



Advancing Global Communications

August 13, 2007

Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington, DC 20554

RE: Notice of Proposed Rulemaking (“NPRM”) “In the Matter of Amendment of Part 90 of the Commission’s Rules,” WP Docket No. 07-100

Dear Ms. Dortch:

The Private Radio Section (“PRS”) of the Wireless Communications Division (“WCD”) of the Telecommunications Industry Association (“TIA”)¹ by filing these comments in the above referenced matter intends to reaffirm the position of PRS as stated in the previous letter of support filed with the Commission in September, 2005.² Such earlier PRS filing specifically supported a Petition for Clarification/Rulemaking that had been filed by a TIA member, and such earlier support letter specifically noted the need for clarity in the Commission’s Rules to realize “...the most effective use of this critical public safety spectrum...on a near term basis.” Additionally, after much discussion and review of the matter addressed in the NPRM, PRS also proposes a simple rule’s change, which PRS believes may sufficiently clarify the rules to prevent unwarranted misinterpretation.

There are several reasons PRS believes the needed clarification can be achieved through some simple changes to the current Commission rules. First, The Commission’s technical rules for the 4.9 GHz band³ already effectively limit so-called “traditional point-to-point” backhaul links by limiting antenna gain and EIRP. Additional limitation on permanent fixed links that are an integral part of a 4.9 GHz broadband public safety network is unnecessary and quite possibly frustrates or discourages deployment of the very broadband networks the Commission hoped to encourage when the 4.9 GHz

¹ TIA is the leading trade association serving the information and communications technology (ICT) industry, with over 600 member companies that manufacture or supply the products and services used in global communications. TIA represents its’ members on the full range of public policy issues affecting the ICT industry and forges consensus on industry standards. On occasion, a TIA division or section of a TIA division will file in a regulatory proceeding representing the views of only the members of that division or section. Therefore, this letter containing comments of the Private Radio Section of the Wireless Communications Division only represents the consensus view of the members of the Private Radio Section.

² On September 16, 2005, PRS filed a letter of support in proceeding WT Docket No. 00-32, indicating it supported the Amended Petition for Clarification/Rulemaking, filed by M/A-COM, Inc on August 23, 2005.

³ See 47 C.F.R. § 90.1215

spectrum was allocated for public safety broadband use. PRS notes these EIRP limits in the Commission's current rules are significantly less than the limits allowed for and actually deployed in traditional Part 101 links. Limiting all possible "fixed" links in a 4.9 GHz broadband public safety network to secondary status, may severely limit the deployment of 4.9 GHz mobile broadband networks, but realize little or no additional benefit from the further limitation of traditional backhaul links in the 4.9 GHz spectrum.

Second, potential interpretation of the existing 4.9 GHz rules as limiting fixed links associated with a 4.9 GHz broadband public safety network to secondary licensing status does not reflect the propagation realities in which such 4.9 GHz broadband public safety networks will operate. Because of the propagation characteristics of this band, the typical urban coverage footprint from an access point to a subscriber is on the order of a few hundred meters. To alleviate this problem, a number of innovative network technologies, often referred to as mesh-networks or multi-hop networks, have been developed that allow for messages to "hop" from access-point to access-point to traverse an infrastructure grid – providing an effectively large coverage area through an interconnected grid of access points. Unfortunately, these access-point to access-point links may be interpreted as permanent fixed point to point link, which would be interpreted as "secondary" thereby making it impossible for any license to expect permanent utilization of the technologies that the Commission wanted to encourage when the rules for 4.9 GHz were initially adopted.

Third, any interpretation of the rules indicating all permanent fixed links are secondary appears to frustrate the Commission's intent to rely on the discretion of the public safety community in managing this public safety spectrum. The rules for the 4.9 GHz band created a band licensing plan providing for geographical, overlapping 4.9 band licenses for all eligible licensees. The rules go on to clearly state "all licensees shall cooperate in the selection and use of channels in order to reduce interference and make the most effective use of facilities."⁴ Then, to further facilitate sharing of the 4.9 spectrum among all eligible licensees the rules provide Regional Planning Committees the opportunity to develop and submit plans on guidelines for sharing the spectrum within a given region.⁵ By adopting this licensing plan the Commission recognized that it is in the best interest of the public safety community, and the public interest, to empower the public safety community to self-manage the operational details employed in the band in order to realize maximum utilization of the band consistent with the public safety needs in a given area. However, the rules provisions regarding the arbitrary 1 (one) year differentiation between temporary and permanent determinations and the possible application of secondary status preempts the public safety community's ability to adequately manage the utilization of the spectrum to best serve the needs of public safety as embodied in §§90.1209(b) and 90.1211(a). Blanket interpretation and application of "secondary" status likely means many permanent fixed applications that are integral parts of 4.9 GHz broadband public safety networks would receive little or no protection even though such applications had been determined by the public safety community to be the most important and meaningful use of the spectrum.

⁴ See 47 CFR §90.1209(b)

⁵ See 47 CFR §90.1211(a)

PRS believes that the Commission can take this opportunity to clarify the current rules, while also furthering the Commission's desire for the public safety community to self-manage the operational details that they have employed in the 4.9 GHz band. With the appropriate clarification, the Commission can assure that the 4.9 GHz band is best utilized for the provision of mobile broadband public safety services for which the spectrum was originally allocated.

In conclusion, PRS recommends some simple changes to the wording of §90.1207 that will effectively clarify the situation concerning fixed links in 4.9 GHz broadband networks. At the same time, PRS recommends that the Commission develop and maintain a sufficient database for investigative purposes, in the very unlikely case any interference problems arise at some point in the future. Accordingly, PRS suggests that the Commission reword §90.1207(d) as follows:

(d) A 4940-4990 MHz band license gives the licensee authority to operate permanent fixed point-to-point stations that are an integral part of a 4.9 GHz mobile broadband public safety network. Licensees choosing to operate permanent fixed point to point stations that are not an integral part of a 4.9 GHz mobile broadband public safety network must license such stations individually on a site-by-site basis. Permanent fixed point to point stations that are an integral part of a 4.9 GHz mobile broadband public safety network will be authorized on a primary basis.

In light of these very serious policy implications, PRS respectfully urges the Commission to expeditiously issue this much needed clarification.

Respectfully submitted,

/s/ Wayne Leyland

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Private Radio Section