



June 10, 2019

By Electronic Filing

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

Re: *Transforming the 2.5 GHz Band*, Notice of Proposed Rulemaking, WT Docket No. 18-120.

Dear Ms. Dortch:

In response to the May 30, 2019 ex parte letter filed by Wireless Communications Association International (WCAI), Voqal writes to reiterate its support for the Schools, Health & Libraries Broadband (SHLB) Coalition's recently filed economic study, and request that the FCC seek additional comment on that study, among other issues.¹ WCAI appears to misunderstand important aspects of the study and, in criticizing it, entirely overlooks the central question at issue: whether there is any reason to think that auctioning EBS spectrum to commercial operators will increase rural broadband coverage, compared to making the spectrum available to educational and tribal entities.²

The comprehensive study submitted by SHLB in partnership with Dr. Raul Katz is the *only* economic analysis in the record analyzing the costs and benefits of the NPRM's alternative approaches for assigning the EBS "white space" spectrum that remains unassigned in half of the United States, predominantly in rural areas. Dr. Katz concludes that assigning EBS white space through priority windows to educational and tribal entities would have substantial benefits for closing the digital divide and homework gap as compared to holding an EBS overlay auction.

That conclusion should come as no surprise. The persistent, pervasive digital divide in rural America is direct evidence that commercial providers, on their own, have not and will not address this problem. The reason commercial providers have failed to build out rural America is

¹ See Letter from John Windhausen, Jr., Executive Director, SHLB Coalition, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 18-120 (filed June 3, 2019) (attaching an economic study by Telecom Advisory Services) ("SHLB Study"); Letter from the Schools, Health & Libraries Broadband (SHLB) Coalition, North American Catholic Educational Programming Foundation, Inc., Mobile Beacon, Voqal, National Digital Inclusion Alliance, and Public Knowledge to Marlene H. Dortch, Secretary, FCC, WT Docket No. 18-120 (filed May 13, 2019).

² We note that WCAI filed its response before the final economic analysis was made public and filed with the Commission on June 3, 2019. Therefore, WCAI and its members did not have an opportunity to read the final report and consider its analysis prior to filing their objection. WCAI's critique should be discounted as it has largely been overtaken by events.

not because of a shortage of available commercial spectrum. As commenters have already noted,³ commercial carriers already have access to over 620 megahertz of spectrum below 3 GHz in the prime bands for deploying wireless broadband.⁴ In fact, part of the 2.5 GHz band—the Broadband Radio Service—is 76.5 megahertz of spectrum that is already licensed to commercial carriers but has not yet been fully built out in the same geographic areas where EBS white space exists today. And yet, according to even the most recent FCC Broadband Deployment Report, over 26% of Americans in rural areas and 32% of Americans in Tribal lands lack coverage from fixed terrestrial 25 Mbps/3 Mbps broadband.⁵ Over 30% of rural Americans lack access to wireless LTE broadband with median speeds of 10 Mbps/3 Mbps.⁶ WCAI offers no evidence or explanation for how auctioning the available EBS spectrum to commercial entities will do anything to address this problem.

Ignoring this question altogether, WCAI claims that the SHLB study is based on “unrealistic assumptions,” claiming that EBS licensees lack “the funding, interest and capability” to meet the connectivity needs of their communities.⁷ The record belies this claim. In fact, the record reveals the opposite—robust educational uses of EBS today and even greater demand by educators and tribes seeking access to the unassigned EBS spectrum.⁸ Indeed, educational institutions today not only have the incentive to build, but also this long-awaited proceeding is happening at a time when “the level of sophistication of school technology leaders has grown tremendously,” there’s been “a trend in the last three years of school districts and County Offices building their own private LTE network providing internet service to students,” and “the pace of these deployments is growing due to enhanced market conditions and a ripe ecosystem of equipment and devices on the 2.5 GHz band.”⁹

Indeed, the FCC recently recognized the successes of EBS self-deployment when it granted two permanent waivers for EBS self-deployment projects just weeks ago.¹⁰ In granting a waiver to

³ Reply Comments of North American Catholic Educational Programming Foundation and Mobile Beacon at 20, WT Docket No. 18-120 (filed Sept. 7, 2018) (“NACEPF and Mobile Beacon Reply Comments”).

⁴ *See id.*; Coleman Bazelon & Giulia McHenry, The Brattle Group, *Mobile Broadband Spectrum: A Vital Resource for the American Economy* 8 tbl.1 (May 11, 2015), http://files.brattle.com/files/7801_mobile_broadband_spectrum_-_a_valuable_resource_for_the_american_economy_bazelon_mchenry_051115.pdf.

⁵ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, Broadband Deployment Report, FCC 19-44, GN Docket No. 18-238, ¶ 33 & fig.1 (rel. May 29, 2019).

⁶ *Id.* ¶ 35 & fig.2b.

⁷ Letter from Mary N. O’Connor, Counsel to WCAI, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 18-120, at 2 (filed May 30, 2019) (“WCAI Letter”).

⁸ *See* NACEPF and Mobile Beacon Reply Comments at 4–10 (listing dozens of examples in the record of current and desired EBS educational deployments).

⁹ Comments of the Imperial County Office of Education and California K-12 High Speed Network at 21, WT Docket No. 18-120 (filed Aug. 8, 2018).

¹⁰ *See Application of the Havasupai Tribe for a New Educational Broadband Service Station*, Memorandum Opinion and Order, DA 19-424, File No. 0008189594 (WTB rel. May 16, 2019) (“Havasupai Tribe Waiver

the Havasupai Tribe, the Commission noted that the tribe had deployed service within “days” of receiving its 2018 STA, offering speeds up to 32 Mbps.¹¹ In another permanent waiver recently granted, the Commission also noted that one school system, in Kings County, California, “operate[s] a seven-site LTE network that offers educational broadband services.”¹² Other than the school system’s EBS deployment, the Commission observed that “there is limited broadband available in Kings County, and where such service is available, it is not affordable for much of the local community.”¹³ These successful deployments—which have been replicated with each of the FCC waivers granting schools and tribes access to EBS—prove that educational entities have the funding, capability, and interest in deploying broadband networks to serve their communities.

In all events, contrary to WCAI’s suggestion, the SHLB economic analysis does not assume that all new EBS licensees will self-deploy. Rather, it contemplates continuation of the multiple EBS business models that exist today, including self-deployments and leases with both national carriers and wireless ISPs in exchange for educational accounts and services that can connect those who are not otherwise reached by commercial offers today.

WCAI’s critique of the increased penetration from affordable EBS offers is equally misplaced. The SHLB study contemplates that EBS licensees will provide an affordable offer, using any of these business models, that will increase broadband subscribership and help close the digital divide. WCAI “doubt[s]” the “viabil[ity]” of such offers.¹⁴ But they exist using EBS spectrum today. In addition to the \$10/month offers provided by Mobile Beacon and Mobile Citizen, Northern Michigan University offers broadband service significantly below the \$34.95/month offer quoted by WCAI to students and veterans, including a \$19.95/month offer for students and a \$24.95/month offer for veterans, while other EBS licensees provide service for free.¹⁵ Moreover, Dr. Katz’s final report contains additional analysis on the feasibility of educational and tribal entities achieving the estimated economic and social benefits. It concludes that, even with additional constraints, priority windows are clearly the superior approach for closing the digital divide and the homework gap.¹⁶

WCAI also fundamentally misunderstands the SHLB request for the Commission to take additional time and seek further comment in this proceeding. Additional time is needed not for

Order”); *Application of Kings County Superintendent of Schools for a New Educational Broadband Service Station*, Memorandum Opinion and Order, DA 19-425, File Nos. 0007949111 & 0007949112 (WTB rel. May 16, 2019) (“Kings County Waiver Order”).

¹¹ Havasupai Tribe Waiver Order ¶ 6.

¹² Kings County Waiver Order ¶ 9.

¹³ *Id.* ¶ 13.

¹⁴ WCAI Letter at 2.

¹⁵ See SHLB Study at 22 tbl.2-3.

¹⁶ See *id.* at 37–38, 43–46.

current EBS licensees,¹⁷ but rather for the numerous educational entities and partners that are only now learning about EBS since the FCC licensing freeze has removed EBS from educators' conversations about broadband connectivity for over a generation.¹⁸

WCAI goes on to defend the Commission's Universal Licensing System (ULS). It is true that ULS allows users to identify the GSA associated with each individual EBS licensee in isolation, but it does not reflect "split-the-football" contours adopted by the Commission fifteen years ago. Nor does ULS allow parties to view the GSAs across a geographic area to help them determine where spectrum is unlicensed and on what channels. As a result, the ULS system itself does not provide either the FCC or the public a comprehensive picture of EBS white space. To be sure, Voqal and other parties may have invested the significant time and resources to compile such information, as reflected in prior filings.¹⁹ But that is no substitute for the agency's fundamental responsibility to make accurate and comprehensive information available about the availability of EBS to the educational and tribal entities that have the most to lose by proposals to commercialize the band and auction the EBS white space.

Finally, WCAI ignores all of the other reasons for SHLB's request, including the continued uncertainty surrounding the T-Mobile-Sprint transaction. Sprint is a party to roughly 70% of all EBS license leases and controls the majority of the commercial part of the 2.5 GHz band, as well. Without knowing whether or not those EBS lease agreements will be transferred and whether or not they may be subject to a divestiture,²⁰ the Commission cannot reasonably determine the appropriate path forward for the 2.5 GHz band.

Voqal urges the Commission to reject WCAI's claims and to initiate a new comment period for parties to fully examine the critical economic analysis—the only of its kind in the docket—before rushing to judgement on the future of EBS.

¹⁷ WCAI also reiterated its unsubstantiated claim that "it is clear from the record" that "the overwhelming majority of EBS [licensees] lease" their spectrum "and do little with what they must reserve." WCAI Letter at 1. In fact, the record amply demonstrates that public-private partnerships facilitated by the current rules provide significant educational benefits that would otherwise not exist. Should the FCC modernize educational use rules, rather than eliminate them, the record shows that these EBS success stories could be replicated by retaining educational eligibility requirements and assigning EBS white space through priority windows. *See generally* NACEPF and Mobile Beacon Reply Comments.

¹⁸ *See, e.g.*, Letter from Robert McLaughlin, Executive Director, National Collaboration for Digital Equity, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 18-120, at 2 (filed May 21, 2019); Letter from Candice Dodson, Executive Director, State Educational Technology Directors Association, and Keith Krueger, Chief Executive Officer, Consortium for School Networking, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 18-120 (filed May 15, 2019).

¹⁹ *See, e.g.*, Letter from Mark Colwell, Director of Telecommunications Strategy, Voqal, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 18-120 (filed May 9, 2019).

²⁰ Sheila Dang, *T-Mobile, Sprint considering divesting wireless spectrum: sources*, Reuters (May 30, 2019, 2:19 PM), <https://www.reuters.com/article/us-sprint-corp-m-a-tmobile/t-mobile-sprint-considering-divesting-wireless-spectrum-sources-idUSKCN1T027V>.

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Sincerely,

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