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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

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In the Matter of	)	
	)	
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
	)	
and	)	
	)	
Examination of Exclusivity and Frequency Assignment Policies of The Private Land Mobile Radio Services	)	

To: The Commission

PETITION FOR RECONSIDERATION

Respectfully submitted,

AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION, INC.

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May 19, 1997

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SUMMARY

AMTA recommends that the FCC clarify or reconsider certain aspects of the Second Report and Order in this proceeding.

First, the Association urges the Commission to clarify that the monitoring requirement for decentralized trunking systems may be satisfied either through manual monitoring by mobile/control station operators or by automatic monitoring at the unattended repeater location. This clarification would be consistent with the existing rules governing monitoring on shared frequencies, and would enable parties to implement whatever measures are appropriate to minimize the potential for harmful interference.

AMTA also recommends that the Commission revise its rules governing the permissibility of centralized trunking. Specifically, the Association suggests that the FCC permit parties to identify to the frequency coordinator up to twenty (20) channels that they intend to clear. The coordinators would consider those channels as "targeted" for 120 days, during which period additional coordinations on the channels would be conditioned on the applicant consenting to the trunked system if trunking authority is obtained. Although applicants would be permitted to target twenty (20) channels, they would be limited to applying for ten (10) at any time. Upon the earlier of (i) the submission of an application for up to ten (10) channels, or (ii) expiration of the 120 day period, any channels for which concurrence had not been obtained and an application filed with the FCC would be released for unconditional use by other parties. A licensee would be permitted to repeat this process once it has placed any earlier-licensed trunked channels in operation.

Additionally, AMTA urges the FCC to reconsider the area within which trunking applicants must obtain concurrence from incumbent co-channel and specified adjacent channel licensees. Rather than the geographic area adopted by the FCC, AMTA proposes that concurrence should be required only when the incumbent's 39 dBu service area contour will be overlapped by the trunking applicant's proposed 22 dBu interference contour.

Finally, AMTA recommends that the Commission revisit the so-called "Safe Harbor" power and antenna height limitations. The Safe Harbor rules are proving unreasonably restrictive, particularly for high mountaintop sites, and should be revised or replaced.

1. The American Mobile Telecommunications Association, Inc. ("AMTA" or "Association"), in accordance with Section 1.429 of the Federal Communications Commission ("FCC" or "Commission") Rules and Regulations, respectfully requests clarification and/or reconsideration of certain aspects of the Second Report and Order in the above-entitled proceeding.[1] Specifically, the Association requests that the Commission clarify its monitoring requirements for "decentralized" trunking systems in the Private Land Mobile Radio ("PLMR") bands below 800 MHz, and that the FCC refine its procedures for deploying "centralized" trunked systems in those bands. Additionally, AMTA urges the Commission to revisit the so-called "Safe Harbor" provisions governing power and antenna height limitations for new stations in the bands below 800 MHz to determine whether they unreasonably restrict the implementation of viable, new systems in those bands.

I INTRODUCTION

2. AMTA is a nationwide, non-profit trade association dedicated to the interests of the specialized wireless communications industry. The Association's members include trunked and conventional 800 MHz and 900 MHz SMR operators, licensees of wide-area SMR systems, and commercial licensees in the 220 MHz band. A substantial number of these members also operate multiple licensed or private carrier systems in the bands below 800 MHz, and wish to work with the Commission to develop rules that will facilitate the implementation of more efficient trunked technologies on those frequencies. Thus, the Association has a significant interest in the rules governing trunking that were adopted in the Second Report and Order.

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[1] Second Report and Order, PR Docket No. 92-235, FCC 97-61 (rel. March 12, 1997) ("Second Report and Order" or "Order").

II BACKGROUND

3. The instant Order is the most recent in a series of decisions adopted by the FCC in its efforts to encourage the more efficient use of PLMR spectrum below 800 MHz.[2] The collaborative effort undertaken by the industry and the Commission in this proceeding holds substantial promise for promoting the implementation of more efficient techniques and equipment even in the heavily encumbered bands under consideration.

4. In the Second Report and Order, the Commission has recognized that the deployment of trunked technology could be one effective method of bringing improved efficiencies and service quality to these congested frequencies. Order at ¶¶ 56-9. The specialized wireless communications community represented by AMTA is particularly well versed in the spectrum and cost efficiencies attributable to trunking, and to the superior grade of service it enables customers to enjoy. Many of the Association's members have operated commercial trunked systems in the 800 MHz, 900 MHz and/or 220 MHz bands, and have first hand knowledge of the benefits of trunking from both the operator's and the subscriber's perspective.

5. Thus, AMTA supports fully the FCC's efforts to craft regulations that will facilitate the deployment of trunked systems below 800 MHz. The Association considers the Second Report and Order a valuable first effort to balance the desirability of trunking with the reality that the frequencies under consideration traditionally have been available on a shared

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[2] Although the 220 MHz band falls within the range of spectrum under consideration in this proceeding, it is not considered part of the PLMR band. 220 MHz systems already operate under a different regulatory structure than is applicable to other bands below 800 MHz.

basis only, with no provisions for channel exclusivity, and that they are heavily utilized in many parts of the country. To the extent trunked technology is permitted to be implemented below 800 MHz, it must be on a "good neighbor" policy that will permit co-channel co-existence in a shared environment.[3] The clarifications and modifications recommended herein are intended to further that objective.

III REQUEST FOR CLARIFICATION/RECONSIDERATION

A. THE COMMISSION SHOULD CLARIFY THAT MONITORING ON FREQUENCIES BELOW 800 MHz MAY BE ACCOMPLISHED EITHER AT THE REPEATER OR THE MOBILE/CONTROL STATION

6. In the Second Report and Order, the FCC distinguishes between "centralized" and "decentralized" trunked systems. The former is defined as a system that uses multiple channel pairs in conjunction with a computer which automatically assigns a user the first available channel or places the user in a queue to be served in turn. Order at ¶ 59. It is the type of trunked system that has been deployed widely at 800 MHz, 900 MHz and 220 MHz on frequencies that are assigned on an exclusive basis. Consistent with the rules governing centralized trunking in those bands, the Order further specifies that, "In a centralized trunking operation, frequencies are assigned internally by a computer **without monitoring**." Order at n. 141 (emphasis added). Although not stated explicitly, the language of the Order appears to indicate that monitoring is required for the decentralized trunking permitted on shared frequencies.

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[3] The Commission has proposed rule changes intended to permit channel exclusivity in these bands under certain circumstances, but has not yet acted on that aspect of this proceeding. Report and Order and Further Notice of Proposed Rule Making, PR Docket No. 92-235, 10 FCC Rcd 10076 (1995).

7. In this regard, AMTA recommends that the Commission further clarify that the rules governing monitoring requirements on shared channels do not specify the technical configuration by which monitoring must be accomplished, irrespective of whether one or more of the systems sharing the frequency employs decentralized trunking technology. AMTA is aware that there is some confusion within the industry on this point which, if left unresolved, could deter the broader implementation of decentralized trunked systems.

8. AMTA believes that its recommended clarification is fully consistent with the current rules regarding shared channel monitoring. Subpart N of Part 90 sets out generally the operating requirements applicable to stations operating in a shared channel environment. For example, FCC Rule Section 90.403(c) states:

> Except for stations that have been granted exclusive channels under this part..., each licensee must restrict all transmissions to the minimum practical transmission time and must employ an efficient operating procedure designed to maximize the utilization of the spectrum.

More specifically, Section 90.403(e) states:

> Licensees shall take reasonable precautions to avoid causing harmful interference. This includes monitoring the transmitting frequency for communications in progress and such other measures as may be necessary to minimize the potential for causing interference.

9. The rules do not specify how monitoring is to be accomplished, only that monitoring, among other means, may be necessary to prevent harmful interference between co-channel systems. Traditionally, it has been the control station and mobile operators that have been expected to listen for co-channel traffic before initiating a transmission on 450 MHz channels because they were equipped to do so, while the repeater through which their transmissions were transmitted was an unattended facility without independent monitoring

capability. By contrast, certain decentralized trunking systems employ automatic monitoring capability at the repeater stations themselves. If a signal is detected on a transmitting frequency, that transmitter is unavailable for assignment until the co-channel activity has ceased.

10. AMTA recognizes that neither of these monitoring approaches will absolutely prevent transmissions that could result in interference problems. Traditional monitoring by operators of mobile units has been shown to work satisfactorily in most circumstances, but its success depends significantly on the relative locations of stations within each of the systems. A mobile on the outermost edge of its system's coverage area may not be able to hear a transmission from an unrelated co-channel repeater located beyond the service area on the other side. The effectiveness of manual monitoring also is dependent ultimately on the willingness of a human operator to hold up until a co-channel transmission is completed. The automatic monitoring capability employed by certain decentralized trunking systems eliminates the ability of a frustrated human to attempt to override a transmission in progress. However, like mobile monitoring, this approach has the potential not to hear certain co-channel operations, such as mobile talk-around or very distant repeaters.

11. AMTA recommends that the Commission maintain its current latitude in allowing parties to determine what precautions are needed to avoid harmful interference. The answer may not be the same in each instance as the co-channel environment will not be identical. However, AMTA believes these issues will be resolved most effectively through the judicious selection of channels by service providers familiar with the operating characteristics of the systems in their area, as confirmed through the frequency coordination process. In the event the Commission determines that the measures adopted in a particular instance are not adequate, the FCC has

ample authority to require further, remedial measures. See, e.g., 47 C.F.R. § 90.173(b).

B. THE COMMISSION SHOULD REFINE ITS RULES REGARDING CO-CHANNEL CONCURRENCE FOR CENTRALIZED TRUNKING SYSTEMS BELOW 470 MHz

12. The Second Report and Order also includes provisions for the implementation of centralized, or non-monitoring, trunked systems under certain circumstances. Order at ¶¶ 56-9. It provides that centralized systems may be authorized if applicants (1) obtain the consent of all licensees whose service areas overlap a circle with a radius of 113 km (70 mi) from the trunked system's base station and whose operating frequency is 15 kHz or less removed from the operating frequency of a trunked system designed to operate on 25 kHz channels or 7.5 kHz or less removed from a 12.5 kHz trunked system or 3.75 kHz or less removed from a 6.25 kHz trunked system and (2) comply with all frequency coordination requirements. Order at ¶ 58. The Order further provides that additional licensees will be assigned that channel only if the new licensee reaches a mutual agreement with the licensee operating the trunked system[4], and that consenting co-channel licensees that subsequently decide not to participate in the trunked system may request assignment to a different channel. Order at ¶ 59.

13. AMTA commends the FCC for taking the first steps in developing a regulatory structure that will permit the deployment of highly efficient trunked facilities in the bands below 800 MHz. The Association appreciates the complexities of introducing this technology into bands where frequencies always have been assigned on a shared basis and which are heavily

[4] Any such conditions must be applied both to subsequently granted co-channel licensees and those authorized to operate on the adjacent channels as to which consent to trunk was required originally.

congested. If it is to be successful, this effort must properly balance the interests of existing and prospective users without becoming administratively burdensome for either the Commission or the PLMR community. The Association believes that the refinements suggested herein will further these important objectives.

14. AMTA has identified two key areas in which modifications to the regulatory scheme adopted by the FCC should be considered. The first is the protection afforded prospective operators while they attempt to obtain concurrence from the requisite co-channel and adjacent channel licensees; the second is the universe of licensees whose consent must be obtained.

(1) "TARGETED" CHANNELS SHOULD BE AVAILABLE TO TRUNKED PARTICIPANTS ONLY FOR A LIMITED PERIOD WHILE CONCURRENT IS SOUGHT

15. As crafted, the rules require a party interested in using a channel for centralized trunking, first, to obtain the consent of the necessary co-channel and adjacent channel licensees, second, after having acquired those consents, to seek coordination for the desired system; and, third, to secure a license for trunked operation from the Commission. It is only after FCC approval has been obtained that new applicants requesting the same channel must agree to participate in the trunked system. While the prospective operator is attempting to "clear" the channel by securing the requisite concurrences, new parties will continue to be free to request coordination on that same channel at distances far enough away to satisfy co-channel coordination requirements but within the area within which consent must be obtained.[5]

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[5] This problem will not arise in the 470-512 MHz band where the rules already provide for mobile loading caps, co-channel separation requirements and the possibility of channel

16. In AMTA's opinion, this process provides an invitation to speculative and anti-competitive behavior. Operators will identify the frequencies their competitors are attempting to clear, and will seek co-channel authorizations for blocking purposes only. Since the channels are shared, and since concurrence is needed from licensees within a broad geographic area, it will not be difficult for a competitor to secure what effectively is a strike authorization. The process also is likely to prove attractive to application mills which will pursue co-channel licenses for greenmail purposes on frequencies that are in the process of being cleared. In fact, the process will discourage legitimate operators from attempting to clear channels for trunking even if they do not expect to be targeted by competitors or greenmailers. A prospective trunked operator must be able to identify the universe of parties from whom it must acquire consent before beginning that process. Prudent business people are not likely to embark on a project without any idea of its likely length, cost or probability of success. Thus, the approach adopted in the Second Report and Order must be modified if centralized trunking is to be implemented in these bands, consistent with the Commission's express intention. In light of these concerns, but still recognizing the need to protect incumbent operations and to promote competitive opportunities, AMTA recommends the following modifications to the procedures adopted in the Second Report and Order.

17. First, it is imperative that some protection be afforded channels that are in the process of being cleared if this process is to have any possibility of success. AMTA recommends that a party intending to implement a trunked system in an area be permitted to

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exclusivity. See, 47 C.F.R. § 90.301 et seq.

identify up to twenty (20) targeted channels to the frequency coordinator.[6] The coordinators would identify those channels as being targeted for trunking, and, for a period of 120 days thereafter, would advise any applicant requesting coordination on those channels, or the affected adjacent channels, within that geographic area that a recommendation would be conditioned on the applicant consenting to the trunked operation if trunking authority is obtained. Although the prospective trunking operator would be permitted to target up to twenty (20) channels, it would not be permitted to apply to the FCC for more than ten (10) trunked channels at a time. Once it has obtained the necessary concurrences, and its application for up to ten (10) channels is submitted to the FCC, any remaining targeted channels would be released. A party that secures a trunking authorization would be permitted to repeat this process once it has certified to the FCC that its authorized channels have been placed in operation.[7]

18. The Association recommends this approach because it believes it balances important competing interests. The number of targetable and licensable channels were selected based on the anticipated difficulty of clearing heavily encumbered spectrum and the industry's experience with the number of channels needed to create an efficient, economically viable system. These recommendations also reflect AMTA's intention to promote a multiplicity of competitive opportunities by restricting the number of channels targetable at a given time, and the Association's desire to reward legitimate operators by providing for system expansion once

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[6] AMTA assumes that the coordinators will follow their normal procedures for handling mutually exclusive coordination requests should multiple parties target the same channel in the same area.

[7] AMTA assumes that these systems will be subject to the general PLMR construction requirement of one year. 47 C.F.R. § 90.155.

construction has been completed.

(2) CONCURRENCE SHOULD BE REQUIRED ONLY WHEN THE 39 dBu SERVICE AREA CONTOUR OF AN INCUMBENT OVERLAPS THE PROPOSED TRUNKED SYSTEM'S 22 dBu INTERFERENCE CONTOUR

19. The second aspect of the Commission's rules that requires reconsideration is the geographic area within which consent from co-channel and designated adjacent channel licensees must be obtained. AMTA is convinced that the area specified is unnecessarily expansive, and that a modified approach will more reasonably reflect the protection needed to permit compatible co-channel operation.

20. The Second Report and Order provides that licensees must obtain concurrence from co-channel and adjacent channel incumbents whose service areas overlap a circle with a 113 km (70 mi) radius of the proposed trunked station location. Order at ¶ 58. It also notes that the FCC has defined service area as the area contained within a stations's 37 dBu contour in the 150-174 MHz band and the area within a station's 39 dBu contour in the 421-512 MHz band. Order at n. 146. When considered in conjunction with the service area radii expressly permitted for these bands in Section 90.205 of the FCC's Rules, is is apparent that prospective trunked operators could be required to obtain consent from licensees whose base stations are as far as 120 miles from the proposed trunked location, or more than twice the separation routinely required for co-channel trunked operation at 800 MHz and 900 MHz. See 47 C.F.R. § 90.621(b).

21. This requirement is unduly restrictive and is likely to frustrate unnecessarily the efforts of operators pursuing trunking opportunities. Therefore, AMTA recommends that the

FCC reconsider this aspect of its decision. Rather than utilizing an arbitrary 70-mile radius around the prospective trunked location, the FCC should require parties proposing trunking in the 450-512 MHz bands to obtain consent from incumbents whose actual 39 dBu service area contour is overlapped by the 22 dBu interference contour of the proposed station.[8] The contour analyses should be based upon generally accepted engineering practices and standards.

22. This analysis should provide ample protection to incumbent stations while still providing reasonable opportunities to implement trunked systems. Based on these criteria, AMTA also is reviewing beyond what mileage separation parties should not need even to consider the service contours of co-channel systems. This figure would be comparable to the 70-mile rule applicable at 800 MHz and 900 MHz, and would limit the systems whose operations would have to be considered when attempting to clear a trunked channel to those that might actually be affected by the co-channel operation. See 47 C.F.R. § 90.621.

IV THE COMMISSION SHOULD REVISIT THE "SAFE HARBOR" RULES

23. In an earlier stage of this proceeding, and in response to a PLMR industry proposal, the FCC adopted rules governing the antenna height and power of new facilities in the 150-174 MHz and 450-470 MHz bands. See 47 C.F.R. § 90.205. These so-called "Safe Harbor" rules define the permissible power and antenna height to achieve specified service area radii in each band. In general, these rules are more restrictive than the technical parameters under which "grandfathered" systems were authorized.

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[8] AMTA does not anticipate significant interest in trunking in bands below 450 MHz. If this proves incorrect, an equivalent protection standard would need to be implemented for those bands.

24. It has come to AMTA's attention that the Safe Harbor rules may be even more limiting than the Commission or the industry had anticipated. They appear to cause significant problems at high antenna sites, such as those in the mountainous Western states where they limit the effective radiating power ("ERP") of new stations so severely that it is unlikely a facility could achieve a useable signal, particularly when competing with high-power, co-channel grandfathered stations.

25. The Association understands that other parties have begun to explore whether the Safe Harbor rules need to be revised, or perhaps even replaced, and that they may address this issue in this proceeding. AMTA looks forward to reviewing and commenting on any such recommendations in its Reply Comments.

V CONCLUSION

For the reasons described herein, AMTA urges the Commission to clarify or modify its rules consistent with the positions detailed above.

CERTIFICATE OF SERVICE

I, Katherine A. Baer, a secretary in the law office of Lukas, McGowan, Nace & Gutierrez, hereby certify that I have, on this May 19, 1997, have had a copy of the foregoing Petition for Reconsideration hand-delivered to the following:

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