



October 16, 2018

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: Ex Parte Presentation, *Promoting Investment in the 3550-3700 MHz Band*
GN Docket No. 17-258

Dear Ms. Dortch,

CTIA commends the Commission for the release of the 3.5 GHz Citizens Broadband Radio Service ("CBRS") *Draft Report and Order* slated for adoption at the October 23, 2018 Open Meeting.¹ As the U.S. strives to lead the world in 5G, rules for Priority Access Licenses ("PALs") in the 3.5 GHz band will be an important aspect of the nation's spectrum strategy. Being first in 4G brought tremendous economic benefits to the United States and created today's app and sharing economy.² The opportunities and economic benefits from 5G are likely to be even greater, with an expected \$275 billion in wireless network investment leading to three million new jobs and another \$500 billion to our economy.³

Thanks in large part to the Commission's efforts, U.S. wireless providers are well positioned in high-band spectrum, but as CTIA and many others have observed, there is a critical need for mid-band

¹ *Promoting Investment in the 3550-3700 MHz Band*, Draft Report and Order, GN Docket No. 17-258, FCC-CIRC1810-02 (draft rel. Oct. 2, 2018) ("*Draft Order*").

² *How America's 4G Leadership Propelled the U.S. Economy*, RECON ANALYTICS (Apr. 2018), https://api.ctia.org/wp-content/uploads/2018/04/Recon-Analytics_How-Americas-4G-Leadership-Propelled-US-Economy_2018.pdf, attached to Letter from Scott K. Bergmann, CTIA, to Marlene H. Dortch, FCC, GN Docket No. 17-258, *et al.* (filed Apr. 17, 2018) ("CTIA April Letter"); see also *The Global Race to 5G*, CTIA (Apr. 2018), <https://api.ctia.org/wp-content/uploads/2018/04/Race-to-5G-Report.pdf>, attached to CTIA April Letter.

³ See, e.g., Letter from Meredith Attwell Baker, CTIA, to Marlene H. Dortch, FCC, GN Docket No. 17-258, *et al.* (filed Sept. 18, 2018).



spectrum for 5G in the United States.⁴ Mid-band spectrum like the 3.5 GHz band offers excellent coverage and capacity characteristics for 5G. Countries around the globe are acting to make mid-band spectrum available to their operators, or will do so in the near term.⁵ The 3.5 GHz band represents the nearest-term opportunity to make available mid-band spectrum to support next-generation wireless networks in the United States.

The *Draft Order* recognizes that the emergence of 5G necessitates targeted changes to the PAL rules to ensure that the band will support next-generation wireless deployments.⁶ In 2015, when the Commission adopted the CBRS rules, 5G was not on the horizon and the decision did not contain a single mention of 5G. But since then, with increased focus on small cell technology to support 4G LTE and the development of next-generation 5G technologies, it became increasingly important to maximize the value of the 3.5 GHz band.

The targeted PAL reforms in the *Draft Order* will help advance 5G in the U.S. while also ensuring that the novel framework of the 3.5 GHz band is a success. The certainty of ten-year, renewable license terms will provide all PAL licensees with the greatest opportunity to deploy and innovate in the licensed portion of this band.⁷ And permitting partitioning and disaggregation of PALs, along with flexible performance requirements, will help ensure that spectrum is put to its highest and best use and will facilitate a robust secondary market for CBRS spectrum.⁸

Throughout this proceeding, CTIA supported PAL geographic areas larger than the originally adopted Census Tracts. The Commission's original micro-targeted approach—which would have resulted in 74,000 license areas and more than half a million licenses at auction—would have increased

⁴ See, e.g., David Abecassis, Chris Nickerson, and Janette Stewart, *Global Race to 5G – Spectrum and Infrastructure Plans and Priorities*, ANALYSYS MASON, at 37 (Apr. 2018), https://api.ctia.org/wp-content/uploads/2018/04/Analysys-Mason-Global-Race-To-5G_2018.pdf, attached to CTIA April Letter.

⁵ See *Draft Order* ¶ 34.

⁶ The *Draft Order* correctly leaves in place the experimental three-tiered framework and does not undermine the rules governing General Authorized Access (“GAA”) use of the band.

⁷ See *Draft Order* ¶ 46.

⁸ See *id.* ¶ 37.



deployment costs and administrative complexity while also raising significant interference concerns that undermined the value and use of the spectrum. For those reasons, CTIA initially supported Partial Economic Areas (“PEAs”) as the geographic area—a compromise approach that proved successful in the 600 MHz incentive auction and that would have increased investment incentives and certainty for the band. As a further effort to address concerns raised in the record, CTIA joined with Competitive Carriers Association to support a combination of Metropolitan Service Areas (“MSAs”) in the top 306 Cellular Market Areas (“CMAs”) and counties in the remaining 428 CMAs.

The Commission’s pending decision to license all PALs on a county basis represents a further compromise that will result in “an inventory with the largest number of areas that the Commission has ever auctioned or licensed.”⁹ Moreover, counties are significantly smaller than the license areas that other nations have used or are expected to use for mid-band spectrum (most nations will use national or large regional licensing).¹⁰ Nonetheless, counties are a marked improvement over Census Tract licensing and offer a middle-ground approach that should provide opportunities for a wide array of fixed and mobile broadband providers.¹¹

CTIA reiterates the need for wide-area operators to be able to aggregate counties, particularly in larger markets. We therefore support the Commission’s decision to include in the *Draft Order* a commitment to seek comment on some form of package or combinatorial bidding for counties comprising an MSA in larger markets as part of the pre-auction process.¹² We agree with the Commission that county-based licensing with the option of package bidding will give the 3.5 GHz band a far better opportunity to succeed for the widest array of operators, including those intending to deploy targeted or rural networks.

⁹ *Id.* ¶ 31.

¹⁰ See, e.g., *id.* ¶ 22; David Abecassis, et al., *Mid-band spectrum geographical licensing approaches*, ANALYSIS MASON (July 2018), <https://api.ctia.org/wp-content/uploads/2018/07/Analysys-Mason-mid-band-5G-spectrum-paper-7-03-18.pdf>, attached to Letter from Scott K. Bergmann, CTIA, to Marlene H. Dortch, FCC, GN Docket No. 17-258, et al. (filed July 9, 2018).

¹¹ *Draft Order* ¶¶ 19, 22.

¹² *Id.* ¶ 40.



Importantly, the targeted changes the Commission proposes to adopt here will advance the overall three-tier, experimental framework for the 3.5 GHz band. The *Draft Order* leaves in place the band plan of 70 megahertz for PALs and 80 megahertz for GAA, as well as the “use-or-share” framework that allows GAA operations on licensed PAL spectrum until PAL operations commence—a framework that, among other things, makes interim performance requirements unnecessary. Moreover, the revisions to the PAL tier will facilitate, rather than harm, rural buildout by providing opportunities for stakeholders of all shapes and sizes. By making targeted changes to the PAL framework—including right-sized license areas, license terms that account for network buildout realities, and partitioning and disaggregation to facilitate secondary market transactions—the Commission will “more effectively promote competition and ensure the development and rapid deployment of new technologies to consumers, including to those in rural areas.”¹³

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Overall, the targeted reforms, including modestly increasing the geographic license areas for PALs and providing for longer, renewable license terms, will promote investment in the 3.5 GHz band and will better align the licensing framework for this band with international developments, allowing U.S. wireless providers to take advantage of economies of scale.¹⁴ Ultimately, these changes will continue to enable low-power and targeted use cases originally envisioned for the band while allowing the deployment of wide-area networks for the provisioning of 5G.

Pursuant to Section 1.1206 of the Commission’s rules, a copy of this letter is being filed in ECFS. Please do not hesitate to contact the undersigned with any questions.

Sincerely,

/s/ Scott K. Bergmann

Scott K. Bergmann
Senior Vice President, Regulatory Affairs

¹³ *Id.* ¶ 7.

¹⁴ *See id.* ¶ 34.