

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

In the Matter of)	
)	
Amendment of Part 90 of the Commission's Rules)	
to Permit Terrestrial Trunked Radio (TETRA))	WT Docket No. 11-69
Technology)	
)	
)	
Request by the TETRA Association for)	ET Docket No. 09-234
Waiver of Sections 90.209, 90.210 and)	
2.1043 of the Commission's Rules)	

To: The Commission

**REQUEST FOR CLARIFICATION
OR,
IN THE ALTERNATIVE,
FOR LIMITED RECONSIDERATION
FILED BY
ENTERPRISE WIRELESS ALLIANCE**

The Enterprise Wireless Alliance (“EWA” or “Alliance”) requests clarification of one aspect of the Federal Communications Commission (“FCC” or “Commission”) Order in the above-entitled proceeding.¹ If the FCC determines that this issue cannot be addressed through clarification, then the Alliance requests limited reconsideration of the *Order* to the extent detailed herein.

I BACKGROUND

In 2009, the TETRA Association (“Association”) submitted a waiver request asking that the Part 90 rules governing occupied bandwidth limits (FCC Rule Section 90.209) and emission masks (FCC Rule Section 90.210) be waived to permit TETRA technology to be implemented in

¹ *Notice of Proposed Rule Making and Order*, ET Docket No. 09-234, FCC 11-63 (rel. Apr. 26, 2011) (“*Order*”). Although public notice of the Notice of Proposed Rule Making (“*NPRM*”) portion of this FCC document was by publication in the Federal Register, public notice of the *Order* was upon release of the document.

the United States (“Waiver Request”).² It also requested waiver relief to allow manufacturers that had received interim equipment authorizations at reduced power to increase their power levels and upgrade to the TETRA standard without securing a new grant of equipment certification (FCC Rule Section 2.1043(a)).

The FCC has taken several actions in response to the Waiver Request. First, it placed the Request on Public Notice and requested comment on it.³ While the *Order* describes the responses as “split between supporting and opposing” the Request, it should be noted that the opponents included the Land Mobile Communications Council (LMCC), the Association of Public Safety Communications Officials-International, Inc. (APCO), the National Public Safety Telecommunications Council (NPSTC), and the Telecommunications Industry Association (TIA), organizations that collectively represent virtually every Part 90 licensee. Most of the parties that opposed grant of the blanket waiver sought by the TETRA Association raised concerns about potential interference in the heavily shared Part 90 bands and urged the FCC instead to open a Notice of Proposed Rule Making in which the technical issues involved could be examined fully.

In response, the FCC initiated the instant *NPRM* in which it has proposed to modify its rules to permit the certification and use of TETRA equipment under Part 90. EWA expects to participate in that aspect of this proceeding as well. In this same *Order*, the Commission also granted the Waiver Request in part, subject to certain conditions pending the outcome of the rulemaking proceeding, based on a determination that waiving the rules at issue “would not

² See Request for Waiver of Section 90.209, 90.210 and 2.1043 (filed Nov. 20, 2009).

³ See Office of Engineering and Technology Declares the TETRA Association’s Request for Waiver of Parts [sic] 90.209, 90.210 and 2.1043 to be a “Permit-But-Disclose” Proceeding for *Ex Parte* Purposes and Requests Comment, *Public Notice*, ET Docket No. 09-234, 24 FCC Rcd 14718 (OET 2009).

likely cause increased interference to adjacent channel uses.”⁴ Because of the concerns that had been raised about potential interference, both adjacent channel and near-far, and the possible impact on public safety interoperability, the waiver to use TETRA equipment does not extend to Public Safety Pool spectrum, but is limited to operations on 450-470 MHz band Industrial/Business Pool (“I/B”) frequencies and ESMR frequencies in the 800 MHz band.⁵ The FCC also announced that licensees wishing to replace their existing systems with TETRA equipment would not be required to secure frequency coordination if the only change was to reflect the TETRA emission, since such an application would not “have an impact on near-term frequency selections.”⁶

II INTRODUCTION

EWA is a national trade association representing business enterprises and wireless sales and service providers, hardware and software system vendors and technology manufacturers. Virtually all of the Alliance’s members conduct some wireless operations on Part 90 spectrum and many have systems on Industrial/Business Pool frequencies in the 450-570 MHz band. EWA, including through its predecessor organization, the Industrial Telecommunications Association, has been an FCC-certified Frequency Advisory Committee since 1987 and processes more than 9,000 requests for licensing application assistance and frequency coordination annually. EWA is a long-standing member of the LMCC and takes an active interest in all matters that involve the use of Part 90 spectrum, including the process by which new technologies are implemented in these bands.

⁴ *Order* at ¶ 20.

⁵ *Order* at ¶ 22.

⁶ *Order* at n. 59 (citing Frequency Coordination in the Private Land Mobile Radio Services, *Report and Order*, PR Docket No. 83-737, 103 F.C.C. 2d 1093, 1150 ¶ 116 (1986)).

III THE FCC SHOULD CLARIFY THAT THE FREQUENCY COORDINATION EXEMPTION IN THE ORDER APPLIES ONLY WHEN CONVERTING TO TETRA ON AN EXCLUSIVE CHANNEL

The Alliance strongly supports and encourages the introduction of innovative, spectrally efficient technologies into the very limited spectrum that has been made available for business enterprise users and the wireless providers that serve their primarily dispatch and other more localized requirements. For example, in April 2009, EWA submitted a Petition for Rule Making asking the FCC to approve the use of interstitial 12.5 kHz 800 MHz channels on a nationwide basis.⁷ The Alliance's proposal balanced the need to protect incumbent systems from destructive interference while still providing opportunities for making more intensive use of this spectrum. EWA also is working diligently with its own members and with the LMCC to facilitate the upcoming migration of many Part 90 licensees to narrowband operations⁸ and, when possible, to more advanced digital technologies that can be deployed on these channels.

The Alliance also has been supportive of changes in the rules to eliminate the frequency coordination requirement when it is unnecessary for optimal spectrum management. EWA endorsed the FCC's proposal to eliminate coordination for applications proposing a reduction in power or antenna height, neither of which could have an adverse impact on co-channel or adjacent channel licensees.⁹ It urged the Commission to exempt from coordination applications filed in response to the mandatory conversion from wideband to narrowband operation when that was the only modification proposed since, again, such a change would affect neither co-channel

⁷ See *Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Seek Comment on the Petition by Enterprise Wireless Alliance Requesting the Creation of New, Full Power, Interstitial 12.5 kHz Channels in the 800 MHz Band*, Public Notice, DA No. 09-2183, rel. Oct. 8, 2009.

⁸ See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Third Memorandum Opinion and Order, Third Further Notice of Proposed Rule Making and Order*, WT Docket No. 99-87, 19 FCC Rcd 25045, 25051-52 ¶¶ 12-13 (2004) (requiring most PLMR licensees in the 150-174 MHz and 421-512 MHz bands to migrate to 12.5 kHz technology by January 1, 2013) (*Narrowbanding Memorandum Opinion and Order*); see also 47 C.F.R. § 90.209(b)(5).

⁹ Amendment of Part 90 of the Commission's Rules, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, WP Docket No. 07-100, 25 FCC Rcd 2479 (2010) ("Part 90 Amendment").

nor adjacent channel licensees.¹⁰ EWA's position consistently has been that frequency coordination should be required when an application reasonably could be expected to impact the spectrum environment and eliminated when it would not, an approach that protects equally the interests of incumbents and those investing in new systems in the heavily encumbered Part 90 bands.

Thus, while EWA welcomes the availability of digital technologies such as TETRA for Part 90 users, it must request clarification of the FCC's statement that coordination should not be required "for modification applications filed pursuant to this waiver where the only change is to reflect the TETRA emissions."¹¹ It is not clear to EWA whether the Commission intended the exemption to apply only to exclusive channels in the bands to which the waiver applies, but it should. If read literally and applied to shared channels as well, on which analog operations are, by far, the predominant mode of operation, this decision would undermine the very purpose of frequency coordination in these bands and would contradict the Commission's decision reached just over a year ago in WP Docket No. 07-100.¹²

It is instructive to review the FCC's reasoning in that Order when it chose to limit the coordination exemption to applications proposing only a reduction in bandwidth:

The *Notice* also sought comment on whether to eliminate the frequency coordination requirement for applications where the only change is a reduction in authorized bandwidth on the licensed center frequencies. Half of the commenters addressing this issue argue that frequency coordination should be required for any change in technical parameters, including a reduction in authorized bandwidth, to protect nearby co-channel and adjacent channel licensee operations from new and potentially harmful interference. The other commenters contend that frequency coordination is not necessary for modifications that propose only a reduction in bandwidth on the licensee's currently authorized center frequency, because such a reduction cannot have an adverse impact on co-channel or adjacent channel licensees. They emphasize that such an exemption from

¹⁰ *Id.*

¹¹ *Order* at n. 59.

¹² The Waiver also applies to the 800 MHz ESMR band where all channels are assigned on an exclusive basis and where no prior frequency coordination is required, as the FCC is responsible for coordination of channels in that band segment.

the frequency coordination requirement should be limited to applications proposing only to reduce channel bandwidth while remaining on the original center frequency, **and not seeking any other changes to the existing license, such as converting from analog to digital emission.**

Removing the frequency coordination requirement for applications that modify existing licenses by reducing authorized bandwidth will not undermine the purpose of the frequency coordination process, i.e., to ensure the quality of frequency selections, expedite licensing, and improve spectrum efficiency to the benefit of private land mobile users. It therefore is in the public interest and is consistent with the Commission's goal of reducing unnecessary regulatory burdens on licensees. In addition, we note that most PLMR licensees below 512 MHz will be required to migrate from 25 kHz operation to 12.5 kHz or narrower operation on their existing frequencies, and we find that removing the frequency coordination requirement for such applications will further the upcoming narrowbanding transition without disturbing the integrity of the frequency coordination process or the Commission's overall spectrum management objectives. **As a result, we amend our rules to provide an exemption from the frequency coordination requirement for modification applications that only reduce authorized bandwidth while remaining on the original center frequencies, and do not seek any other changes in technical parameters.**¹³

The 450-470 MHz I/B spectrum has been allocated for Private Land Mobile Radio use for half a century. Until very recently, the regulatory framework for this band was predicated entirely on shared use of channels. Licensees were not afforded any exclusivity or protected service areas. Rather, the same channel is assigned to multiple parties in the same geographic area, all of whom are required to monitor before transmitting and generally coordinate and cooperate in their use of the spectrum to promote the efficient use of these predominately shared frequencies. While FCC Rule Section 90.187 now provides an opportunity to secure exclusivity under defined circumstances, it is exceedingly difficult to satisfy those technical requirements in markets of any size because the spectrum is already encumbered with 50 years' worth of systems. Based on the FCC's belief that TETRA equipment will not cause increased interference to adjacent channel users, it may be accurate that frequency coordination is not essential when a licensee on an exclusive channel converts to that technology. However, because the great majority of I/B channels in the 450-470 MHz band still are assigned on a

¹³ Part 90 Amendment at ¶¶ 6-7 (citations deleted; emphasis added).

shared basis, adjacent channel considerations are only one element to consider when determining what requirements should be applied to entities seeking to deploy TETRA.¹⁴

Perhaps because of the historically shared spectrum environment, it is only recently that digital technologies have been developed for this band. The Alliance has welcomed this opportunity for enhanced user capabilities and has worked with all vendors to facilitate the introduction of their various digital solutions. Doing so requires careful coordination in this largely shared and analog spectrum environment, both to produce a satisfactory result for the new entrant investing in digital technology and to minimize any adverse impact on incumbent analog users. Presumably TETRA proponents themselves have an interest in maintaining frequency coordination protocols for their technology so as to avoid instances of harmful interference in shared spectrum environments, a result that they and their customers would be obligated to address at potentially great expense.

The FCC acknowledged the important role coordination plays in balancing these interests in furtherance of improved spectrum efficiency just one year ago. The Commission recognized that an application for digital technology could have an impact on other frequency recommendations and the spectrum environment generally. It, therefore, retained the coordination requirement for conversion to digital emission both for shared and exclusive Part 90 channels. The reversal of that decision in the instant *Order* and only vis-à-vis TETRA equipment is remarkable and, at least with regard to shared channels, inconsistent with established principle of sound spectrum management in these bands.

The Alliance is committed to promoting the efficient and effective use of the 450-470 MHz I/B band. This responsibility is particularly challenging during a time when all users are

¹⁴ The FCC also should be aware that a number of public safety systems operate on these I/B channels as well and will be impacted by the blanket waiver relief granted in the *Order*.

obligated to convert to narrowband equipment, some users are attempting to secure channel exclusivity, and some wish to migrate to digital technology in a still largely analog spectrum environment. As the Commission itself has noted, frequency coordination is a proven means “to ensure the quality of frequency selections, expedite licensing, and improve spectrum efficiency to the benefit of private land mobile users.”¹⁵ For this reason, EWA respectfully requests the FCC clarify its statement in the *Order* and confirm that prior frequency coordination still is required before converting an existing system authorized for shared channels to TETRA technology.

Respectfully submitted,

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¹⁵ See n. 13 *supra*.

CERTIFICATE OF SERVICE

I, Linda J. Evans, with the law firm of Lukas, Nace Gutierrez and Sachs, LLP, hereby certify that I have, on this May 26, 2011 caused to be mailed, first-class, postage prepaid, a copy of the foregoing to the following:

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