



Critical Infrastructure Industries Must Have Access to Spectrum

Electric, gas and water utilities, transit systems, pipelines, railroads and other critical infrastructure industries (CII) are large-scale users of wireless communications systems. Wireless provides routine and emergency voice communications to field crews, as well as increasing amounts of vital mobile data. Wireless also enables tens of millions of utility meters; controls and monitors critical system elements such as substations, pumping stations and control centers; and provides the most efficient means of providing safe, reliable public services at a minimum cost. With many CII entities migrating to a "smarter," next-generation infrastructure over the next decade, reliance on wireless systems will only grow.

However, utilities and other CII segments have no radio spectrum dedicated for their use. Field crews operate on discrete, scattered and congested frequencies shared with incompatible users, and have no interoperability when tens of thousands of personnel converge to assist in emergency recovery efforts. Vital control systems often operate with secondary status to much less important users, or are forced onto highly congested unlicensed frequency bands. The next generation of U.S. power, water, natural gas and other infrastructures will rely on advanced wireless networks, most of which will be built, owned and maintained internally to meet reliability requirements and coverage needs. CII must have a small spectrum allocation to enable deployment of necessary systems, integration of systems, interconnection and interoperability.

While narrowband cellular and PCS licensees received 25-30 MHz each to serve consumer needs, and public safety allocations total well over 75 MHz, CII seeks only 10 MHz of nationwide spectrum below 1 GHz on which to build interoperable, fixed and mobile, voice and data radio systems to help them provide the basic services on which all Americans depend. CII builds highly robust communications infrastructure, and will make admirable partners with other emergency responders, compatible Federal users (in the case of Federal spectrum sharing) or across CI segments; many utilities already share their wireless networks with public safety agencies. While the potential benefits to communities nationwide are large, no Federal funding is sought for this network. With a spectrum "home," CII entities will build their internal networks to a mutually agreed, interoperable and robust standard over time.

Utilities and other CII entities currently do an admirable job of making the most of available spectrum resources, but without some dedicated spectrum on which to migrate, the future holds slower response times and danger to the safety of workers and consumers. UTC urges consideration of a CII spectrum allocation immediately to meet both present and future needs.