



Spectrum Access & Sharing Issues Brief

Background:

As utilities face increasing consumer demands, regulatory, business, technical and environmental changes, they need stronger communications systems to support the safe, reliable, secure, and effective delivery of energy and water services. While utilities are deploying more fiber optic cable deeper into their networks to provide backbone capacity, they need access to additional spectrum bands to improve the coverage and capacity of their service territories and help deploy new smart technologies.

Issue:

Though unlicensed spectrum can meet some of their needs, access to licensed spectrum is needed to provide the reliability required for mission critical applications. It is also critical that spectrum be made available to utilities nationwide and have it support the use of standardized technologies that are commercially available.

UTC Analysis:

UTC is currently advocating for policies promoting utility access to spectrum through a multi-level strategy with various domestic and international partners. For its utility members located in the United States, UTC has identified the following spectrum bands that could be used by, and shared with, utilities so that the spectrum is put to more effective and intense use without disrupting incumbent spectrum users.

- 7125-8500 MHz (7/8 GHz band): As it stands, this band is allocated for federal government microwave operations. However, this band could be shared with utilities and provide an alternative spectrum band for utilities to

transition off the 6 GHz band due to interference from unlicensed devices the FCC has recently authorized to operate in the band.

- 388-399 MHz and 406-420 MHz (400 MHz bands): Currently, this spectrum band has been allocated for federal government land mobile radio operations. However, this spectrum band can be shared with utilities for private long-term evolution and 5G communications networks.
- 4940-4990 MHz (4.9 GHz band): This spectrum band has been predominately used by public safety groups and other critical infrastructure entities. However, this band can be shared with utilities and would encourage greater coordination and collaboration between the two groups during emergency response operations. Moreover, the sharing of this spectrum band would support the use of Unmanned Aerial Systems (UAS) by utilities during the aftermath of storms and extreme weather.

758-768 MHz / 788-798 MHz (700 MHz band): Like the 4.9 GHz band, this spectrum band, known as the Public Safety Broadband Network, has predominately been used by public safety entities for emergencies. However, this spectrum band can be shared with utilities for greater communication and coordination during emergencies.

Contact Information

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