



August 9, 2023

Via ECFS

Re: WT Docket No. 20-443, Expanding Flexible Use of the 12.2-12.7 GHz Band; GN Docket No. 22-352 Expanding Use of the 12.7-13.25 GHz Band for Mobile Broadband or Other Expanded Use

The Computer & Communications Industry Association (CCIA)¹ is pleased to respond to the Commission's two Notices of Proposed Rulemaking ("NPRMs") regarding expanded use of the 12.2-12.7 GHz ("Lower 12 GHz")² and 12.7-13.25 GHz ("Upper 12 GHz")³ spectrum bands.⁴ Expanding the types of services authorized in the Lower and Upper 12 GHz bands will invite new entry and new innovation, creating an even more competitive wireless market and an even more vibrant connected economy.

CCIA confines these comments to the issues it finds most pressing for the wireless market in the near term.

I. THE FCC SHOULD AUTHORIZE THE LOWER 12 GHz BAND FOR FIXED TERRESTRIAL, HIGH-POWER, TWO-WAY, POINT-TO-MULTIPOINT BROADBAND SERVICES.

Since January 2021, the Commission has been considering how the 12.2-12.7 GHz band can accommodate additional services.⁵ Several authoritative engineering studies demonstrate that the FCC can authorize the Lower 12 GHz band for high-power, two-way broadband service without causing harmful interference to legacy services, namely Direct Broadcast Satellite (DBS) and non-geostationary orbit system, fixed satellite service (NGSO FSS).⁶ The value of this band for speeding broadband deployment to unserved and underserved areas is self-evident⁷ and virtually unquestioned.⁸ Further, the lapse of the FCC's auction authority makes it all the more crucial that existing spectrum bands like the Lower 12 GHz be expanded for additional technologies and services.

CCIA understands that the Commission was reticent to authorize the Lower 12 GHz band for

¹ For more than fifty years, CCIA has promoted open markets, open systems, and open networks. CCIA members employ more than 1.6 million workers, invest more than \$100 billion in research and development, and contribute trillions of dollars in productivity to the global economy. The list of CCIA members is available at <https://ccianet.org/about/members/>.

² Published at 88 Fed. Reg. 43502 (July 10, 2023).

³ Published at 88 Fed. Reg. 43938 (July 10, 2023).

⁴ CCIA participates in and supports the work of the 5G for 12 GHz Coalition.

⁵ WT Docket 20-443, *Expanding Flexible Use of the 12.2-12.7 GHz Band*, Notice of Proposed Rulemaking, FCC 21-13 (Jan. 15, 2021), published at 86 Fed. Reg. 13266 (Mar. 8, 2021).

⁶ E.g., WT Docket 20-443, *Assessment of Feasibility of Coexistence Between NGSO FSS Earth Stations and 5G Operations in the 12.2-12.7 GHz Band*, RKF Engineering Solutions, LLC ([May 2021](#)); File No. RM-11768, *MVDDS 12.2-12.7 GHz Co-Primary Service Coexistence*, Tom Peters ([June 8, 2016](#)), *MVDDS 12.2-12.7 GHz Co-Primary Service Coexistence II*, Tom Peters ([June 23, 2016](#)).

⁷ E.g., WT Docket 20-443, *The 12 GHz Band: Analysis of Physical Characteristics and Applicable Technologies*, Roberson and Assoc., LLC ([July 7, 2021](#)) ("Roberson Report").

⁸ WT Docket 20-443, *Reply Comments of RS Access, LLC at 1-9* ([July 7, 2021](#)).



mobile services.⁹ The necessary alternative, at this time, is for the Commission to authorize the Lower 12 GHz band for terrestrial, high-power, point-to-multipoint service. As a fixed wireless option, this service will be less difficult to coordinate vis à vis extant DBS and NGSO service in the Lower 12 GHz while nonetheless unlocking more of this spectrum’s potential.

II. THE FCC SHOULD AUTHORIZE THE UPPER 12 GHz BAND FOR HIGH-POWER, TERRESTRIAL, MOBILE BROADBAND SERVICES.

The 12.7-13.25 GHz band is well suited for mobile broadband services. In general, mid-band spectrum in this range can reliably support high throughput with low path loss, and as a result requires less infrastructure deployment and investment.¹⁰ CCIA therefore supports the Commission’s proposal to authorize “any fixed or mobile service” for the Upper 12 GHz band pursuant to its flexible-use Part 27 Rules.¹¹

The record shows that “very few parties have argued that the current balance of incumbents in the 12.7 GHz band should be left unchanged and that the band should remain untouched.”¹² As such, and reliant on modern advancements in spectrum sharing,¹³ the Commission retains broad authority and discretion to authorize the Upper 12 GHz band for a wide array of services, including mobile broadband service. Though CCIA remains hopeful that both 12 GHz bands will eventually be authorized for mobile service, today it urges the Commission to take that step for the Upper 12 GHz and authorize high-power, terrestrial, mobile service by the end of 2023.

III. THE FCC SHOULD PERMIT UNLICENSED USE OF THE UPPER AND LOWER 12 GHz BANDS.

CCIA supports authorizing the unlicensed use of any wireless spectrum that safely can accommodate that model. The value that unlicensed spectrum brings to the U.S. economy is staggering; according to a January 2022 report issued by the Consumer Technology Association, unlicensed spectrum “generates \$95.8 billion per year in incremental sales value[.]”¹⁴

The Commission therefore should permit low-power unlicensed use of both the Lower 12 GHz¹⁵ and the Upper 12GHz band. As the Commission notes, the Part 15 Rules expressly protect licensed services – here, DBS, NGSO FSS and MVDDDS – from interference.¹⁶ And the success story of unlicensed use in the 6 GHz band serves as an appropriate example for how the Commission can responsibly allow unlicensed use. For the same reasons – scarcity, lapse in auction authority – set forth above, the Commission should truly maximize use of the Upper and Lower 12 GHz bands by authorizing unlicensed use of this spectrum at low power

⁹ WT Docket 20-443, Report and Order ¶ 2 (May 19, 2023).

¹⁰ Roberson Report at 1-3.

¹¹ *Upper 12 GHz Band NPRM*, 88 Fed. Reg. at 43968 ¶ 40.

¹² *Id.* at 43940 ¶ 5.

¹³ *See id.* at 43947 ¶ 34.

¹⁴ Laura Ambrosio and Jim Fellingner, *CTA Research: Unlicensed Spectrum Generates \$95.8 Billion Per Year* ([Feb. 1, 2022](#)).

¹⁵ *Lower 12 GHz Band FNPRM*, 88 Fed. Reg. at 43507 ¶¶ 11-12.

¹⁶ *Id.* at 43507 ¶ 12.



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Thank you for continuing to explore how the Lower 12GHz and Upper 12GHz bands can be best used in furtherance of America's broadband goals. CCIA remains available for any additional information that the Commission might need.

Sincerely,

Stephanie Joyce
Chief of Staff and Senior Vice President
CCIA

¹⁷ CCIA supports proposals to delay authorization of unlicensed use in the 12 GHz bands until applications for Broadband Equity, Access and Deployment (BEAD) funding, particularly applications from Tribal entities, are resolved.