

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
)
Transforming the 2.5 GHz Band) WT Docket No. 18-120
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)

**PETITION FOR RECONSIDERATION AND CLARIFICATION OF THE
SCHOOLS, HEALTH & LIBRARIES BROADBAND COALITION,
CONSORTIUM FOR SCHOOL NETWORKING, STATE EDUCATIONAL
TECHNOLOGY DIRECTORS ASSOCIATION, AMERICAN LIBRARY
ASSOCIATION, NATIONAL DIGITAL INCLUSION ALLIANCE,
NEBRASKA DEPARTMENT OF EDUCATION, UTAH EDUCATION AND
TELEHEALTH NETWORK, COUNCIL OF CHIEF STATE SCHOOL
OFFICERS, A BETTER WIRELESS, AND ACCESS HUMBOLDT**

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INTRODUCTION AND SUMMARY

Pursuant to Section 405 of the Communications Act of 1934 (“Act”) and Section 1.429 of the Federal Communication Commission’s (“FCC” or “Commission”) rules,¹ the Schools, Health & Libraries Broadband (“SHLB”) Coalition, Consortium for School Networking (“CoSN”), State Educational Technology Directors Association (“SETDA”), American Library Association (“ALA”), National Digital Inclusion Alliance (“NDIA”), the Nebraska Department of Education, Utah Education and Telehealth Network (“UETN”), Council of Chief State School Officers (“CCSSO”), A Better Wireless, and Access Humboldt (collectively, “Joint Educational Petitioners”) respectfully petition the Commission to reconsider and clarify certain aspects of the Commission’s recently published order regarding Educational Broadband Service (“EBS”) in the 2.5 GHz band.²

Joint Educational Petitioners are a diverse group of state and nonprofit educational, technology, and digital inclusion organizations and leaders, united by their commitment to spectrum policies that advance educational access to broadband for all. The SHLB Coalition is a broad-based coalition of organizations that promote open, affordable, high-quality broadband for anchor institutions and their communities. CoSN is the premier professional association for current and aspiring K-12 education technology leaders, providing the community, knowledge and professional development they need to create and grow engaging learning environments. SETDA is the principal nonprofit membership association representing U.S. state and territorial educational technology leaders. SETDA’s mission is to build and increase the capacity of state

¹ 47 U.S.C. § 405; 47 C.F.R. § 1.429.

² See *Transforming the 2.5 GHz Band*, Report & Order, 34 FCC Rcd. 5446, ¶¶ 3, 13 (2019) (“EBS Order”).

and national leaders to improve education through technology policy and practice. Founded in 1876, the mission of ALA is to provide leadership for the development, promotion, and improvement of library and information services and the profession of librarianship in order to enhance learning and ensure access to information for all. Representing hundreds of affiliated organizations, NDIA is a unified voice for home broadband access, public broadband access, personal devices, and local technology training and support programs. UETN connects Utah’s K-12 schools, technical colleges, institutions of higher education and public libraries, as well as healthcare facilities throughout the state. CCSSO is the nonpartisan, nationwide, nonprofit organization of public officials who head departments of elementary and secondary education in the states, the District of Columbia, the Department of Defense Education Activity, the Bureau of Indian Education, and the five U.S. extra-state jurisdictions. Access Humboldt provides broadband media access services for the North Coast region of California, including more than 30 K-12 education districts plus libraries, universities and community colleges. A Better Wireless is a wireless internet operator that has partnered with Battle Lake Independent School District #542 in an effort to use EBS to close the digital and homework divide faced by 23 percent of enrolled families.³

³ Each of these parties have been active participants in this proceeding. *See, e.g.*, Comments of the SHLB Coalition, WT Docket No. 18-120 (filed Aug. 8, 2018) (“SHLB Comments”); Comments of CoSN on Proposed Service Rules on the 2.5 GHz Band, WT Docket No. 18-120 (filed Aug. 8, 2018); Comments of SETDA on Proposed Service Rules on the 2.5 GHz Band, WT Docket No. 18-120 (filed Aug. 8, 2018); Letter from Larra Clark, ALA, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed May 1, 2019); Comments of the National Digital Inclusion Alliance, WT Docket No. 18-120 (filed Aug. 8, 2018); Initial Joint Comments of Nebraska Department of Education (NDE), Nebraska Educational Television (NET), and the State of Nebraska Office of the Chief Information Officer (OCIO), WT Docket No. 18-120 (filed Aug. 8, 2019) (“Nebraska Joint Comments”); UETN EBS Response to the FCC Notice of Proposed Rulemaking at 4, WT Docket No. 18-120 (filed Aug. 7, 2018) (“UETN Comments”); Letter from Carissa Moffat Miller, CCSSO, and Robert Hull, NASBE, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed June 24, 2019); Letter from Mitch

Joint Educational Petitioners appreciate the Commission’s decision to move forward on licensing the EBS spectrum that has remained unassigned for decades. In particular, Joint Educational Petitioners share the Commission’s view of the importance of closing the digital divide in rural communities and promoting 5G deployment. However, analysis of the Order in light of the record here raises material questions about its logic and factual support. In particular, Joint Educational Petitioners are concerned that the Commission’s chosen approach forgoes proven means to connecting underserved schools and students⁴ and will do little to advance 5G networks.⁵

We therefore respectfully seek reconsideration of two specific aspects of the Order: (1) the decision to eliminate the educational eligibility requirements that have preserved this spectrum for educators for over half a century; and (2) the decision not to provide educators any opportunity to apply for this long-unassigned EBS spectrum, particularly in long-underserved rural areas, in advance of the auction. In each case, the Commission made material errors and omissions warranting reconsideration. Taken together, these decisions effectively eliminate education from the EBS band at a time when access to the internet has never been more important to education and when educational institutions have proven themselves capable of

Koep, A Better Wireless, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed July 3, 2019); Letter from Over 800 Educational, Public Interest, and Commercial Signatories to Chairman Ajit Pai, FCC, WT Docket No. 18-120 (filed May 8, 2019) (signed by Access Humboldt).

⁴ See EBS Order at 5528 (Commissioner Geoffrey Starks’s statement described the EBS Order as “a missed opportunity” and explained that “rather than embracing the positive aspects of the [EBS] program and improving upon it, [the Order sets] up a regulatory framework that may lead to its ultimate demise.”)

⁵ See EBS Order at 5522 (As Commissioner Michael O’Rielly explained in his statement, “the lack of available spectrum in the largest markets makes it hard to characterize this as a true mid-band play for 5G or next-generation services.”)

deploying this spectrum, even without the help of a commercial lessee. We therefore respectfully request that the Commission reconsider these decisions and preserve an educational EBS.

I. The Continuing Need for Educational Eligibility Requirements.

The Commission’s decision to eliminate educational eligibility requirements for EBS should be reconsidered given clear record evidence of the continued need for the benefits these requirements provide.

Educational Eligibility Remains Necessary. First, the Commission wrongly claimed that educational eligibility was not necessary to meet the needs of underserved communities, relying in part on the availability of E-Rate funding.⁶ Joint Educational Petitioners are concerned that the logic on this point is both faulty and unsupported.

To begin with, this argument does not address the fundamental challenge of the digital divide⁷—that commercial carriers lack sufficient incentive to deploy the spectrum they would acquire in the 2.5 GHz auction to rural areas. Commercial operators today already have more than 600 MHz of licensed spectrum below 3 GHz, much of which is already subject to aggressive performance requirements and exhibits technical characteristics that make it at least as economical for rural deployment. Nonetheless, they have not adequately deployed to rural communities—leaving rural students facing a persistent digital equity gap. The Commission provides no reasoned explanation for its hope that simply adding 2.5 GHz spectrum to the

⁶ EBS Order ¶ 19.

⁷ Letter from Keith Krueger, CoSN, Larra Clark, ALA, Candice Dodson, SETDA, Angela Siefer, NDIA, John Windhausen, Jr., SHLB Coalition, and Andreas Bitzarakis, EBPARC, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed July 3, 2019) (“Educators’ Ex Parte”).

inventories of commercial mobile providers will somehow spur rural deployment *this time*, when the vast amount of other licensed spectrum (including 2.5 GHz itself through BRS licenses and EBS leasing) has not done so.

With respect to E-Rate, the Order omits any discussion of the uncontroverted fact that, unlike EBS, E-Rate funds have long been limited to services and equipment used on the recipient's premises or campus.⁸ The Order ignores that the E-Rate program today cannot reach students at home and is no substitute for an educational EBS.

Educational Eligibility Advances the Commission's Goals. Second, the Commission mistakenly concluded that retaining these requirements would not further its goals of enhanced broadband deployment and intensive spectrum use.⁹ In so doing, the Commission ignored uncontroverted evidence in the record that these eligibility restrictions had in no way hindered deployment.¹⁰ To the contrary—*where EBS was licensed*—educational EBS license holders have either self-deployed¹¹ or leased EBS spectrum to deploy extensive mobile broadband networks.¹² Moreover, EBS licenses currently cover the vast majority of Americans despite the

⁸ See Letter from John Windhausen, Jr., SHLB Coalition, to Marlene H. Dortch, FCC, WT Docket No. 18-120, at 2 (filed Apr. 11, 2019); UETN Comments at 4; Letter from Donald L. Herman, Jr., Clare C. Liedquist, and Molly O'Connor, Counsel to The Rural Operators, to Marlene H. Dortch, FCC, at 2 (filed Apr. 25, 2019).

⁹ EBS Order ¶ 15.

¹⁰ See, e.g., Comments of Voqal, WT Docket No. 18-120 (filed Aug. 8, 2018) (“Voqal Comments”); Comments of North American Catholic Educational Programming Foundation and Mobile Beacon, WT Docket No. 18-120 (filed Aug. 8, 2018) (“NACEPF and Mobile Beacon Comments”); Comments of Northern Michigan University, WT Docket No. 18-120 (filed Aug. 8, 2018) (“NMU Comments”).

¹¹ See, e.g., NMU Comments at 3-5, 7.

¹² See, e.g., Comments of Sprint Corp. at 2-3, WT Docket No. 18-120 (filed Aug. 8, 2018); Joint Comments of National EBS Association and Catholic Technology Network, WT Docket No.

fact that the Commission has not accepted new applications for EBS licenses since the early 1990s.¹³ Operator rhetoric aside, there is no actual evidence that excess capacity leases have held back deployment or impaired spectrum utilization. To the contrary, as the Order itself explains, the “public-private partnerships promoted by [the educational eligibility and lease model] have facilitated the construction of networks, which have benefitted both the educational institutions and their network partners.”¹⁴ We could not agree more. Rather than following that logic to the reasoned conclusion that spectrum held by anchor institutions provides benefits for *both* education *and* deployment—particularly in rural, hard-to-reach areas—the Order ignores extensive record evidence that underutilization in the 2.5 GHz band is a direct result of the fact that the Commission froze EBS licensing for decades, not educational eligibility requirements.

Economic Benefits of Educational Eligibility. Third, although the Order touts the economic benefits from its changes to the 2.5 GHz eligibility rules,¹⁵ the only economic study in the record concluded the opposite. That study,¹⁶ prepared by Dr. Raul Katz and Fernando

18-120 (filed August 8, 2018) (“NEBSA and CTN Comments”); NACEPF and Mobile Beacon Comments at 10-14.

¹³ Letter from Mark Colwell, Voqal, to Marlene H. Dortch, FCC, WT Docket No. 18-120, at 3 (filed May 9, 2019).

¹⁴ EBS Order ¶ 17 & n.42 (citing Joint Reply Comments of Community Telecommunications Network and Michigan Education Technology Leaders at 7, WT Docket No. 18-120 (filed Sept. 7, 2018)) (summarizing assertion of an educational EBS licensee that the lease model was essential to both (1) “deployment of a 2.5 GHz network covering 4 million people in the Metropolitan Detroit area” and (2) the licensee’s ability to “bridge the digital divide and the homework gap, providing broadband access to students at home, for thousands of low-income households”).

¹⁵ EBS Order ¶ 3.

¹⁶ Dr. Raul Katz and Fernando Callorda, *The Economic Benefit of Keeping the ‘E’ in EBS: A Comparison of Licensing Unassigned EBS to Educators and Nonprofits vs. Commercial Auctions*, Telecom Advisory Services and SHLB (2019) (“Katz Study”), <https://www.shlb.org/uploads/Policy/Policy%20Research/SHLB%20Research/SHLB%20EBS%20Economic%20Study.pdf>.

Callorda on SHLB’s behalf, determined that simply modernizing the EBS rules and retaining the EBS eligibility requirements would reduce the digital divide by 18.28% and close the homework gap in rural areas by 29.6%, while generating an additional \$70.93 billion in U.S. GDP.¹⁷ Eliminating the eligibility requirements and auctioning the available spectrum would only, by contrast, “generate meager economic and social benefits.”¹⁸

The Order misreads and wrongly disregards the Katz Study, making a number of factual errors regarding the study’s assumptions and methodology. First, the Commission claims that the study “assum[es] that educational licensees offer broadband service at \$15/month” even though “none of the self-deployed educational networks identified by SHLB offer service on a regular basis to the general public at \$15/month.”¹⁹ This analysis is mistaken. To begin with, the Katz Study did not rely on an across-the-board assumption that educational licensees would offer service at \$15/month. It assumed that they would offer service at \$15/month only in areas that already have existing service and, therefore, where service can be provided at lower cost. In areas that are currently unserved, it assumed that they would charge a much higher \$35/month.²⁰ Thus, although the Commission concluded that the Katz Study overlooked the higher costs of rural infrastructure-based providers, the \$35/month assumption is, in fact, precisely in line with the maximum charged by these providers.²¹

¹⁷ *Id.* at 5.

¹⁸ *Id.*

¹⁹ EBS Order ¶ 21.

²⁰ Katz Study at 33.

²¹ EBS Order ¶ 21 n.56.

The Commission also, without explanation, confines its analysis to “self-deployed EBS networks.”²² This is logical for currently unserved areas where the Commission appears to assume that commercial providers will not acquire licenses and build out their networks, requiring educational licensees to build their own facilities if they are to provide service.²³ But it is entirely unsupported by the record in areas served by a commercial provider, for which the record is replete with examples of EBS licensees offering service for \$15/month or less through the EBS leasing model.²⁴

Second, the Commission makes a similar error in criticizing the Katz Study’s purported assumption that “EBS licensees in rural areas would be able to negotiate similar agreements [to those that exist today between EBS licensees and Sprint] with Sprint or another provider.”²⁵ But the study makes no such assumption. As explained above, it assumes that EBS licensees *in areas with existing commercial service* will be able to reach such agreements. But, in rural areas with no existing commercial provider, where costs of deployment are highest, it assumed that

²² *Id.* ¶ 21.

²³ Note that this assumption itself is at odds with the Commission’s conclusions about the benefits of removing eligibility restrictions and proceeding directly to an overlay auction. The Commission appears to believe, without explanation, that providers will be unwilling to partner with educational entities to offer service in currently unserved areas for the purposes of discounting the Katz Study. But it nonetheless assumes that they will take on the *greater* investment of acquiring at least some of these licenses at auction and build-out in the absence of an educational partner.

²⁴ *See, e.g.*, NACEPF and Mobile Beacon Comments at 2, 12 (explaining that Mobile Beacon provides “anchor institutions with high-speed, unlimited, \$10/month mobile internet”); Voqal Comments at 7-8 (describing how Voqal’s Mobile Citizen project provides broadband accounts “for free or at very favorable rates”); SHLB Comments at 5 (“[B]oth Mobile Beacon and Mobile Citizen currently offer an uncapped service at a price of \$10 per month.”); Reply Comments of Voqal at 39, WT Docket No. 18-120 (filed Sept. 7, 2018) (explaining that Digital Wish partners with Mobile Beacon to provide an “EBS-enabled, private, \$10/month internet plan that offers uncapped data”).

²⁵ EBS Order ¶ 21.

EBS licensees would self-deploy, not seek to enter into a lease agreement with a commercial carrier. Indeed, one of the study’s fundamental conclusions is that commercial providers will not be able to justify acquiring licenses and building out in high-cost rural markets where they have not done so already. By contrast, because of their different cost structures, nonprofit educational licensees will be able to do so in many places where commercial providers cannot.²⁶ Far from speculation, this is based on what educational licensees are actually doing today.

Third, the Commission claimed that the Katz Study “fails to recognize the efficiency of spectrum auctions.”²⁷ Although spectrum auctions are clearly a crucial tool in the Commission’s toolbox for maximizing the public interest benefits of wireless spectrum, the Commission itself has recognized that there are others as well.²⁸ It is the Commission that has failed to justify the use of an overlay auction and complete liberalization of its longstanding eligibility restrictions as compared to other options. Indeed, far from overlooking the economic merits of an overlay auction, the Katz Study specifically evaluated the likely outcome of an overlay auction and concluded that a 2.5 GHz overlay auction would yield little revenue.²⁹ This reflects a point raised repeatedly in the record by several different parties: the Commission already has evidence that an overlay auction in this band will *not* capture the efficiency benefits achieved by spectrum auctions in other contexts.

²⁶ See, e.g., Katz Study at 44-45.

²⁷ EBS Order ¶ 22.

²⁸ See, e.g., Chairman Ajit Pai and Rep. Anna Eshoo, *The Feds Have to Act to Get America Faster Wi-Fi*, *Wired* (Feb. 7, 2016) (touting unlicensed spectrum as “a key platform for innovation” that “produces tremendous economic benefits” all while “helping to bridge the digital divide”).

²⁹ Katz Study at 52.

In particular, the most comparable auction the Commission has conducted was the 2009 2.5 GHz BRS overlay auction where market dynamics were very similar to what exists today, including patterns of incumbency and license encumbrance. In 2009, the 2.5 GHz band was almost exclusively held by a single commercial operator and therefore that operator won nearly all of the available spectrum after only two rounds of bidding because of lack of interest from other carriers. Today, the 2.5 GHz band is still largely controlled by a single commercial operator, and thus an overlay auction of EBS spectrum will likewise entail fewer bidders and less competition than other spectrum auctions.³⁰ The Commission simply ignored this important and fundamental concern, in contravention of its statutory obligations.

Fourth, the Commission claims that the Katz Study “considers deployment to entire counties, and it precludes deployment to parts of counties.”³¹ This is also incorrect. To the contrary, the study assumes that networks will be deployed in the populated *portions* of newly licensed counties. That is why the study’s calculations include county area and population as key variables.³²

Finally, the Order contends that the Katz Study overlooked the fact that making additional spectrum available for commercial providers may lower costs for consumers by lowering providers’ costs.³³ But this effect, even if it does materialize as the Commission

³⁰ See, e.g., NACEPF and Mobile Beacon Comments at 5 (arguing that an overlay auction “would radically increase complexity, invite delay, and reduce broadband availability to students and educators”); NEBSA and CTN Comments at 12 (“[M]ost parties do not believe that auctions are the best way to license EBS spectrum among competing educational entities.”); Voqal Comments at 26 (“[S]pectrum auctions will not work in the EBS band.”)

³¹ EBS Order ¶ 22.

³² Katz Study at 32-34.

³³ EBS Order ¶ 22.

assumes (the Order provides no evidence or any substantial argument to suggest that it will), will clearly not have a sufficiently substantial effect to undermine the conclusions of the study. Most importantly, the Commission appears to assume that the cost to consumers of wireless service is primarily driven by carriers' own costs. To the contrary, however, competitive dynamics are the key driver of reduced wireless prices. Because the 2.5 GHz overlay will serve merely to further concentrate licenses in the hands of a single provider—which itself may soon merge with another even larger provider—this consolidation would appear likely to dominate any marginal changes to carriers' costs made possible by a 2.5 GHz spectrum auction. The fact that this spectrum is already widely licensed and intensively used in most populated areas further limits any potential cost savings that carriers may capture from an overlay auction.³⁴

Notably, any slight reduction in the cost of service—even if it were to occur as a result of a 2.5 GHz overlay auction—will fall far short of the cost reduction needed to close the digital divide and far short of the benefits that would flow from retaining educational eligibility rules. The Katz Study already makes the very generous assumption that consumers are able to purchase robust service from commercial providers for \$30/month. Nonetheless, EBS providers' ability to substantially address the digital divide stems from their ability to offer service for far less: \$15/month in areas with a commercial provider. There is little realistic chance that the theoretical cost reductions the Commission posits will make a dent relative to this 50% savings, which the Commission gives up by eliminating the eligibility requirements and auctioning the spectrum to commercial providers.

³⁴ Auctioning the spectrum, of course, will involve increased costs for the winning bidder who must pay for the new license in the auction. If the Commission is truly concerned about costs, the low-cost solution would be to provide these licenses to educational entities rather than auctioning them.

Waivers Granted Before and After the EBS Order Support Educational Eligibility.

Finally, less than two weeks after releasing the Order removing all educational eligibility and use requirements from the EBS band as “unnecessary,” the Wireless Bureau granted a waiver request and assigned EBS spectrum to Northern Michigan University (“NMU”) for the expansion of their Educational Access Network.³⁵ Joint Educational Petitioners applaud NMU’s work in the 2.5 GHz band and support the Bureau’s decision to grant that waiver. Indeed, in the last 6 years, the Commission has granted 7 waivers allowing educational entities access to EBS spectrum for the purpose of building wireless networks to connect students and communities that had been largely unserved or underserved by commercial wireless networks.³⁶ All these entities who received these waivers have built out wireless networks and are successfully providing service at lower costs than comparable service available from the commercial sector in these same areas. Yet neither the Commission’s Order nor the NMU Waiver Order make any real attempt to reconcile these diametrically opposed findings about the need for educational EBS to close the digital divide, particularly in rural areas. While the NMU Waiver Order claims that NMU is

³⁵ *Application of The Board of Trustees of Northern Michigan University for New Educational Broadband Service Stations*, Memorandum Opinion & Order, 34 FCC Rcd. 6293 (2019) (“NMU Waiver Order”).

³⁶ *NMU Waiver Order*; *Application of Kings County Superintendent of Schools for New Educational Broadband Service Stations*, Memorandum Opinion & Order, 34 FCC Rcd. 3226 (2019); *Application of the Monterey County Superintendent of Schools for a New Educational Broadband Service Station*, Memorandum Opinion & Order, 31 FCC Rcd. 13274 (2016); *Application of Kings County Superintendent of Schools for New Educational Broadband Service Stations*, Memorandum Opinion & Order, 31 FCC Rcd. 13281 (2016); *Application of the Board of Trustees of Northern Michigan University for New Educational Broadband Service Stations*, Memorandum Opinion & Order, 31 FCC Rcd. 3371 (2016); *Application of the Board of Trustees of Northern Michigan University for a New Educational Broadband Service Station*, Memorandum Opinion & Order, 28 FCC Rcd. 15576 (2013); *Application of the Board of Trustees of Northern Michigan University for New Educational Broadband Service Stations*, Memorandum Opinion & Order, 28 FCC Rcd. 15583 (2013).

“unique,”³⁷ the record in the EBS rulemaking proceeding specifically reflected several state educational entities seeking to emulate NMU to build educational broadband access networks to reach hard-to-serve areas in their communities.³⁸ Rather than inexplicably holding diametrically opposed views on the value of an educational EBS, Joint Educational Petitioners urge the Commission to apply the logic of its waiver decisions to the rulemaking and recognize that it need not choose between education and commercial deployment. By keeping licenses in educators’ hands, the Commission can get the benefit of both. At the very least, the Commission must provide a reasoned explanation for its apparently inconsistent treatment of these educational organizations.

II. The Continuing Need for an Educational Priority Window.

The Commission’s failure to provide for any educational priority window before commercially auctioning available EBS spectrum is equally problematic. In reaching that decision, the Commission first reiterated that providing priority access to educators would not further its broadband deployment goals. It next asserted that an educational priority window would result in mutually exclusive applications, which would necessitate competitive bidding, and that many schools may not be able to participate because of restrictions on local government authority under Dillon’s Rule.³⁹ Finally, it distinguished this decision from its decision to adopt a Tribal window, stating that the more focused Tribal window would be less likely to lead to mutual exclusivity. Like the elimination of educational eligibility rules, the decision not to provide educators with any priority window rests on questionable logic and lacks record support.

³⁷ See NMU Waiver Order ¶ 13.

³⁸ See *infra* notes 52-56.

³⁹ EBS Order ¶ 67.

First, for the reasons stated above, the Commission’s belief that allowing educators access to hold EBS licenses would be contrary to its broadband deployment goals is belied by the record. Moreover, accepting the Order’s position on the Dillon Rule, the Commission’s auction approach will affirmatively deny many rural educators their *only* opportunity to access this, or any, spectrum. Commercial operators, on the other hand, already have access to over 600 MHz of spectrum today in these very same rural areas. In addition, commercial operators will have multiple opportunities to bid for spectrum outside of the 2.5 GHz band, including the 37, 39, and 47 GHz millimeter wave auctions, the CBRS auction, and the recently announced public auction for 280 MHz of C-band spectrum. By contrast, the alternative approach of an educational priority window gives educational entities a chance to access available EBS spectrum to meet their educational needs, while connecting communities either through self-deployments or by allowing commercial entities to access the spectrum through leases. To the extent that the Order applies the same performance requirements to all new licensees, whether acquired by window or by auction, newly licensed spectrum will be deployed, however assigned. Indeed, build out to newly licensed areas would occur *more* quickly for licenses awarded through a window.

Second, the Commission failed to address a leading proposal for how to resolve mutual exclusivity that would arise from an educational priority window—a settlement window. In the Notice of Proposed Rulemaking, the Commission itself expressly sought comment on whether to allow such a settlement window to allow filers to work through any mutually exclusive applications in advance of any auction.⁴⁰ In response, multiple commenters supported such a

⁴⁰ See *Transforming the 2.5 GHz Band*, Notice of Proposed Rulemaking, 33 FCC Rcd. 4687, ¶ 46 (2018) (“EBS NPRM”).

settlement window approach as a solution both grounded in Commission precedent⁴¹ and consistent with the public interest.⁴² Although the Order finds wanting other suggestions for resolving mutual exclusivity,⁴³ the complete lack of any discussion of settlement windows is a material omission and contrary to Section 309(j)(6)(e).⁴⁴

Third, the Commission’s decision to adopt a priority window for rural Tribal entities, but to decline to do so for rural educational entities was unreasonable and ignored material record evidence. Joint Educational Petitioners fully support the Commission’s decision to provide a priority opportunity for rural Tribal entities to access available EBS spectrum prior to any auction. However, the Order fails to make any mention of the proposal in the Educators’ Ex Parte for a narrowly targeted rural educators window, which would be held after the Tribal window and before the auction.⁴⁵ We urge the Commission to consider this proposal and adopt it so that *all* rural areas with unlicensed EBS spectrum today can have the opportunity to connect their communities.

The Tribal window will provide Tribal entities with the much-needed opportunity to “address the communications needs of their communities,” including “the deployment of

⁴¹ See, e.g., *The Incentive Auction Task Force and Media Bureau Announce Procedures for Low Power Television, Television Translator and Replacement Translator Stations During the Post-Incentive Auction Transition*, Public Notice, 32 FCC Rcd. 3860, ¶ 14 (2017).

⁴² Voqal Comments at 21; NACEPF and Mobile Beacon Comments at 36-37 & n.94.

⁴³ EBS Order ¶ 68.

⁴⁴ In a footnote, the Commission claims that it has complied with the statutory requirement to evaluate alternatives to competitive bidding to resolve mutual exclusivity in the public interest. EBS Order ¶ 68 n.195. Not so. The Commission cannot simply ignore the settlement window alternative raised by the EBS NPRM and supported in the record.

⁴⁵ See Educators’ Ex Parte at 2-3.

advanced wireless services to unserved or underserved areas.”⁴⁶ According to the Commission’s 2019 Broadband Deployment Report, only 67.9 percent of people living on Tribal lands have access to fixed terrestrial connectivity at broadband speeds.⁴⁷ Joint Educational Petitioners agree that this is a compelling case for action in the form of a Tribal priority window. But the Order ignores that lack of connectivity is not limited to Tribal lands. As the Commission observed, “bringing broadband access to rural Americans is critical to providing them with the same economic, employment, education and civic opportunities that people in urban areas enjoy.”⁴⁸ This is no less true in non-Tribal rural areas. And the reasons for the Tribal window are no less compelling, particularly where rural educators have called for access to unassigned EBS spectrum to serve their communities.

The Commission did attempt to distinguish the reasons for the Tribal priority window from the more general educational priority windows proposed in the NPRM.⁴⁹ The Order asserted that the Tribal priority window “will be a more focused solution than an educational window” and “the fact that a small fraction of educational institutions might be positioned to provide broadband service in rural areas is not a sufficient basis for establishing a general priority window for all eligible educational institutions.”⁵⁰ But the Commission’s conclusion that many educators might not be positioned to provide broadband is unsupported in fact and in the record.

⁴⁶ EBS Order ¶ 47.

⁴⁷ *Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2019 Broadband Deployment Report, 34 FCC Rcd. 3857, 3873 fig.1 (2019).

⁴⁸ EBS Order ¶ 56.

⁴⁹ *Id.* ¶¶ 70-72.

⁵⁰ *Id.* ¶¶ 70-71.

First and foremost, even a cursory review of the record reveals educators’ demand for unassigned EBS spectrum and their readiness to deploy it, either themselves or through public-private partnerships. Several commenters explained how the costs of deployment have dropped and the technical expertise needed for deployment is more achievable today than ever before.⁵¹ And, as the FCC itself recognized in the waivers discussed above, EBS networks in Northern Michigan and Imperial County are positive proof that educators are often the best positioned to deploy EBS in areas unserved by commercial carriers today. There is no basis for the Commission’s view that educators are somehow less equipped than Tribes to replicate such successful EBS deployments.

In particular, several state education and technology leaders made clear how well positioned they are to utilize EBS spectrum to connect their communities.⁵² For example, the Nebraska Department of Education, in coordination with other state bodies, explained its plan to build upon the state’s already constructed statewide fiber network connecting 100% of the state’s public schools and use EBS to provide wireless broadband service to Nebraska students while at home and on school buses—including the approximately 40,000 to 50,000 that lack adequate

⁵¹ See, e.g., Initial Comments by the Imperial County Office of Education/California K-12 High Speed Network at 21, WT Docket No. 18-120 (filed Aug. 7, 2018) (“The pace of these deployments [in California school districts] is growing due to enhanced market conditions and a ripe ecosystem of equipment and devices on the 2.5 GHz band.”); Voqal Comments at 10 (describing how “the cost of deploying 4G LTE wireless systems—both fixed and mobile—in the 2.5 GHz band has dropped precipitously”); NACEPF and Mobile Beacon Comments at 13-14 (explaining that the market dynamics of the 2.5 GHz band “brought down the prices of the network equipment and consumer handsets”).

⁵² See, e.g., Letter from John Windhausen, Jr., SHLB Coalition, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed Nov. 9, 2018) (“Nebraska and Virginia Ex Parte”); Nebraska Joint Comments; North Carolina Department of Information Technology, Broadband Infrastructure Office Comments, WT Docket No. 18-120 (filed Aug. 8, 2018) (“North Carolina Comments”); UETN Comments.

home internet access today.⁵³ The Virginia Department of Education described the high level of interest in Virginia in developing an EBS network.⁵⁴ The North Carolina Department of Information Technology explained how statewide EBS initiatives and coordination “could result in increased investment by internet service providers and yield affordable home internet access to more than 100,000 students.”⁵⁵ And Utah educational and technical leaders supported the efforts of the Utah Educational and Telehealth Network to obtain access to EBS spectrum to fill broadband access gaps in the state.⁵⁶

The Commission also claims that a Tribal priority window would be less likely to lead to mutual exclusivity than an educators’ window.⁵⁷ We note, however, that mutual exclusivity remains clearly possible in the Tribal window as well. Indeed, the new rules explicitly contemplate this possibility.⁵⁸

Therefore, while we fully support the Tribal priority window, we cannot agree with the Commission’s conclusion that Tribal entities have “an interest in obtaining additional 2.5 GHz spectrum that is greater than and distinguishable from the interests of educational entities.”⁵⁹

⁵³ See Nebraska and Virginia Ex Parte. See also Nebraska Joint Comments.

⁵⁴ See Nebraska and Virginia Ex Parte.

⁵⁵ See North Carolina Comments.

⁵⁶ See Letter from Tracy Davis, Garfield County School District, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed July 11, 2018); Letter from Tim G. Smith, Utah CoSN Chapter, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed July 19, 2018); Letter from Scot McCombs, Canyons School District, and M. Guy Durrant, Daggett School District, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed Aug. 2, 2018); Letter from David V. Styler, Millard School District, to Marlene H. Dortch, FCC, WT Docket No. 18-120 (filed Aug. 7, 2018). See also UETN Comments.

⁵⁷ EBS Order ¶ 73.

⁵⁸ See 47 C.F.R. § 27.1204(d).

⁵⁹ EBS Order ¶ 72.

Both Tribes and educators have equal interests in serving their communities, are equally equipped to be able to deploy this spectrum, and would be equally shut out from obtaining this or any other licensed spectrum if they had to compete against commercial entities in an auction. There is no legal basis for treating these comparable entities so differently. The Commission should not—and need not—choose between the two. Indeed, state education agencies—or other state level agencies—can play a role in addressing the Tribal needs the FCC describes, especially in meeting the needs of Tribal schools.

But even if the Commission remains resistant to an educational priority window for all areas with unlicensed EBS spectrum, the Commission should reconsider the Educators' Ex Parte proposal for a targeted rural educators window. As set out in the record:⁶⁰

- To target underserved communities, the rural educator window would include counties where affordable broadband availability is low;
- Like the restriction to Tribal entities, eligibility for the rural educator window would be limited to accredited educational institutions, state and local government educational organizations, and nonprofit community anchor organizations meeting community educational needs, such as libraries. The range of eligible entities could, of course, be further narrowed if the Commission deemed it necessary to reduce the odds of mutually exclusive applications further still;
- Like the restriction to Tribal lands, licenses awarded in the rural educators window would cover only the rural area of the school district in which the applicant has a local presence, established using a number of factors that demonstrate local knowledge of a community, including the provision of service to the local area. State departments of education, for example, by the nature of their authority and work have a local presence in all school districts in their respective states. Like the eligible areas for the Tribal window, this will reduce the likelihood of mutually exclusive applications;
- Rural educator window licenses would be subject to the performance requirements and schedule applicable to licenses awarded from the Tribal window; and

⁶⁰ See Educators' Ex Parte at 2-3.

- Like the new Tribal licensees, rural educator licensees would be restricted from assigning or transferring their licenses until after they have met the applicable build-out requirements.

This more focused proposal, which is not mentioned in the Order, both addresses concerns with the educational priority window and removes any perceived distinctions with the Tribal priority window adopted by the Commission.

An alternative consideration for the Commission to make available spectrum for educators would be to license EBS in all counties where it is available, but to limit the educational window to one 16.5 GHz portion of the band—namely EBS Channels G1, G2, and G3. This alternative approach is reasonable for multiple reasons. First, at the time the Order was approved, the FCC had not yet announced its plan to make available substantial amounts of mid-band spectrum. But since July 10, the Commission has scheduled its first mid-band auction, where it will offer 70 MHz of CBRS spectrum—the largest number of licenses ever available at an FCC spectrum auction.⁶¹ In addition, Chairman Pai has announced his plan to make available 280 MHz of C-Band spectrum by the end of 2020.⁶² Chairman Pai has also released a draft NRPM that would free up an additional 250 MHz of mid-band between 3.3 GHz and 3.55 GHz, which will receive a vote at the December FCC meeting.⁶³ Given that many educators cannot participate in these opportunities for reasons outlined above, making one EBS license available to them now is their only meaningful shot to acquire this tool.

⁶¹ *Hearing on Oversight of the Fed. Commc'ns Comm'n: Spectrum Auctions Program, Part 2, Before the Subcomm. on Financial Servs. of the S. Comm. on Appropriations*, 116th Cong. (2019) (Joint Statement of Julius Knapp, Chief of the Office of Engineering and Technology, FCC, and Giulia McHenry, Acting Chief of the Office of Economics and Analytics, FCC, at 3).

⁶² Letter from Chairman Ajit Pai, FCC, to Sen. Roger Wicker (filed Nov. 18, 2019).

⁶³ *Facilitating Shared Use in the 3.1-3.55 GHz Band*, Notice of Proposed Rulemaking, WT Docket No. 19-348 (rel. Nov. 21, 2019).

Secondly, by limiting the educator window to a single 16.5 MHz license where it is available, the Commission can offer schools an adequate amount of spectrum to build out broadband networks quickly, but also leave open the opportunity for commercial entities to acquire the other larger EBS licenses at the subsequent 2.5 GHz auction. This win-win scenario allows schools to acquire a tool they need but also commercial carriers to acquire the most valuable, contiguous blocks of spectrum in the mostly rural areas where it is available.

We urge the Commission to reconsider and grant this proposal to provide a priority opportunity for rural educators to access EBS spectrum and serve the communities most in need of connectivity.

CONCLUSION

Although we support the Commission's efforts to extend broadband access to rural Americans, promote 5G network deployment, and modernize the 2.5 GHz rules, the manner in which the Commission has chosen to do so and its failure to engage with the record render a number of its decisions unsupportable and arbitrary. In particular, the Commission should reconsider its decisions to eliminate the longstanding EBS educational eligibility requirement and to auction off the spectrum without allowing rural educators that have been frozen out of the band for decades an opportunity to apply. These decisions were based on flawed analyses that ignore record evidence, commit significant factual errors, and fail to explain unreasoned judgments.

These errors start—but do not end—with the Commission's failure to recognize its own role in hindering EBS by failing to accept EBS license applications, beyond a handful of one-off waivers, for decades. This has led the Commission to wrongly blame existing EBS licensees and educational eligibility rules for reducing investment in the band, to forgo the benefits of an

educational EBS, and instead commercialize EBS spectrum. But the record shows that where EBS has been licensed, educators—often with commercial partners—have succeeded in both promoting extensive commercial deployment and making real progress toward closing the digital divide and homework gap. By contrast, in the largely rural areas where EBS remains unassigned, commercial operators have abundant spectrum in other bands, but have done little to address these persistent, pervasive problems.

Joint Educational Petitioners therefore respectfully ask the Commission to reconsider the Order and make rules that allow educators to continue and expand this work, rather than abandoning an educational EBS in favor of a flawed overlay auction that holds little, if any, promise for either helping schools and students or increasing rural coverage. Instead of allowing educational entities an opportunity to access unassigned EBS spectrum, the Commission’s auction decision has shut them out entirely. In so doing, the Commission has chosen the least inclusive option of them all.

Respectfully submitted,

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