

UTC 2018 Resolution: Mobile Communications Operations in the 6 GHz Spectrum Band

WHEREAS, in January 2017, three Federal Communications Commission (FCC) bureaus—the International Bureau, the Wireless Technology Bureau, and the Office of Engineering and Technology—granted an application and waiver allowing a start-up satellite phone provider to operate a nationwide mobile network in the 5925-6425 band (collectively known as the “6 GHz” band) of radio spectrum; and,

WHEREAS, the Bureaus’ decision permits the company (Higher Ground, LLC) to operate nearly 50,000 C-Band mobile earth stations to support Internet of Things (IoT) applications controlled through a spectrum database that it will manage and operate; and,

WHEREAS, numerous utilities and other critical infrastructure providers house mission-critical communications networks and devices in the 6 GHz band; and,

WHEREAS, nearly every party commenting on the record in the FCC proceeding objected to the application, stating that the company had not proved its technology will prevent interference with incumbent systems in the band. For utilities, interference in this band could disrupt situational awareness and possibly lead to line outages or power failure; and,

WHEREAS, the FCC Bureaus directed Higher Ground, once operational, to mitigate interference after it has occurred and, if such interference does occur, the Bureaus will hold the company harmless from any potential liability, leaving utilities and other incumbents who use the 6 GHz band with little recourse; and,

WHEREAS, in August 2017, the FCC initiated a Notice of Inquiry into whether it should expand the 6 GHz band to other users; and,

WHEREAS, utilities use the 6 GHz spectrum band for a variety of applications, such as supervisory control and data acquisition (SCADA) networks that monitor and control substations and valves as well as security and transfer-trip protection circuits that guard against external threats and isolate faults on the grid. These microwave systems also support voice applications, including utility nuclear emergency telecommunications systems; and,

WHEREAS, the 6 GHz band is already heavily used by utilities, railroads, pipelines and other critical infrastructure industries for essential services, and existing frequency coordination processes make safe and efficient use of the band; and,

WHEREAS, allowing additional untried, untested mobile devices in a band well-suited for stationary microwave antennas will undoubtedly cause confusion and interference in the 6 GHz band; and,

WHEREAS, utilities have migrated to the 6 GHz band after being forced out of lower bands due to FCC policies. These utilities have invested considerable ratepayer money into developing systems suitable to the 6 GHz band; and,

WHEREAS, other bands would serve the needs of startup companies and other commercial services better and more efficiently than the 6 GHz.

NOW, THEREFORE, BE IT RESOLVED, that the Utilities Technology Council (UTC), gathered at its Annual Telecom & Technology Meeting in Palm Springs, California, urges the Federal Communications Commission to rescind the application and waiver granted to Higher Ground, LLC, in January 2017 and discontinue its inquiry into expanding the 6 GHz band to mobile devices.

Adopted by the UTC Membership, May 10, 2018