

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

In the Matter of )  
 )  
Implementation of Sections 309(j) and 337 )  
of the Communications Act of 1934 as Amended ) WT Docket No. 99-87  
 )  
Promotion of Spectrum Efficient ) RM-9332  
Technologies on Certain Part 90 )  
Frequencies )  
  
To: The Commission

**COMMENTS  
OF THE  
ENTERPRISE WIRELESS ALLIANCE  
IN RESPONSE  
TO  
PETITION FOR RECONSIDERATION**

The Enterprise Wireless Alliance (“EWA” or “Alliance”), in accordance with Section 1.429(f) of the Federal Communications Commission (“FCC” or “Commission”) Rules and Regulations, respectfully submits its Comments on the Petition for Reconsideration in the above-entitled proceeding<sup>1</sup> filed by the City of New York (“NY Reconsideration Request”).<sup>2</sup> The NY Reconsideration Request indicates concern about the FCC’s expressed intention in the Third R&O to establish a date certain for migration of Private Land Mobile Radio Service (“PLMRS”) systems below 512 MHz to 6.25 kHz technology once that technology has matured and been tested.<sup>3</sup> The NY Reconsideration Request notes that public safety interoperability could be

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<sup>1</sup> Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended/Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, WT Docket No. 99-87, *Third Report and Order*, 22 FCC Rcd 6083 (rel. March 26, 2007) (“Third R&O”).

<sup>2</sup> Petition for Reconsideration filed by the City of New York, Department of Information Technology and Telecommunications, *Public Notice*, Report No. 2817 (rel. May 30, 2007).

<sup>3</sup> Third R&O at ¶ 11.

seriously impaired if the FCC mandates 6.25 kHz bandwidth systems without permitting licensees an opportunity to develop “reasoned migration paths” for this initiative.<sup>4</sup>

EWA agrees that the FCC rules must provide the PLMRS industry with the opportunity to develop rational, cost-effective approaches toward the integration of advanced, more efficient technologies in these historically heavily-used, highly congested bands. Most important, the Commission must continue to recognize that there are multiple paths to enhanced technical efficiency and that the rules must be sufficiently flexible to permit deployment of the variety of advanced technologies that have or will become available for use in these bands.

## **I. INTRODUCTION**

EWA represents a broad alliance of business enterprise users, service providers, radio dealers and technology manufacturers, all of which use or provide wireless telecommunications products or services. A significant number of EWA’s members operate either exclusively or for part of their communications capabilities on the bands at issue herein. The Alliance’s manufacturer members are at the forefront of developing technologies that will permit EWA’s user members to derive more intensive use of this spectrum. The “refarming” proceeding is an instrumental part of this initiative. The decisions reached by the Commission in this more than decade-long proceeding will have a profound impact on existing licensees in these bands as well as on future users. Thus, EWA and its members have a substantial interest in the FCC’s actions in the Third R&O.

## **II. BACKGROUND**

The Commission began this effort to maximize the efficient use of the PLMRS bands below 512 MHz twelve years ago.<sup>5</sup> The basic premise of the initiative was that a migration to

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<sup>4</sup> NY Reconsideration Request at 3.

<sup>5</sup> See Replacement of Part 90 by Part 88 to revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 10076, 10092 (1995).

increasingly narrower bandwidths would promote more intensive use of this spectrum. Among other steps, the Commission adopted rules that provided for full power 12.5 kHz bandwidth interstitial channels in the 450-512 MHz bands and full power 7.25 kHz bandwidth interstitial channels in the VHF band. The Commission also provided for a future narrowing of operations on this spectrum to 6.25 kHz bandwidth. Those actions did not create “new” PLMR spectrum, but were intended to provide additional capacity in existing bands by creating more communications paths within the same spectrum.

In 2004, the Commission adopted rules that established a January 1, 2013 date certain for migration of all PLMRS users in these bands to 12.5 kHz technology.<sup>6</sup> The industry has taken that deadline to heart and, in the three years since its adoption, has made significant progress toward deriving even more intensive utilization out of this already heavily used band. Many incumbent licensees already have either modified their existing equipment to satisfy the 12.5 kHz bandwidth requirement or, when necessary, have purchased new 12.5 kHz-capable equipment to meet that standard. New users are implementing 12.5 kHz bandwidth systems at the outset.

PLMRS equipment manufacturers also have made substantial investments in the development of more advanced and efficient technologies with results that are fully consistent with the FCC’s mandate. In the past year, they have introduced equipment with 6.25 kHz bandwidth FDMA capability, as well as both two-slot 12.5 FDMA and two-slot 12.5 kHz TDMA capability. Each of these approaches provides a valuable migration approach for certain PLMRS licensees and each already has enjoyed substantial interest within the PLMRS marketplace.

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<sup>6</sup> Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended/Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, WT Docket No. 99-87, *Third Memorandum Opinion and Order, Third Further Notice of Proposed Rule Making and Order*, WT Docket No. 99-87, 19 FCC Rcd 25045 (2004).

Thus, the PLMRS community is already well on its way to satisfying the FCC's current spectrum efficiency standards. EWA, as an organization charged by the Commission with the responsibility to help manage efficient use of this scarce resource, is squarely committed to working with its members, with the FCC, and with the rest of the PLMRS industry to promote appropriately intensive use of these bands. It has supported this Commission initiative with the caveat that the pace of technological change in telecommunications does not permit, and indeed would be stifled by, adoption of a "one size fits all" approach to efficient spectrum utilization. It is critical that the FCC maintain its current posture of establishing efficiency standards, such as those embodied in FCC Rule Section 90.203(j)<sup>7</sup> rather than dictating the particular technology by which those efficiencies must be achieved. To the extent that the Commission remains true to that approach, the PLMRS industry will be well-served.

**III. THE PLMRS RULES THAT PROVIDE FOR ALTERNATIVE APPROACHES TO SATISFYING SPECTRUM EFFICIENCY STANDARDS SHOULD BE REAFFIRMED AS THE INDUSTRY MIGRATES TO ADVANCED TECHNOLOGIES.**

In its Comments in the most recent phase of this proceeding, EWA noted that there have been dramatic technical advances in the wireless world since the "refarming" of the PLMRS bands below 512 MHz began. None is more striking than the endorsement of broadband technologies by wireless users around the globe. The features and flexibility that are available on broadband have permitted it to eclipse other advanced techniques in a relatively brief period. As broadband itself advances from 3G to 4G capabilities, its dominant position in the wireless marketplace likely will be further enhanced.

The PLMRS bands below 512 MHz are not well-suited for truly wideband technologies because of their very high levels of incumbency and, therefore, very limited opportunities for channel exclusivity. Nonetheless, it is important that the Commission's rules not stifle the

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<sup>7</sup> 47 C.F.R. § 90.203(j).

development of other approaches that would promote more intensive utilization of these bands. Instead, it should maintain its posture of flexibility in the means by which users are permitted to meet their spectrum efficiency obligations.

For that reason, the Alliance endorsed the FCC's decision to adopt an "efficiency equivalency" alternative when it established a date certain for conversion to 12.5 kHz bandwidth systems. FCC Rule Section 90.203(j) defines efficiency, not by operation on a particular channel bandwidth, but by requiring that equipment either operate on that bandwidth or meet an efficiency standard of one voice or data channel path equal to that bandwidth. The flexibility of that approach to efficiency standards has permitted different equipment manufacturers to pursue different paths to spectrum utilization and has allowed users to select from among those approaches based on their individual requirements, the epitome of a regulatory framework that does not operate in a command-and-control mode.

While the Third R&O does not specifically reference the provisions of Rule Section 90.203(j), a rule that applies to both 12.5 kHz bandwidth requirements and the 6.25 kHz requirements under consideration herein, the rule remains in effect and available to support the hugely varied PLMRS user community. The Commission was correct to anticipate that this greater flexibility would result in the very types of innovations that now are being made available to that user community and, thus, was consistent with the public interest. That conclusion has been confirmed by the introduction of a variety of system technologies, all of which are different, but each of which is able to meet the FCC's efficiency requirements.

EWA commends the Commission for having adopted the regulatory approach embodied in Section 90.203(j). It encourages the FCC to emphasize the alternative paths by which its efficiency requirements can be satisfied in all of its further pronouncements on this subject. In fact, EWA has been an active participant within the Land Mobile Communications Council

("LMCC") in that organization's work in identifying regulatory changes that should be adopted with respect to FCC Rule Section 90.187 and other regulations that define frequency assignment policies that are affected by the introduction of these more advanced, more efficient technologies. The LMCC intends to submit these proposed rule changes to the Commission in the near-term future so that the full benefits of these technologies can be realized without compromising the communications of existing users.

#### **IV. CONCLUSION**

EWA supports the Commission's efforts to promote intensive utilization of this spectrum, provided that it does so in a manner that is consistent with the "reasoned migration paths" called for in the NY Reconsideration Request and provided that its rules promote, rather than curtail, equipment choices for the very broad range of PLMRS users. The Alliance hopes to work with the Commission in achieving these critical regulatory objectives.

Respectfully submitted,

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June 21, 2007

**CERTIFICATE OF SERVICE**

I, Linda J. Evans, a secretary in the law office of Lukas, Nace, Gutierrez & Sachs, Chartered, hereby certify that I have, on this 21<sup>st</sup> day of June, 2007, caused to be mailed, first-class, postage prepaid, the foregoing Comments to the following:

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Linda J. Evans