May 26, 2015

WRITTEN EX PARTE COMMUNICATION
SUBMITTED VIA ECFS

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

Re: Terrestrial Use of the 2473-2495 MHz Band for Low-Power Mobile Broadband Networks; Amendments to Rules for the Ancillary Terrestrial Component of Mobile Satellite Service Systems; IB Docket No. 13-213, RM-11685

Dear Ms. Dortch:

In the above referenced proceeding, parties have asserted that the use of the band 2473-2495 MHz for a terrestrial low power service (“TLPS”) will be a boon for Wi-Fi users because it will relieve overcrowding of existing Wi-Fi frequencies and create additional Wi-Fi capacity.1/ These statements are inaccurate and misleading.

First, Wi-Fi Alliance created the term “Wi-Fi” to mean devices that implement certain IEEE standards in a way that makes them interoperable. Wi-Fi certified devices or their embedded chipsets have typically undergone rigorous testing that make them qualified to bear the Wi-Fi CERTIFIED™ mark, which may only be issued by Wi-Fi Alliance. As a result, consumers can rely on Wi-Fi certified devices to be interoperable with each other. There are currently no devices approved by the Commission to operate on the proposed TLPS network. There are therefore no TLPS devices that are Wi-Fi devices, are Wi-Fi CERTIFIED™, contain Wi-Fi CERTIFIED™ chipsets, or are interoperable with other Wi-Fi devices. Consequently, it is inaccurate and misleading to assert, as others do, that creation of a TLPS will create additional Wi-Fi capacity.2/ Today, there is no evidence that TLPS will be


2/ See Lovisa Letter at 1 (asserting that Globalstar’s TLPS would “open[] more Wi-Fi spectrum for public consumption” and “alleviate” the public’s “need for Wi-Fi bandwidth”); Berry Letter at 1 (alleging that TLPS would “increase the Nation’s Wi-Fi capacity by a third”); iPass Letter at 1 (contending that TLPS would benefit iPass’ global network of Wi-Fi hotspots “by liberating an additional channel of Wi-Fi capacity”).
anything but a private, stand-alone, low-power service. In contrast, Wi-Fi devices operate on an open-technology platform. So, TLPS will not create any additional Wi-Fi capacity; unless Wi-Fi users pay for the privilege of accessing TLPS, they will have no additional spectrum on which to operate their Wi-Fi devices.

Second, instead of aiding users of Wi-Fi devices, TLPS may harm Wi-Fi operations. Many parties have questioned whether the record contains sufficient information regarding the technical characteristics about a proposed TLPS to ensure that it does not cause unacceptable levels of interference to Wi-Fi devices. Wi-Fi Alliance acknowledges that Wi-Fi devices operate under Part 15 of the Commission’s rules, which offers no protection from interference. However, as the Commission has recognized, the ability to cause harmful interference to Part 15 devices is not unbounded. Moreover, the public interest requires that the Commission proceed cautiously in authorizing a service that may disrupt Wi-Fi operations. In 2014 alone, about 2.6 billion Wi-Fi devices were sold; there are about 4.5 billion Wi-Fi devices currently in use. An estimated 72 million U.S. households use Wi-Fi networks. The Commission has recognized the central nature of Wi-Fi networks to the wireless ecosystem. Among other things, Wi-Fi products act as an on-ramp to 54% of the world’s Internet traffic, a figure expected to increase to 61% by 2018. Indeed,

3/ See Letter from Greg Gerst, Gerst Capital, LLC, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 13-213 and RM-11685, at 1 (filed Apr. 1, 2015) (“Gerst Letter”) (arguing that Globalstar’s “demonstrations provide neither the level of technical rigor nor the level of information necessary for the FCC to make an informed decision”); Letter from Paul Margie, Counsel to NCTA, to Ms. Marlene H. Dortch, Secretary, FCC, IB Docket No. 13-213 and RM-11685, at 1-5 (filed Apr. 16, 2015) (explaining in detail how Globalstar’s TLPS demonstration does not constitute a rigorous interference test); Letter from Julie M. Kearney, Vice President, Regulatory Affairs, Consumer Electronics Association, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 13-213, at 2 (filed Apr. 16, 2015) (“CEA Letter”) (noting that “serious questions still remain regarding the ability of TLPS to co-exist with existing unlicensed users”); Letter from Michael Warnecke, Chief Counsel, Technology Policy, Entertainment Software Association, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 13-213 and RM-11685, at 3 (filed Apr. 20, 2015) (explaining that the present record “suggests that the proposed TLPS service . . . would cause significant public harm to the Wi-Fi and Bluetooth technologies”).

4/ See 47 C.F.R. § 15.5(b).

5/ See Request by Progeny LMS, LLC for Waiver of Certain Multilateration Location and Monitoring Service Rules; Progeny LMS, LLC Demonstration of Compliance with Section 90.353(d) of the Commission’s Rules, Order, 28 FCC Rcd. 8555, ¶ 10 (2013) (explaining how the Commission has conditioned certain licenses on a licensee’s ability to demonstrate that its systems did not cause “unacceptable interference” to Part 15 devices).


7/ Internet, COMMUNICATIONS DAILY (Nov. 5, 2014) (reporting that, according to Strategy Analytics, 72 million U.S. households use Wi-Fi networks).

Commissioners have recognized the need to expand Wi-Fi capacity by designating additional spectrum for Wi-Fi operations. The Commission would be working at cross-purposes if it were to, on the one hand, seek to create additional Wi-Fi capacity in one band and, on the other, potentially diminish the utility of Wi-Fi in another.

Yet, that is precisely what is suggested in this proceeding. While TLPS devices were recently demonstrated at the FCC's headquarters and tested at its laboratory facilities, there is substantial material disagreement about the meaning – if any – of those processes. At stake is a potentially significant disruption to a critical means of connectivity across society at home, work, and school. More rigorous testing, which has been proposed by many parties to this proceeding, may allow the Commission to proceed to authorize TLPS. However, the very limited technical evaluation that has occurred to date has been rushed and constrained, and the results are inconclusive. Accordingly, if the Commission proceeds on the current record, it must decline to authorize TLPS.

9/ See Joint Statement of Commissioners Jessica Rosenworcel and Michael O'Rielly, News Release (Apr. 20, 2015) (supporting efforts to permit unlicensed access to the 5.9 GHz band, particularly for Wi-Fi use).


11/ See Letter from Michael Calabrese, Director, Wireless Future Project, Open Technology Institute, and Harold Feld, Senior Vice President, Public Knowledge, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 13-213 and GN Docket No. 12-354, at 1-2 (filed Feb. 18, 2015) (“[T]he FCC should not authorize a new licensed service that overlaps the intensively-used 2.4 GHz unlicensed band without the benefit of objective and conclusive testing of whether TLPS will potentially disrupt existing Wi-Fi operations on channel 11 . . .”); Bluetooth SIG Report at 12; Gerst Letter at 1; CEA Letter at 3; CableLabs Report at 6; NCTA Letter at 1.
Pursuant to Section 1.1206 of the Commission’s rules, a copy of this letter is being submitted in the docket of this proceeding. Should you have any questions, please contact the undersigned directly.

Respectfully submitted,

[Signature]

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