



June 29, 2015

**BY ELECTRONIC FILING**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> St, S.W.  
Washington, D.C. 20554

**Re: NOTICE OF EX PARTE**

**GN Docket No. 14-177:** *Use of Spectrum Bands Above 24 GHz For Mobile Radio Services;*  
**WC Docket No. 16-70:** *Applications of XO Communications, LLC and Verizon Communications Inc. for Transfer of Control of Licenses and Authorizations*

Dear Ms. Dortch,

On June 27, 2016, Tim Donovan, Liz Barket and I, on behalf of Competitive Carriers Association (“CCA”);<sup>1</sup> John Hunter and Steve Sharkey of T-Mobile, USA (“T-Mobile”); Donald L. Herman, Jr. of Herman & Whiteaker on behalf of Adams Telecom. Inc., Central Texas Communications, Inc., E.N.M.R. Telephone Cooperative, Horry Telephone Cooperative, Inc., and Pine Belt Communications, Inc.; Grant Spellmeyer of U.S. Cellular; Ben Moncrief of C Spire (via telephone); and Jamey Wigley of the Central Texas Telephone Cooperative, Inc. (“CTTC”) (via telephone) met with Simon Banyai, Michael Ha, Blaise Scinto, Jose Albuquerque, Karen Sprung, John Schauble, Jim Schlichting, Matthew Pearl, Brian Regan, Stephen Buenzow (via telephone), and Catherine Schroeder (via telephone) of the Federal Communications Commission’s (“FCC” or “Commission”) Wireless Telecommunications Bureau (“WTB”). During the meeting, CCA and its members discussed the forthcoming Report & Order and Further Notice of Proposed Rulemaking in the above-referenced *Spectrum Frontiers* proceeding.<sup>2</sup> CCA is generally pleased with the Chairman’s proposal to free up more spectrum for 5G deployments and to allow the technology to drive the

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<sup>1</sup> CCA is the nation’s leading association for competitive wireless providers and stakeholders across the United States. CCA’s membership includes nearly 100 competitive wireless providers ranging from small, rural carriers serving fewer than 5,000 customers to regional and national providers serving millions of customers. CCA also represents approximately 200 associate members including vendors and suppliers that provide products and services throughout the mobile communications supply chain. Additional spectrum opportunities are critical to developing and deploying new technologies for all CCA members within the wireless ecosystem.

<sup>2</sup> See FCC, “Fact Sheet: Spectrum Frontiers Proposal to Identify, Open Up Vast Amounts of New High-Band Spectrum for Next Generation (5G) Wireless Broadband” (rel. June 23, 2016), *available at* [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0623/DOC-339990A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0623/DOC-339990A1.pdf) (“*Spectrum Frontiers* Fact Sheet”).

FCC's policy.<sup>3</sup> Nevertheless, CCA and its members discussed modifications outlined below that will foster rapid and more innovative 5G deployments in urban, suburban and rural areas alike.

### A. Aggregation

CCA praised the Commission's plans to establish an *ex ante* spectrum holdings limit of 1250 MHz for auctioned spectrum and a 1250 megahertz limit for case-by-case review of secondary market transactions in all millimeter wave ("mmW") bands. Consolidation in the wireless market, especially with critical spectrum resources, has plagued what once was a competitive industry. While the 1250 megahertz limit of all mmW spectrum is helpful, CCA reiterated its support for a two-tiered approach including an overall screen for licensed spectrum and a one-half screen for licensed spectrum in a particular band, like 28 GHz.<sup>4</sup> Specifically, CCA urged the Commission to implement: (1) a one-third screen for all licensed mmW spectrum; and (2) a one-half screen for licensed spectrum in a particular band, like 28 GHz. CCA encourages the FCC to employ this two-tiered approach with respect to secondary market transactions and as an *ex ante* spectrum auction policy mechanism.

The Commission must establish clear, comprehensive aggregation limits for licensed mmW spectrum that will actually prevent anticompetitive practices by the largest carriers who are positioned to be among the first to develop technologies for these higher-frequency bands, and who are already attempting to aggregate unique high-band spectrum to the detriment of competition and consumers.<sup>5</sup> Establishing a screen or limit for all the mmW spectrum reduces the overall effectiveness of the limit. In addition, the 1250 megahertz screen appears to be approximately based on one-third of the spectrum to be licensed in the 28, 37 and 39 GHz bands. To the extent that the 37-37.6 GHz band is "licensed-by-rule" it should not be included in determining a one-third screen. Excluding this spectrum would bring the screen to approximately 1100 megahertz. Additionally, without a per-band spectrum limit, one carrier could aggregate all 850 MHz of the 28 GHz band, for example. If the Commission does not adopt CCA's two-tiered approach, CCA encouraged the Commission to explain how any proposed rules will account for harmful aggregation within a single band.

### B. Operability

CCA is a long and staunch advocate for interoperability. CCA welcomes the WTB policy of operability across the 28 GHz band and across the exclusively licensed portion of the 37 GHz band and 39 GHz band with respect to mobile uses. Nevertheless, if the 37-37.6 MHz band is licensed-by-rule, it should not be included in an operability requirement for the 37.6-40 GHz licensed band. Including the licensed-by-rule band, where sharing requirements have not yet been established,

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<sup>3</sup> See Remarks of FCC Chairman Tom Wheeler, "The Future of Wireless: A Vision for U.S. Leadership in a 5G World," National Press Club (June 20, 2016), *available at* [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2016/db0620/DOC-339920A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0620/DOC-339920A1.pdf).

<sup>4</sup> See *Ex Parte* Letter from Rebecca Murphy Thompson, EVP & General Counsel, CCA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 et al. (filed June 15, 2016).

<sup>5</sup> See *Applications Filed for the Transfer of Control of XO Communications, LLC to Verizon Communications Inc., Pleading Cycle Established*, Public Notice, DA 16-393, WC Docket No. 16-70 (2016) ("Verizon-XO Transaction").

would significantly delay development of standards and equipment and deployment in the traditionally licensed 37.6-40 GHz band. CCA suggests the Commission should take a more nuanced approach to operability with respect to fixed technologies and unlicensed spectrum. T-Mobile urged the Commission to consider how the operability rule as described by the WTB might impact device development, considering some fixed technologies only function across a portion of the mmW bands described. Further, C Spire explained that fixed connections are often supported by non-standardized technology and therefore might not easily fit into the proposed operability rules. CCA asked the Commission to fully explore the impact of an operability rule on both mobile and fixed technologies and with respect to unlicensed services in the 37 GHz band.

### C. License Size

Like interoperability, CCA strongly supports the use of smaller geographic license sizes, especially for newly auctioned spectrum, so rural and regional carriers have an opportunity to bid on their existing geographic market territory without being forced to compete and expend unnecessary and often limited resources for the more urban portions of their markets. Nevertheless, CCA objects to the Commission's proposal to change incumbent LMDS license sizes from BTA to counties or PEAs. In this instance, the Commission's proposed change to county and PEA license areas would harm incumbent licensees, especially small and rural carrier licensees.

Small carriers facing increased buildout requirements would likely fail to comply and thus would lose their licenses. While the contemplated performance requirements themselves are not particularly onerous in isolation, the cost of buildout requirements for each "new" county-based license within the existing licensed BTA would greatly multiply the expense of holding LMDS licensees.<sup>6</sup> Rural carriers hold licenses in sparsely populated areas. For example, CTTC explained that it currently serves 19 counties within its two BTA licenses, and being forced to buildout networks in each of those 19 counties is untenable given technological and practical constraints. Some of CTTC's counties are completely rural and sparsely populated. For example, CTTC's licensed territory covers 3,200 square miles with less than 2 customers per square mile, and therefore it does not make sense to install points of presence ("POPs") or links per the proposed buildout requirements. A rural carrier should not be forced to deploy needless infrastructure to keep its license when it has already invested financial and human resources deploying and meeting its expected buildout requirement. Further, CCA explained that the Commission should not assume a relatively "empty" county justifies taking that license away from its incumbent owner; rural areas may not always remain sparsely populated, and agricultural or industrial use could invigorate spectrum utilization. Reducing the size of the license reduces its value, and carriers should not be deprived of a valuable asset for which they have already paid.

CTTC also noted that the proposed new license sizes do not make sense from a technological perspective. Even if a rural carrier wanted to deploy a mobile network in a rural, flat county on LMDS spectrum, the necessary technology simply does not exist given LMDS spectrum's limited propagation capabilities. Nationwide carriers may use LMDS spectrum for terrestrial mobile

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<sup>6</sup> See *Ex Parte* Letter from D. Cary Mitchell & John A. Prendergast, Counsel to the Blooston Rural Carriers, Blooston, Mordkofsky, Dickens, Duffy & Prendergast, LLP, Counsel to the Blooston Rural Carriers, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 14-177 et al. (filed June 17, 2016).

uses, but rural and regional users likely will continue to use LMDS for backhaul and point-to-point services for some time.

CCA supports the WTB's goals of driving new technologies, but in the case of incumbent LMDS licenses, shrinking the license size is not the correct policy. C Spire noted that it is exploring new equipment and plans to begin testing new technologies within the next few months in the mmW spectrum based on its current license parameters. Changing the license size now would put competitive carriers like C Spire in the position of having to decide between stranding their investment or keeping their license at an unreasonable cost. Dramatically changing the character of existing LMDS licenses would result in sunk costs for carriers who have already invested in network technology and may result in decreased coverage for rural areas. These carriers went to significant expense to construct their LMDS licenses, even when others were forced to return their licenses because the lack of economically available equipment. This sort of change will deter 5G deployments in rural America. Rather, CCA encouraged the WTB to reward carriers for their investment. To that end, CCA proposed a few potential remedies, including the use of county-sized licenses for the top 20 markets without disturbing BTA licenses for all other markets and/or a significantly longer glide path towards county or PEA sized licenses to recoup their sunk costs and revise their business plans. Regardless, the Commission should not inflict the described harms on incumbent licensees without a plan to make those licensees whole.

Similarly, CCA also discouraged a "use or share it" approach, which would lead to uncertainty and deter investment and innovation. Certainty is needed to encourage investment in higher spectrum bands, particularly where a vast majority of the spectrum will require research and development of new technology to fully implement the bands.

#### **D. Sharing the 37-37.6 Band**

The Commission will severely devalue the 37-37.6 GHz band if it is used by "dynamic shared access between different commercial users, and commercial and federal users."<sup>7</sup> The 37 GHz spectrum is the crown jewel of this proceeding because it represents greenfield opportunity. While all but a modest amount of the 28 and 39 GHz bands are already licensed, the 37 GHz band is not and is the only spectrum that could be fully auctioned for new services. This spectrum should be licensed for commercial use to achieve the greatest financial and technological value. At the very least, the Commission should not require two commercial parties to share, and should only subject licensees to sharing arrangements between commercial and federal users. CCA and T-Mobile asked the Commission to take into account past successes with respect to mobile carriers coordinating with federal users in the AWS-1 spectrum and current successful efforts to coordinate use of AWS-3 spectrum. The Commission should not use an untested sharing approach in this band if the FCC wants to lead in 5G deployments.

Recognizing the benefits of a mix of spectrum technologies, CCA supports freeing up more spectrum for both licensed and unlicensed uses.<sup>8</sup> Nevertheless, the FCC is making available almost double the amount of unlicensed spectrum as licensed spectrum in these bands. When combined

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<sup>7</sup> See *Spectrum Frontiers* Fact Sheet at 1.

<sup>8</sup> See Reply Comments of Competitive Carriers Association at 9 and 12, GN Docket No. 14-177, WT Docket No. 10-112 (filed Feb. 26, 2016).

with existing high-band unlicensed spectrum, the Commission will double the current amount of high-band unlicensed spectrum to 14 GHz of spectrum. The WTB should reconsider its sharing proposal for this 600 megahertz of spectrum for licensed opportunities. In addition, T-Mobile noted that licensing a portion of the 64-71 GHz band will drive greater investment in technology development and deployment that will facilitate greater use of unlicensed portions of the band.

### **E. Cybersecurity**

Finally, CCA expressed concern over the proposed cybersecurity rules. The Commission describes a requirement to “file a statement before deployment that includes certain security-related information, such as a description of participation in standards body of security work, its intended approach to security, and the implications their security of design will have on other parts of the 5G ecosystem.”<sup>9</sup> Although the rule on its face seems to be presented as an information-gathering exercise, CCA encouraged the Commission to describe the concerns animating this requirement, including any plans for treating required security filings confidentially and to ensure that no liability could attach to the statements in an enforcement action.

CCA explained that many competitive carriers simply buy the best network equipment that they can get access to, from the one or two equipment manufacturers willing to create bespoke equipment needed to operate their networks. It is likely small carriers assume security measures are built into the equipment, or that they are relying on assertions by an equipment manufacturer to that effect. Equipment manufacturers in the business of constructing and selling network infrastructure, not carriers, are in the best position to provide security information. If the Commission wishes to gain insight into the security practices of competitive carriers, they should seek that information from the equipment manufacturers. In sum, there are more appropriate avenues to discuss security than mandated disclosures prior to network buildouts.

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<sup>9</sup> See *Spectrum Frontiers* Fact Sheet at 2.

This *ex parte* notification is being filed electronically with your office pursuant to Section 1.1206 of the Commission's Rules. Please do not hesitate to contact me with any questions or concerns.

Sincerely,

*/s/ Rebecca Murphy Thompson*

Rebecca Murphy Thompson  
EVP & General Counsel  
Competitive Carriers Association

cc (via email): Simon Banyai  
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