

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Amendment of Part 90 of the Commission's Rules) WP Docket No. 07-100
To: The Commission

**COMMENTS
OF THE
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or “Alliance”), in accordance with Section 1.415 of the Federal Communications Commission (“FCC” or “Commission”) rules, is pleased to submit its comments in response to the Sixth Further Notice of Proposed Rulemaking in this proceeding.¹ Examining the current use of the 4.9 GHz band is more than timely, as evidenced by the fact that this is a Sixth FNPRM. This spectrum has been allocated for public safety operations for a substantial amount of time, and the FCC has questioned whether it is being used as intensively as anticipated or for the types of applications intended.² The Commission has an ongoing affirmative obligation either to assure itself that spectrum it has allocated is supporting an appropriate level of usage, or to adopt rule changes intended to promote greater utilization.

EWA has participated in multiple previous stages of this proceeding. It consistently has taken the position that allowing private enterprise users primary access to a significant portion of the allocation will benefit both those users and public safety entities. Extending eligibility to companies engaged in transportation, agricultural, manufacturing, heavy construction, and other major business activities, along with utilities and oil and gas producers, will create a much larger

¹ Amendment of Part 90 of the Commission's Rules, WP Docket No. 07-100, *Sixth Further Notice of Proposed Rulemaking* FCC 18-33 (2018) (“Sixth FNPRM”).

² Statement of Commissioner O’Rielly at 1.

ecosystem of prospective users and usages, and thereby incentivize the development of equipment and applications for the band. This, in turn, will serve the public interest, since this spectrum will be used more intensively for purposes such as securing the nation's electric grid, fortifying its infrastructure, streamlining its manufacturing facilities, and modernizing its farm operations, in addition to addressing public safety requirements.

As discussed below, the Alliance urges the Commission to broaden the eligibility criteria for this spectrum, but not open it for commercial use, and to adopt rules consistent with the efficient management of this allocation.

I INTRODUCTION

EWA is a national trade association representing business enterprises, wireless sales and service providers, hardware and software system vendors, and technology manufacturers. It has been an active participant in this proceeding because a number of its larger private enterprise members have an increasingly time-sensitive need to deploy self-provisioned, licensed broadband facilities in locations and with capabilities that are not consistent with commercial broadband offerings.³ The Alliance also represents a significant number of commercial service providers that offer primarily two-way dispatch communications for business and governmental customers. EWA's Board, which includes a large number of these commercial operators, nonetheless has endorsed the position that the 4.9 GHz band can best serve the public interest by being used for private enterprise and public safety operations and not commercial service.

³ EWA has joined with pdvWireless, Inc. in proposing a realignment of the Part 90 900 MHz band for private enterprise fixed and mobile usage. A 4.9 GHz allocation with much more limited propagation capability would be complementary and fill the need for greater capacity in a more localized operation. *See* WT Docket No. 07-100.

II THE MOST EFFICIENT AND BEST USE OF SPECTRUM OBJECTIVE MUST RECOGNIZE THE CRITICAL ROLE PRIVATE ENTERPRISE OPERATIONS PLAY IN THE NATION’S SAFETY AND ECONOMY.

The already lengthy record in this proceeding confirms one essential fact: Virtually all parties agree that more robust use of this spectrum is achievable. The Sixth FNPRM notes that only a very small percentage of potential public safety entities use this band, with fewer than 750 additional licenses issued between 2012 and 2018.⁴ The National Public Safety Telecommunications Council (“NPSTC”) filed a report almost five years ago in which it recommended, among other changes, that primary eligibility be extended to entities classified as Critical Infrastructure Industry (“CII”),⁵ with immediate access to two five-megahertz channels and the possibility of additional usage in the future.⁶ While the uses to which public safety entities put the spectrum may well be critical, more can and should be done with it.

1) Private Enterprise Entities Should be Eligible for Primary Use of 4.9 GHz Spectrum.

The Sixth FNPRM states that its goal is “to ensure that public safety continues to have priority in the band while opening up the band to additional uses that will facilitate increased usage, including more prominent mobile use, and encourage a more robust market for equipment and greater innovation....”⁷ EWA is concerned, however, that the Commission’s intensive focus on consumer-based services may have obscured its view of the broader range of telecommunications activities. In particular, in this and other proceedings, it seems not to recognize the vital importance of spectrum – narrowband, wideband, and broadband – for the businesses on which every consumer relies each and every day. The highest and best use of

⁴ Sixth FNPRM at ¶ 1.

⁵ The current CII definition is found in 47 C.F.R. § 90.7.

⁶ 4.9 GHz National Plan Recommendations, Final Report, filed by National Public Safety Telecommunications Council in a letter from Ralph A. Haller, Chair, NPSTC, to Marlene H. Dortch, Secretary, Federal Communications Commission, dated October 24, 2013 (“NPSTC Report”).

⁷ Sixth FNPRM at ¶ 3.

spectrum is not necessarily a mathematical calculation determined by the number of devices that can be squeezed into a band, irrespective of the content of their communications. The nation's major industries, whose products and services are at least as essential to consumers as their smartphones, use commercial networks for certain applications, but also must have access to licensed spectrum on which they can deploy self-provisioned systems that meet their standards for reliability, resiliency, coverage, and security. No commercial network is capable of addressing all the needs of non-consumer based subscribers, and few are fully accessible during emergencies when they are most urgently needed.

Supporters of opening the band for commercial operations describe the position as consistent with a movement away from central planning in favor of flexible spectrum use. In truth, however, commercial allocations are themselves a form of FCC central planning and a choice with a highly predictable outcome. They inevitably result in spectrum either being awarded to a small number of commercial operators through the auction process, or being made available on an unlicensed basis, or a combination of the two. The spectrum invariably is used for consumer-oriented services, with a limited number of providers and vendors defining what offerings are provided to the consumer marketplace.

To be clear, EWA supports commercial spectrum allocations, both licensed and unlicensed. It is a vocal advocate for spectrum sharing when it permits more intensive utilization while providing appropriate protection for incumbent licensees. But, when a band is allocated for commercial use, that effectively forecloses its availability for CII and other business enterprise operations, regardless of the flexible use opportunity label. Unlicensed spectrum simply is not suitable for the types of operations businesses conduct when operating their own systems. These systems are used to manage fleets of aircraft in extremely busy and wireless-

saturated airport environments, to maintain our electric grid with its ever-increasingly complexity, to ensure safety in extremely high-risk facilities such as refineries and nuclear plants, and for myriad other purposes that require a level of reliability and security that is not obtainable on unlicensed spectrum.

The Commission too readily seems to acquiesce to the claims from commercial carriers and their advocates that these business requirements can be met by acquiring auctioned spectrum in the secondary marketplace through partitioning and/or disaggregation. A vibrant secondary market is a spectrum policy objective that receives considerable support. But the experience of more than two decades and almost one hundred auctions, many of which involved spectrum designated for flexible commercial use, does not support that assumption. In all but the rarest instances, it is not practical from a business development standpoint or economically worthwhile for a commercial operator to carve out a relatively small piece of its geographic authority to accommodate the unique coverage requirements of local private carrier competitors and business enterprises that are viewed as potential customers for the commercial network.

This is not a criticism of commercial auction winners. It is not in their business interest to address these needs, nor is it their responsibility to ensure that these spectrum requirements are satisfied. That is the FCC's responsibility under the Communications Act, which charges it "... to make available, so far as possible, to all the people of the United States...a rapid, efficient, Nation-wide, and world-wide wire and radio communication service...for the purpose of promoting safety of life and property through the use of wire and radio communications..."⁸ The activities conducted on private wireless systems by CII and other business enterprise users unquestionably promote the safety of life and property and should be recognized as consistent with the highest and best use of spectrum.

⁸ 47 U.S.C. § 151.

For these reasons, EWA’s filings in response to the NPTSC Report endorsed a number of its points, but also urged the Commission to expand eligibility beyond the CII user-only community, but not to commercial providers. EWA has noted repeatedly that the current CII definition was adopted in response to a specific legislative action involving a different spectrum band more than three decades ago. Regarding this band, the Alliance questions why members of the airline and farming industries, for example, would not be welcome as 4.9 GHz licensees, since their operations clearly are essential to the nation, are highly safety-related, and are of a scale that would justify investment in a system for their own use. Indeed, EWA recommended that 4.9 GHz eligibility be extended to all business enterprise users, since any number of them have identified a compelling demand for self-provisioned broadband facilities.

Alternatively, rather than relying on the Section 90.7 CII definition, the Commission could adopt for the 4.9 GHz band the Department of Homeland Security (“DHS”) identification of entities included in its national plan: Partnering for Critical Infrastructure Security and Resilience.⁹ DHS’s objective was to create a collaborative, integrated approach toward strengthening the nation’s various critical infrastructure elements through management of physical and cyber risks. DHS included the following industries as part of the Critical Infrastructure Section in addition to governmental and emergency services:

- Chemical
- Critical Manufacturing
- Information Technology
- Nuclear Reactors, Materials & Waste
- Food and Agriculture

⁹ See U.S. Department of Homeland Security. *NIPP 2013: Partnering for Critical Infrastructure Security and Resilience*. Available at: <https://www.dhs.gov/sites/default/files/publications/national-infrastructure-protection-plan-2013-508.pdf> (July 7, 2017).

- Defense Industrial Base
- Energy
- Healthcare and Public Health
- Financial Services
- Water and Wastewater Systems
- Transportation Systems

EWA agrees that these industry categories capture the great majority of private enterprise entities whose localized broadband requirements might not be satisfied on a commercial network and, therefore, would need to have a system designed to their particular specifications. They also correspond closely to the definition of eligible 4.9 GHz users proposed by EWA and other non-public safety members of the CII Task Team that participated in development of the NPSTC Report:

Application for and use of the 4.9 GHz band shall be made available to CII and those entities whose use of the spectrum shall directly benefit public safety or activities that enhance the ability to protect property, the environment, and the American public, which shall include the safety and security of the American workforce.¹⁰

Public safety and these types of entities co-exist successfully in many bands pursuant to appropriate frequency assignment policies, in large part because they have similar technology and operating requirements. There is no reason to believe that they cannot effectively share the 4.9 GHz band as well.

2) Frequency Coordination

In its Comments on the NPSTC Report, EWA opposed NPSTC's recommendation that only public safety coordinators be permitted to coordinate applications for the 4.9 GHz band, including applications from whatever non-public safety entities eventually are permitted to

¹⁰ NPSTC Report at n. 14.

operate on this spectrum. The Alliance pointed out that it and certain other non-public safety Frequency Advisory Committees (“FACs”) have both the capability and commitment to process applications in accordance with whatever rules and policies the FCC adopts for the band. It reminded NPSTC that some of these FACs already exchange information regularly with public safety FACs when handling applications for Sprint-vacated spectrum and adhere to the specialized procedures for processing such requests.¹¹ It explained that as long as the technical criteria adopted by the Commission for the 4.9 GHz band are followed by all FACs, all eligible licensees will enjoy the appropriate level of interference protection.¹²

EWA’s Reply Comments in response to the NPSTC Report expressed surprise and strong disagreement with the Joint Comments filed by the Forestry Conservation Communications Association, the International Municipal Signal Association, and the International Association of Fire Chiefs, all of which are members of NPSTC, in which they alleged that there had been significant problems in working with non-public safety FACs in coordinating Sprint-vacated spectrum. The Alliance challenged those parties to identify any such problems. It is notable that none has done so, either individually or collectively. Moreover, while NPSTC has submitted more than a half-dozen *ex parte* filings in this proceeding since the Joint Comments submitted by those three members, including filings specifically refuting positions advanced by Presidential Partners Consulting and Federated Wireless, Inc., it has not endorsed those claims or provided any supporting documentation.

¹¹ See Public Safety and Homeland Security Bureau Announces Applications and Licensing Procedures for Channels Relinquished by Sprint Nextel Corporation in the 809-809.5/854-854.5 MHz Band, *Public Notice*, WT Docket No. 02-55, 23 FCC Rcd 18343 (2008).

¹² To ensure that these rules and policies are followed, EWA recommends that only FACs that maintain day-to-day operational control over their spectrum management decisions and frequency recommendations be recognized by the FCC as qualified to coordinate 4.9 GHz applications.

Therefore, EWA again urges the FCC to adopt coordination rules for this band that mirror those applicable to Sprint-vacated spectrum. All qualified FACs should be permitted to process applications for any entity eligible to operate in the band. At a minimum, non-public safety FACs must be authorized to handle applications from non-public safety entities to ensure that all qualified applicants receive comparable access to this spectrum.

Further, EWA agrees with the Commission that there would be no need for a five-day review period of applications by public safety Regional Planning Committees (“RPCs”).¹³ The FCC has proposed to give RPCs ample opportunity to develop regionalized plans, provided that they not restrict non-public safety licensing beyond what is permitted under the FCC rules.¹⁴ A review of individual applications would be burdensome and duplicative of the frequency coordination process.¹⁵

III ADDITIONAL COMMENTS

The Commission has proposed to allow public safety entities one year to provide the site-based information needed to allow FACs to protect their operational facilities from subsequently filed applications.¹⁶ This seems to EWA to be an overly generous period. Public safety organizations identify themselves as the optimum managers of public safety wireless networks. Consequently, public safety entities that are operating 4.9 GHz facilities should have their site-specific information reasonably available. The Alliance cannot imagine why it would take up to 365 days to submit the same type of information that they file routinely for other systems that they operate, particularly since they now are on notice that they will need to do so at some future

¹³ Sixth FNPRM at ¶ 29.

¹⁴ *Id.* at ¶¶ 41-44.

¹⁵ *Id.* at ¶ 29.

¹⁶ *Id.* at ¶ 36.

date. In EWA's opinion, 60 days from the date that the FCC releases a public notice announcing the filing window should be ample to complete that task.

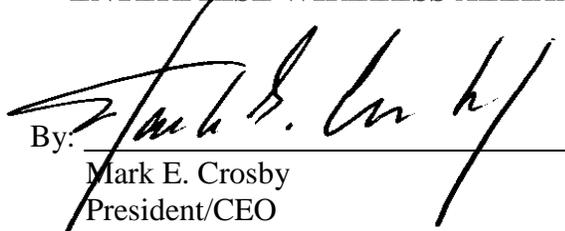
Finally, while EWA would not object to a public safety licensee that has built and operated a 4.9 GHz system leasing some or all of its spectrum to another public safety entity, it would oppose extending the leasing option to commercial or even business enterprise users. Creating an arbitrage opportunity for public safety entities to acquire spectrum for the purpose of leasing it, rather than utilizing it for public safety operations, defeats the purpose of designating spectrum for public safety use in the first place.

IV CONCLUSION

EWA urges the Commission to adopt rules that will promote the more robust utilization of this band under rules that are consistent with the recommendations herein.

Respectfully submitted,

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July 6, 2018