



LAND MOBILE COMMUNICATIONS COUNCIL

July 24, 2020

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

RE: ET Docket No. 18-295
GN Docket No. 17-183
Unlicensed Use of the 6 GHz Band
Ex Parte Presentation

Dear Ms. Dortch:

The Land Mobile Communications Council hereby files the following *ex parte* letter in response to the Commission's actions in the above-referenced proceeding.¹

I. Introduction

The LMCC is a non-profit association of organizations representing virtually all users of land mobile radio systems, providers of land mobile services, and manufacturers of land mobile radio equipment.² The LMCC acts with the consensus and on behalf of the vast majority of public safety, business, industrial, transportation and private commercial radio users, as well as a diverse group of land mobile service providers and equipment manufacturers. Membership includes the following organizations:

- American Association of State Highway and Transportation Officials ("AASHTO")
- American Automobile Association ("AAA")
- American Petroleum Institute ("API")
- Association of American Railroads ("AAR")
- Association of Public-Safety Communications Officials-International, Inc. ("APCO")

¹ *Unlicensed Use of the 6 GHz Band*, Report and Order and Further Notice of Proposed Rulemaking, ET Docket No. 18-295, 35 FCC Rcd 3852 (rel. Apr. 24, 2020).

² See www.lmcc.org.

- Aviation Spectrum Resources, Inc. (“ASRI”)
- Enterprise Wireless Alliance (“EWA”)
- Forest Industries Telecommunications (“FIT”)
- Forestry-Conservation Communications Association (“FCCA”)
- Government Wireless Technology & Communications Association (“GWTCA”)
- International Association of Fire Chiefs (“IAFC”)
- International Municipal Signal Association (“IMSA”)
- MRFAC, Inc. (“MRFAC”)
- Telecommunications Industry Association (“TIA”)
- The Monitoring Association (“TMA”)
- Utilities Technology Council (“UTC”)
- Wireless Infrastructure Association (“WIA”)

Several of these organizations also provide frequency coordination of point-to-point microwave services, including the 6 GHz band. As such the interests of the LMCC are affected by this proceeding, and the LMCC can provide extensive experience and unique perspectives regarding frequency coordination and processes for the resolution of potential interference for the Commission to consider in this proceeding.

II. If the Commission Declines to Establish its Own Interference Protection Rules and Procedures, it Must Establish Certain Minimum Procedures and Expectations of Any Multi-Stakeholder Group

In the Report and Order³ the Commission encouraged the formation of a multi-stakeholder group to study technical and operational issues for the 6 GHz band, including indoor low-power devices.⁴ In doing so, the Commission explained that a “multi-stakeholder group that addresses issues concerning both standard-power operations and indoor low-power operations in the 6 GHz band could provide valuable insights into complex coexistence issues and provide a forum for the industry to work cooperatively towards efficient technical and operational solutions.”⁵

It’s a mistake for the FCC to delegate authority for such important issues to a multi-stakeholder group. In particular, the FCC should adopt sufficient requirements of AFC operators and RLAN manufacturers to prevent and promptly identify and eliminate interference to incumbent operators rather than delegating this responsibility to a multi-stakeholder group.⁶

³ *Unlicensed Use of the 6 GHz Band*, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 3852 (2020) (“Order”).

⁴ *Id.* at ¶¶174-180.

⁵ *Id.* at ¶174.

⁶ Sections 301 and 302 of the Communications Act authorizes the Commission to “maintain control over all the channels of radio transmission and to provide for such use of the channels....[including] interference [that may be] caused by such use or operation” and to regulate “the interference potential of devices which in their operation are

If the FCC were to nevertheless delegate its authority to a stakeholder group, it must promptly establish several requirements and parameters of this group to ensure that incumbents are protected from interference. The FCC must also prohibit any unlicensed devices to be marketed or sold commercially until the stakeholder group satisfactorily addresses the interference concerns of incumbent users of the 6 GHz band.⁷

In its Order, the Commission already set a number of expectations of this group, which should become mandates. To ensure that all viewpoints are considered, the Commission should require, not encourage, participation in the working group by “all sectors of the 6 GHz ecosystem” including existing 6 GHz band incumbent licensees.⁸ Rather than encouraging the multi-stakeholder group to address any issues it deems appropriate regarding interference detection and mitigation in the event that an incumbent licensee believes it may be experiencing harmful interference from standard-power or indoor low-power operations, the FCC must require this group to develop capabilities on the part of AFC operators and RLAN manufacturers to detect and eliminate interference before it occurs.⁹ The Commission should also require the following of the multi-stakeholder working group: (1) work cooperatively to develop and test devices to aid in the goal of developing processes for introducing and operating devices across the 6 GHz band,¹⁰ (2) address any other issues for AFC development, including standards that are necessary for AFC operators, such as how to implement the required propagation models or whether common communications protocols are needed between standard power unlicensed devices and the AFC,¹¹ and (3) develop best practices and standards concerning standard-power operations (and use of the AFC system) and for indoor low-power operations,” including device and communication link security.¹²

In addition, and of primary importance, the Commission must require AFC providers and RLAN manufacturers to conduct testing of both standard power and low power devices under real-world conditions. This must occur at the expense of AFC providers and RLAN manufacturers and with the involvement of the variety of incumbent licensees in the band. Testing must be

capable of emitting radio frequency energy by radiation, conduction, or other means in sufficient degree to cause harmful interference to radio communications.”

⁷ If left to the whims of the RLAN proponents, it will be too late before a stakeholder group would act to prevent irreversible harmful interference. See Petition for Reconsideration of the Fixed Wireless Communication Coalition in ET Docket No. 18-295 at 10 (filed Jun. 25, 2020)(reporting that “discussions have begun regarding the formation of a multi-stakeholder group, but the first meeting of that group will not take place until July 31, after the effective date of the rules,” adding that this meeting will “necessarily focus on organization” and that it “will take some time to develop a testing plan, run tests, and analyze the result.”)

⁸ Order at ¶175.

⁹ *Id.* at ¶176.

¹⁰ *Id.* at ¶177.

¹¹ *Id.* at ¶178.

¹² *Id.* at ¶179.

conducted to the satisfaction of the incumbents prior to the marketing and sale of new standard power and low power unlicensed devices. Contrary to the Order, this should not be merely a permissive suggestion.¹³ The interference prevention, detection, and resolution methods to be implemented by the AFC providers and RLAN manufacturers must be proven in advance to work.¹⁴ While the Commission has a role to play in quickly establishing and setting requirements and expectations of the multi-stakeholder working group as outlined above, it should defer oversight of this group to an independent, expert federal agency such as Idaho National Labs. This will best ensure that the group is guided in a fair and neutral fashion that facilitates good faith negotiations and cooperation.

To be sure, the Commission's Office of Engineering and Technology (OET) should have a liaison role to observe and to ensure that the multi-stakeholder working group's activities are useful and pertinent and to provide guidance on the topics on which it would be most helpful for the Commission to receive input. OET can also convey matters that need to be codified into the Commission's rules resulting from the output of the stakeholder group.

III. Conclusion

The FCC should adopt rules that imposes requirements upon AFC operators and RLAN manufacturers to ensure the prevention and prompt detection and elimination of interference caused to incumbent licensees. If the Commission nevertheless insists on delegating this important responsibility to a multi-stakeholder group, it must impose a number of requirements and expectations consistent with the above to ensure that incumbents are appropriately protected.

¹³ Id. at ¶177 (“we encourage the multi-stakeholder group, if conducting any testing related to developing procedures and processes regarding interference detection and mitigation, to set a goal of implementing any agreed-upon device-related features before unlicensed 6 GHz devices reach consumers”).

¹⁴ In the case of 5.9 GHz, experience from the current 5 GHz unlicensed U-NII bands shows that interference does occur. Despite rules the Commission enacted to minimize interference, the Commission's Enforcement Bureau has documented numerous cases of interference from unlicensed 5 GHz U-NII operations to FAA Terminal Doppler Weather Radar (TDWR). Further testing has also proven that 5 GHz U-NII operations have interfered with the 5.9 GHz ITS band.

Please refer any questions regarding this matter to the undersigned.

Respectfully submitted,

LAND MOBILE COMMUNICATIONS COUNCIL

A handwritten signature in blue ink that reads "Klaus Bender". The signature is written in a cursive style with a horizontal line extending from the end of the name.

Klaus Bender, PE
President
2121 Cooperative Way, Suite 225
Herndon, VA 20171