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

ET Docket 10-123, Spectrum Task Force Requests Information on Frequency Bands

Identified by NTIA as Potential Broadband Spectrum

Ex Parte Communication

Dear Ms. Dortch:

Re:

On behalf of the Fixed Wireless Communications Coalition ("FWCC"), pursuant to Section 1.1206(b)(1) of the Commission's Rules, we are electronically filing this written *ex parte* communication in the above-referenced docket.¹

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.

Fletcher, Heald & Hildreth

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The FWCC commends the Commission for working with NTIA to repurpose federal spectrum for wireless broadband use. There is an urgent and growing need for wireless broadband in the United States. We are pleased to see the Commission working to make additional spectrum available for this purpose.

End-user connections, however, are only as good as the backhaul links that move broadband traffic onto and through the networks needed to support mobile operation. Corresponding additional spectrum must be identified for fixed wireless backhaul and distribution links. The NTIA evaluation stops at 4400 MHz because that is roughly the highest useful frequency for mobile wireless. The evaluation is incomplete to the extent it does not take into account the fixed facilities needed to support these links.

The relatively low frequencies and narrow bandwidths suitable for mobile handset service do not well for wireless backhaul. The fixed wireless systems needed for network distribution and backhaul need spectrum above about 4 GHz, below which antenna sizes are unwieldy. Long links for network distribution need frequencies below 10 GHz, to avoid rain fade. Shorter links for tower backhaul, particularly in built-up areas, can function at frequencies up to about 30 GHz, depending on local conditions. Also, because wireless backhaul and distribution aggregate mobile traffic from a great many handsets, they typically require wider channels—at least 30-50 MHz in each direction.

In addition to examining frequencies below 4400 MHz, the FWCC urges the Spectrum Task Force and NTIA to also look at federal spectrum above 4400 MHz, to support the wireless backhaul and network distribution needed for mobile broadband services.²

Please do not hesitate to contact us with any questions.

Respectfully submitted,

Mitchell Lazarus Christine E. Goepp Counsel for the Fixed Wireless Communications Coalition

cc: Chairman Julius Genachowski
Comm'r Michael J. Copps
Comm'r Robert McDowell
Comm'r Mignon Clyburn
Comm'r Meredith Attwell Baker
Ruth Milkman
James Schlichting

John Leibovitz

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John Schauble
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Julius Knapp
Ira Keltz
Ronald Repasi
Alan Stillwell
Bruce Romano

The FWCC has pending a petition for a rulemaking that would allow non-federal users to share federal fixed spectrum at 7125-8500 MHz, ECFS docket RM-11605. The petition is here: http://www.fwcc.us/pdffiles/FWCC%20Petn%20for%20Rulemaking%207125-8500%20MHz%20AS%20FILED.pdf.