Dynamic Spectrum Alliance Limited

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January 10, 2017

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

Re: RM No. 11778: Fixed Wireless Communications Coalition, Inc., Request for Modified Coordination Procedures in Bands Shared Between the Fixed Service and the Fixed Satellite Service

Dear Ms. Dortch:

The Dynamic Spectrum Alliance (DSA) submits these comments in support of having the Federal Communication Commission ("Commission" or "FCC") open a rulemaking proceeding to free up additional bands for dynamic shared use.¹

Additional spectrum is needed to accommodate more abundant and affordable broadband connectivity. Building and maintaining robust wireless connectivity -- including Wi-Fi -- depends on having access to unlicensed radio frequency spectrum. However, existing spectrum allocations simply are not sufficient to accommodate potential deployments. With data consumption increasing at a compound rate of over 40 percent per year,² and with some 80 percent of mobile data traffic going over Wi-Fi networks,³ DSA believes it is vital that the Commission advance policies that will lead to the most intensive spectrum sharing.

DSA long has been a strong advocate for the allocation of dynamic shared spectrum. Dynamic access makes the most efficient and effective use of spectrum that otherwise is being significantly underutilized. Further, dynamic access provides protection of incumbent services while enabling new sharing opportunities, thus eliminating the seemingly intractable spectrum

¹ The Dynamic Spectrum Alliance (DSA) is a global, cross-industry alliance focused on increasing dynamic access to unused radio frequencies. The membership spans multinational companies, small- and medium-sized enterprises, academic, research, and other organizations from around the world, all working to create innovative solutions that will increase the utilization of available spectrum to the benefit of consumers and businesses alike. A full list of DSA members is available on the DSA's website at www.dynamicspectrumalliance.org/members/.

² See Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2015–2020 White Paper, February 3, 2016; and Ericsson Mobility Report, November 2015.

³ June 21, 2016 comments from AT&T's president of Technology Operations, Bill Smith, at the Wells Fargo 2016 Convergence and Connectivity Symposium.



clearing or grandfathering battles that have defined spectrum management over the last two decades. Indeed, where the Commission is setting future access rules, its default position should be to adopt dynamic spectrum sharing as the single most future-proof policy framework.

While clearing and repurposing underutilized spectrum has been useful in past circumstances, the timescale for such reallocations is lengthy, and finding suitable spectrum for relocated systems is increasingly difficult. The Commission instead should identify opportunities for more dynamic use of existing commercial allocations, especially in bands that are inefficiently utilized today.

The FWCC Petition identifies a particular rule change for four shared FS/FSS bands that seeks to enable more intensive use of current commercial spectrum across multiple bands.⁴ The Petition states that the practice of full-band, full-arc licensing leads to over-inclusive reservations of spectrum by FSS operators, which unnecessarily preclude terrestrial service use. FWCC argues that under the current rules, FSS operators could claim hundreds of megahertz of spectrum they are not using, for geographic areas where their antennas do not point.

DSA does not at this time take a position on the specifics of the FWCC proposal. We believe, however, that dynamic spectrum sharing would be a superior option that better achieves the same end of more efficient shared use. Given the Petition's identification of a significant underutilization problem, the Commission should promptly initiate a rulemaking that considers more productive, dynamic uses of these bands. DSA suggests that the Commission's rulemaking focus not only on the FWCC's specific proposal, but also ask questions about other approaches that could facilitate more efficient and intensive use of these bands while protecting incumbent operations. We also believe that the FCC should recognize in particular that the C-Band downlink (3.7 GHz to 4.2 GHz) and uplink (5.9 GHz to 6.4 GHz) bands are vastly underutilized.

Thus, the Commission should issue a notice of proposed rulemaking that proposes rule changes to allow dynamic sharing of the indicated spectrum bands.

Sincerely,

Kalpak Gude President Dynamic Spectrum Alliance

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⁴ Fixed Wireless Communications Coalition, Inc., Petition for Rulemaking, RM No. 11778, Request for Modified Coordination Procedures in Bands Shared Between the Fixed Service and the Fixed Satellite Service Petition for Rulemaking (filed October 11, 2016).