

Before the  
**Federal Communications Commission**  
Washington DC 20554

In the Matter of )  
 )  
BATTELLE MEMORIAL INSTITUTE, INC. ) RM-11713  
 )  
Petition for Rulemaking to Adopt Service Rules )  
For the 102-109.5 GHz Band )

**REPLY STATEMENTS OF THE  
FIXED WIRELESS COMMUNICATIONS COALITION**

The Fixed Wireless Communications Coalition, Inc. (FWCC)<sup>1</sup> files these Reply Statements in the above-captioned proceeding.<sup>2</sup>

The FWCC does not object to Battelle Memorial Institute, Inc.’s (Battelle’s) proposal for a rulemaking proceeding to adopt service rules for the 102-109.5 GHz band. However, the Commission should propose and adopt rules which open the possibility of using the band for small cell operations and short links, rather than just the long links contemplated by BMI’s proposed EIRP and minimum antenna gain standards.<sup>3</sup> If the Commission proposes rules for this

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<sup>1</sup> The FWCC is a coalition of companies, associations, and individuals interested in the fixed service—i.e., in terrestrial fixed microwave communications. Our membership includes manufacturers of microwave equipment, fixed microwave engineering firms, licensees of terrestrial fixed microwave systems and their associations, and communications service providers and their associations. The membership also includes railroads, public utilities, petroleum and pipeline entities, public safety agencies, cable TV providers, backhaul providers, and/or their respective associations, communications carriers, and telecommunications attorneys and engineers. Our members build, install, and use both licensed and unlicensed point-to-point, point-to-multipoint, and other fixed wireless systems, in frequency bands from 900 MHz to 95 GHz. For more information, see [www.fwcc.us](http://www.fwcc.us).

<sup>2</sup> *Battelle Memorial Institute, Inc., Petition for Rulemaking to Adopt Service Rules for the Section 102-109.5 GHz Band*, RM-11713 (filed February 6, 2014).

<sup>3</sup> Establishing a maximum allowable EIRP at +70 dBW and adopting a 43 dBi minimum antenna gain standard suggests that Battelle contemplates use of the band for long links only.

band, it should not propose any minimum antenna gain requirements, giving the industry flexibility to also utilize the band for small cell operations and short links.

In a separate proceeding, the FWCC has proposed that the Commission relax antenna standards in the 71-76 and 81-86 GHz bands by, among other things, reducing minimum antenna gain from 43 to 38 dbi.<sup>4</sup> This would permit the use of smaller antennas conducive to implementation of urban systems covering shorter distances at lower capacities. The same public interest considerations that support relaxation of antenna standards in the 70/80 GHz bands apply to the 102-109.5 GHz band.<sup>5</sup> The Commission should not set minimum antenna gain requirements or antenna pattern requirements that would eliminate flexibility for small cell backhaul applications in the band.

Furthermore, although Battelle claims that the 70 GHz and 80 GHz bands are heavily congested in some portions of the country, the FWCC understands that areas with any appreciable congestion are actually extremely limited. The uptake of 70/80 GHz usage as indicated by the rate of link registrations in the third party database has been quite slow and constrained in part by present standards that call for larger antennas. Battelle's claims of 70/80 GHz congestion are not contrary to proposals for relaxation of the antenna standards in the band.

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<sup>4</sup> Letter from Mitchell Lazarus, Counsel, FWCC to Marlene H. Dortch, Secretary, FCC in WT Docket No. 10-153 (filed March 24, 2014); Letter from Mitchell Lazarus, Counsel, FWCC to Marlene H. Dortch, Secretary, FCC in WT Docket No. 10-153 (filed April 4, 2013); Comments of the Fixed Wireless Communications Coalition in Response to the Commission's Notice of Inquiry in WT Docket No. 10-153 at 2-6 (filed Oct. 5, 2012).

<sup>5</sup> *See, e.g.*, Request for Waiver of Aviat Networks (no docket number), pp. 3-9 and 12-13 (filed April 5, 2013).

## CONCLUSION

The FWCC has no objection to a rulemaking to adopt service rules for the 102-109.5 GHz band so long as the Commission keeps open the possibility of using the band for small cell operations and short links.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read 'ML' followed by a stylized flourish.

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April 10, 2014

**CERTIFICATE OF SERVICE**

The undersigned certifies that on this 10th day of April, 2014, a copy of the foregoing was served upon the attached service list by U.S. Mail.



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Cheng-yi Liu

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