. They replaced it with a second one and it failed as well. Three new SD9 radios all failed, and they were unable to get support from MDS to resolve the issue, so they started to explore other options.

Search for Replacement Radios

GE MDS Orbit The municipality considered upgrading their network to GE MDS Orbit, but it required far more bandwidth, even if it wasn't needed. In addition, the Orbit solution was going to require the installation of 60' antennas on customers' front lawns making the infrastructure and corresponding costs to implement prohibitive.

Cell Modems They needed redundancy, so they had considered cell modems for such purposes, but not for their main communication network. With cell modems they would be reliant on the cellular provider. If a cell modem or entire network went down, it's down. There would be nothing they can do to fix it, and the downtime could become catastrophic for their business and customers. In contrast, with a licensed network they could quickly diagnose and resolve issues on their own. Such control and reliability were critical.

XetaWave Xeta9 900 MHz Debian The GE MDS SD9 radios were operating in X710 mode so they searched the internet for alternatives. They discovered that XetaWave radios are drop-in replacements for GE MDS 9710/SD9 radios and could operate in X710 mode thus enabling interoperability and continuous operation of their network. It only took 10 minutes to drop in a XetaWave radio and have it operational on their existing network. The interoperability of XetaWave's radios allowed the customer to operate on their own timeline rather than being required to replace their entire network all at once.

XetaWave's customer support was a key component to the success of the project. *"The tech support has been tremendous. Your team has been very proactive and has reached out to me many times. You always put people on the phone with me who can figure out what's going on. It's also amazing how fast the engineers develop firmware. I called in and they modified the firmware for me and sent a new version to me in two days. That type of response time is unheard of with other companies I've worked with."*

Future Plans – Upgrade to an IP/Ethernet Network

The end goal is to migrate from their existing legacy X710 serial network to an IP/Ethernet network. Since all XetaWave radios are software defined (SDR) this will simply require the change of a setting within their existing Xeta9 radios and no disruption to the operation of their networks. With other manufacturers, migrating to IP/Ethernet may require all radios be replaced – "rip and replace". The resource and cost savings of implementing XetaWave radios are incomparable.