

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Expanding Flexible Use in Mid-Band Spectrum) GN Docket No. 17-183
Between 3.7 and 24 GHz)

COMMENTS

Los Angeles County, California, the City and County of Denver, Colorado, the City of Kansas City, Missouri, Ozaukee County, Wisconsin and the Government Wireless Technology & Communications Association (“GWTCA”) (jointly, the “Joint Commenters”), through counsel and pursuant to Section 1.415 of the Commission’s Rules, 47 C.F.R. §1.415, hereby submits its Comments in the response to the Commission’s Notice of Inquiry in the above-captioned matter.

BACKGROUND

Los Angeles County, California - Los Angeles County, California (“Los Angeles County”), is a licensee of a microwave system in the 6 GHz band. The Los Angeles Countywide microwave network (LANET), consists of thirty-four primary (formula) tower sites and an additional fifty-six Fire Department and Sheriff’s Department stations which are provided connectivity by these primary sites.

The microwave links in service across LANET comprise of U6/L6 GHz, 10GHz, 11 GHz, 18 GHz, 23GHz as well as the unlicensed radio links in the 4.9 GHz band. In addition to providing service to the Fire and Sheriff’s Departments, LANET also provides transport services to the County Wide Integrated Radio System (CWIRS), a 800 MHz simulcast trunked radio system designed for disaster recovery as well as servicing the County’s day-to-day operation for all the

other public service agencies such as Department of Public Works, Paramedics radio systems, Department of Social Services, Parks and Recreation, Libraries, District Attorneys, Animal Controllers, etc.

To accommodate the Los Angeles Regional Interoperable Communications System (LA-RICS), a grant funded multi-year, multimillion-dollar project, additional microwave paths are being added to the LANET. The LANET microwave system and its supported radio systems provide first responder communications to the entirety of Los Angeles County as well as the region once LA-RICS is being implemented. The County of Los Angeles is currently holding 120 active radio licenses authorized by the Federal Communications Commission to operate in this band to provide mission-critical services to a population total in excess of 10.17 million citizens and visitors.

Kansas City, Missouri – The City of Kansas City, Missouri (“Kansas City”) is also a microwave licensee in the 6 GHz band. The Metropolitan Regional Radio System (“MARRS”) consists of 47 Tower Sites and 24 Public Safety Answering Points interconnected by microwave links primarily in the upper 6 GHz band. This system also provides the data path for all regional 911 calls. These microwave links support 28,000 public safety and public service users in State, Local, and Federal levels of government to support approximately 1.8 million citizens. Each of these links are carrying dozens of calls for service at any given time.

Ozaukee County, Wisconsin – Ozaukee County, Wisconsin (“Ozaukee County”) has 6 GHz microwave licenses. Ozaukee County’s public safety radio communications system consists of a three site simulcast with a fourth satellite site within its county boundaries that are all connected to a control point via 6 GHz and 4.9 GHz microwave technologies.

There is a connection to the neighboring county to the west, Washington County Wisconsin, through an interop subsystem interface via 4.9 GHz microwave. Ozaukee and Washington Counties interoperate extensively. Washington County operates a ten site simulcast system utilizing 4.9, 6 and 11 GHz for site connectivity.

In addition to the traffic of the two counties, the State of Wisconsin operates a state wide system that utilizes available microwave bandwidth in both counties. Considering the interop nature of the two counties, public safety and public service agencies support approximately 225,000 citizens, relying heavily on the reliability of the microwave systems operating on the frequencies in question.

City and County of Denver, Colorado – The City and County of Denver, Colorado (“Denver”) radio system consists of 9 radio site locations connected by both a 6 GHz and 11 GHz microwave network to support over 8000 Public Safety radio users. The Denver 911 center handles over 80,000 calls for service monthly. The Denver radio system is interconnected to the City of Lakewood and the City of Arvada using 6 GHz microwave links, which supports interoperability to those agencies. There are additional microwave links using 6 GHz that provide connectivity to support interoperability throughout the North Central Region (NCR) in Colorado. The NCR consists of 10 counties in the metro area, which includes 41 cities, towns or municipalities, which encompasses over 60% of the population of Colorado.

Government Wireless Technology & Communications Association – The Government Wireless Technology & Communications Association (“GWTCA”), is a non-profit trade association created to advocate on behalf of government and non-government users of wireless technology and communications in the public service industries, such as public transit. GWTCA’s membership includes government agencies, manufacturers, engineers and consultants working on

a variety of issues impacting represented users. As government agencies and transit operators often provide infrastructure locations for implementation of telecommunications facilities, GWTC has a significant interest in this proceeding. Such users are also licensees and users in the 6 GHz band.

In this proceeding, the Commission is reviewing its rules in the 3.7-4.1 GHz, the 5.925-6.425 GHz and 6.425-7.125 GHz bands. Specifically, the Commission is reviewing whether any or all of these bands are appropriate for flexible use.

II. COMMENTS

As discussed above, the Joint Commenters have microwave interests in the 6 GHz, and thus are extremely concerned about the potential of interference to these operations, which are crucial to public safety. As the Commission has discovered in the 800 MHz band, the discovering and mitigating carrier to public safety interference is complicated, burdensome and expensive proposition. Further, since such interference is discovered after it occurs, it poses a grave danger to public safety.

The Joint Commenters appreciate the Commission interest in creating even more carrier spectrum. The Joint Commenters have already been through two forced relocations to accommodate such carrier interests, including the 800 MHz reband and the 2 GHz relocation to create PCS spectrum. However, at a certain point the needs of public safety must take precedence.

The Joint Commenters are adamantly opposed to any “sharing” of the 6 GHz band in which their microwave links exist. The risk to public safety is simply too great. Interference from mobile devices is notoriously difficult to locate for mitigation. Increasing the opportunities for mobile interference within the band is an unnecessarily high risk.

If the Commission is to permit “flexible use” of the bands adjacent to these public safety microwave links, it must address how to proactively mitigate interference and ensure the public safety does not incur costs for mitigating interference should it occur. Such tools and rules do not presently exist. Indeed, 800 MHz post-rebanding interference mitigation has cost the City of Oakland over a half million dollars. Unfortunately, Oakland is not alone in encountering such interference, post-rebanding. These interference problems post-rebanding have occurred despite the presence of Section 90.697 of the Commission’s Rules, which was specifically designed to address post-rebanding interference. Section 90.697 is the most advanced interference rule section ever created by the FCC, yet it has failed to be effective at ensuring that interference does not occur, and has failed to inhibit the imposition of significant costs on municipalities.

The Joint Commenters look forward to developing proper procedures to ensure that flexible use of the bands adjacent to 6 GHz microwave links is proactive, effective and does not increase costs to public safety. Within these parameters, opportunities for cooperation are possible.

III. CONCLUSION

WHEREFORE, the premises considered, it is respectfully requested that the Commission act in accordance with the views expressed herein.

Respectfully submitted,

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