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In the Matter of
Transforming the 2.5 GHz Band

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WT Docket No. 18-120

Comments of R Street Institute

Respectfully submitted,

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I. Introduction & Summary

In this proceeding, the Federal Communications Commission (“FCC” or “Commission”) seeks to transform the 2.5 GHz band (2496–2690 MHz), which has been assigned to Educational Broadband Service (“EBS”) and subject to strict regulatory constraints for decades.¹ Today, the 2.5 GHz band is “the single largest band of contiguous spectrum below 3 gigahertz and has been identified as prime spectrum for next generational mobile operations,” and yet it “currently lie[s] fallow across approximately one-half of the United States, primarily in rural areas.”² It therefore presents a tremendous opportunity for the FCC to pursue its statutory mandate to “generally encourage the larger and more effective use of radio in the public interest[.]”³

To encourage more effective use of the 2.5 GHz band, the Commission should take several steps. First, it should rationalize the geographic areas for 2.5 GHz licenses by using standard geographic service areas (“GSAs”) defined along census tract boundaries. Second, the Commission should maximize flexibility in the 2.5 GHz band by expanding license eligibility, removing educational-use requirements, and eliminating arbitrary term lengths that stifle long-term investment in the band. Third, it should move directly to auction EBS spectrum without any priority access windows. Fourth, the Commission should avoid placing any strict performance requirements on EBS licensees. Finally, the Commission should give due consideration to alternative approaches to managing EBS spectrum,

¹ Transforming the 2.5 GHz Band, *Notice of Proposed Rulemaking*, WT Docket No. 18-120, ¶1 (May 10, 2018) [hereinafter “NPRM”], <https://goo.gl/qPmkzr>.

² *Id.*

³ 47 U.S.C. § 303(g).

including incentive and overlay auctions, so long as it takes a realistic view of the transaction costs involved.

II. License Areas Should Aim to Maximize Productivity

The Commission is right to rationalize licenses in the 2.5 GHz band by utilizing regular GSAs.⁴ The goal of this rationalization is not to favor incumbents in the band, but to optimize the areas available for auction. Utilizing GSAs, defined along census tract boundaries (though not necessarily limited to individual census tracts), furthers that goal by reducing transaction costs. Specifically, because tract borders are defined by on-the-ground conditionals rather than arbitrary geometric shapes, these rationalized boundaries would reduce transaction costs by making it easier for bidders to decide which areas to cover and upon which licenses to bid.

In deciding how to rationalize current GSAs, the Commission should recall the history of the band, which has shown that EBS licensees have little expertise in using this spectrum. The fact that so much of it has lain fallow for so long suggests that incumbents are likely not the most productive users.⁵ Over time, the initial giveaway of EBS spectrum has proven to be a mistake, and the Commission should not amplify that mistake by giving away more valuable spectrum to educational users.

Moreover, EBS incumbents have little expertise transacting in secondary markets, which can drive productive spectrum use on an ongoing basis.⁶ Indeed, the fact that EBS

⁴ NPRM ¶ 11.

⁵ *Id.* ¶ 1.

⁶ Joe Kane, *The Role of Markets in Spectrum Policy*, R Street Institute (June 2018), p. 4. <https://goo.gl/5BfuQr>.

licensees are non-profits or government users means that they lack the same economic incentives of private industry to pursue profitable secondary-market transactions. The Commission should, therefore, only expand an EBS incumbent's license into a GSA if the existing license covers a majority of the relevant census tract.⁷ Otherwise, the Commission should make that census tract available for auction, as doing so will ultimately maximize productive use of the 2.5 GHz band.⁸

III. License Flexibility Should be Maximized

One of the main failures of the EBS giveaway is the lack of flexibility in the licenses.⁹ Spectrum capacity would not have been wasted to the same extent if licensees were able to repurpose or lease their spectrum for more productive uses. While the Commission has increased the flexibility of EBS licenses over time,¹⁰ there is still room for more flexibility, which is essential to ensure productive use of the 2.5 GHz band in the future.¹¹

To maximize EBS license flexibility, the Commission should first allow all licensees to lease or transfer their rights to any other users by removing the restrictions on what entities may hold a license in this band. Second, the Commission should remove the current educational-use requirements for the band. Designating particular bands for particular uses is antithetical to flexibility, and it hamstring the ability of markets to direct spectrum to its most productive use. The Commission simply cannot expect to know the most productive

⁷ *Id.* ¶ 14.

⁸ *Id.*

⁹ See Kane *supra* note 6; NPRM ¶ 1.

¹⁰ NPRM ¶ 4.

¹¹ *Id.* ¶¶ 5–7.

use of every frequency band at all times. Top-down directives, therefore, would only repeat the mistakes that resulted in this band's disuse in the first place.

While the Commission's proposal acknowledges this fact, it also asks "who is better positioned to determine the highest and best use of 2.5 GHz spectrum, the Commission or licensees?"¹² The answer to this question is: "neither." The most productive use of spectrum is not known to any party a priori. It depends upon the subjective valuations of that spectrum in rivalrous alternative uses, and that information can only be discovered through the market process. Given this, the licensees will know before the Commission whether the spectrum is being used productively because they are closer to the markets in which the discovery process takes place. The FCC should, therefore, rely on the market process, rather than attempting to plan spectrum use from the top down.

While educational uses of spectrum may be worthy goals of social policy, they must be compared with alternatives that may yield even greater benefits to consumers. This would be true even if the 2.5 GHz band were being extensively used for educational purposes. That fact alone would not demonstrate that the spectrum could not be put to an even more productive use. That the 2.5 GHz band has been so underused for so long only emphasizes the necessity of markets in determining the best use of spectrum.

The Commission should also eliminate the limitation on the term length of leased licenses.¹³ The secondary market for EBS licenses is skewed by these restrictions as lessees who may be able to put the spectrum to a productive, long-term use face uncertainty about

¹² *Id.* ¶ 22.

¹³ *Id.* ¶ 23.

whether their plans can be realized. Indeed, insofar as it is authorized by the statute, the Commission should consider making primary EBS licenses perpetual.¹⁴ The same distortions that result from limited terms in the secondary market also affect the primary market in ways that would be intolerable for other scarce resources. For example, it is easy to see that a regime in which one's land faced a renewal process—or even seizure and re-auction—every few years would reduce investment in improving the land and would make the land less productive than it could otherwise be.¹⁵

Likewise, for spectrum licenses, the degree to which one is willing to invest in a given band will be conditioned by how certain the licensee is of realizing future revenues, and limited terms distort those investments toward shorter term projects.¹⁶ The United States needs long-term spectrum investment and the Commission can facilitate that by extending—and effectively making perpetual—the terms of licenses in this band.

IV. Priority Access Windows Would Reduce Productive Spectrum Use

The Commission should not create priority access windows for various interested groups in local areas. Even if the Commission is correct that local authorities have special insight into what is best for the educational needs of their communities,¹⁷ that fact does not require giving them priority access to spectrum. The challenge, for local education as for all policy objectives, is how to optimize outcomes given the constraints imposed by other worthy uses of the same resources. Markets are the only way to learn the most productive of

¹⁴ See 47 U.S.C. §§ 307(c)(1); 309(j)(4)(B).

¹⁵ Kane, *supra* note 9, at 6.

¹⁶ *Id.*

¹⁷ See NPRM ¶ 26.

rivalrous options. Granting special privileges to certain potential users distorts the market and amounts to the Commission picking winners and losers. Such preferential treatment among spectrum users was still commonplace in 1985 when the Commission openly “expressed a ‘strong preference’ for local applicants in the [EBS] licensing process[,]”¹⁸ but that type of harmful central planning should be left in the past.

The Commission explains its proposal by saying that “granting certain entities local priority filing windows is premised on the idea that such entities are uniquely qualified to hold spectrum licenses and ensures that the licenses are put to their highest and best use[.]”¹⁹ Yet if this is true, then priority access would not be necessary to ensure that such entities get access to EBS licenses. If they truly are uniquely positioned to make the most productive use of spectrum, then they would prevail in a fair auction for such licenses.

Giving certain entities special treatment to pursue social goals detracts from economical and productive use of spectrum, and also requires a host of bureaucratic micromanagement to ensure those goals are met. Such efforts would certainly include the proposed holding periods,²⁰ buildout requirements,²¹ checks against unjust enrichment,²² and in-depth review of which entities have a bona fide relationship to the Commission’s social objective.²³ The need for all of these expensive and restrictive measures would, however, be

¹⁸ *Id.*

¹⁹ *Id.* ¶ 47.

²⁰ *Id.*

²¹ *Id.* ¶ 54.

²² *Id.* ¶ 47.

²³ *Id.*

obviated by allowing markets to direct spectrum to its most productive use rather than a government-imposed alternative goal.

The Commission is right to resolve mutually exclusive license applications through competitive bidding, but this bidding should be an auction open to all potential users, not only a special subset.²⁴ The Commission rightly explains that the logic of competitive bidding is found in the fact that it directs spectrum to those users who value it most highly.²⁵ That process cannot work, however, if users that could potentially be the highest bidder are excluded from the auction.

Giving away spectrum to certain groups does not result in its productive use. The very reason for the current proceeding is that previous attempts to do so in this band have failed.²⁶ The Commission should, therefore, reverse course and rely on the market mechanism rather than doubling down on government design, and “mov[e] directly to auction for this spectrum, rather than open priority filing windows for certain entities[.]”²⁷

V. Strict Performance Requirements are Unnecessary and Counterproductive

To the extent permissible, new EBS licenses should not include strict performance requirements, as they are unnecessary and have the effect of skewing investment in and use of the spectrum. The Commission has come to realize that dictating *how* a particular band is used hampers the market’s ability to put spectrum to its most productive use. In the same way, dictating *whether* a band has enough use is also detrimental to the long-term productive

²⁴ *Id.* ¶ 45.

²⁵ *Id.*

²⁶ *Id.* ¶ 1.

²⁷ *Id.* ¶ 61.

use of spectrum. When a robust secondary market exists, licensees face opportunity costs if they do not use spectrum at a given time. That is, someone else who wants to put the spectrum to use might seek to buy access to it, and the fact that it remains with the original licensee indicates that the offer was (or would be) declined, as the licensee gave up the opportunity to have that money in order to keep the license. This is a real cost that will incentivize licensees not to use spectrum only when failure to use it now will lead to greater productivity later.

Again, as in the case of land, one should not assume that because a landowner is not currently using a piece of property that it should, therefore, be taken by the government. There may be many reasons why leaving a piece of land vacant for a time contributes to long-term productivity. Likewise with spectrum, the failure to use some portion of one's spectrum does not *per se* indicate a market failure in need of regulatory correction. The Commission should, therefore, focus on facilitating a robust, competitive secondary market for spectrum licenses rather than micromanaging how much of its allocated spectrum a licensee is using.

The Communications Act requires that the Commission establish performance requirements “to ensure prompt delivery of service to rural areas, to prevent stockpiling or warehousing of spectrum by licensees or permittees, and to promote investment in and rapid deployment of new technologies and services[.]”²⁸ However, deadlines and penalties for performance failures are merely listed in the statutory text as examples of what the Commission *could* do. How the performance requirements are designed is ultimately left to the Commission's discretion. Simple transparency regulations — for example, requiring that

²⁸ 47 U.S.C. 309(j)(4)(B).

licensees maintain up-to-date contact information in order to facilitate exchanges on the secondary market with prospective buyers — would arguably be enough performance requirements for any licensee, including EBS ones.

VI. The Commission Should Consider Alternative Approaches and Take a Realistic View of Transaction Costs

The Commission also raises the possibility of holding an incentive auction or overlay auction for the entire 2.5 GHz band.²⁹ Either of these would be superior to the Commission continuing to choose winners and losers in the EBS band, but the Commission should not overestimate the benefits of an incentive auction compared to those of an overlay auction with subsequent bilateral negotiations.

Many of the same transaction costs thought to prevail in overlay auctions are also present in incentive auctions, and Congress may have taken an asymmetric view of these costs in directing the Commission to pursue an incentive auction for the 600 MHz band.³⁰ Indeed, the case for holding an overlay auction is likely even stronger in the EBS band because it has fewer active incumbents and less extensive use than the TV broadcast band. However, because this was given only brief consideration, further notice and comment may be needed for the Commission to pursue such a proposal.

²⁹ NPRM ¶ 61.

³⁰ Thomas W. Hazlett, “Efficient Spectrum Reallocation With Hold-ups and Without Nirvana,” *George Mason University Law and Economics Research Paper Series* 14:16 (May 21, 2014). <https://goo.gl/wE1gnG>.

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