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

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FEDERAL COMMUNICATIONS COMMISSION
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In the Matter of)
)
Promotion of Spectrum Efficient) RM- 9332
Technologies on Certain Part 90)
Frequencies)

TO: The Commission

Comments of USMSS, Inc.

USMSS, Inc. ("USMSS"), pursuant to section 1.405 of the Commission's rules¹ and in response to the *Public Notice* released July 31, 1998,² hereby respectfully submits these comments to the above captioned petition for rule making.³

I. Statement of Interest

1. USMSS is a nationwide association of independent Motorola Service Stations. USMSS member companies sell, install, and maintain private wireless communications infrastructure that operates on the bands between 220 and 900 MHz. In addition to providing a nationwide service support network, USMSS is committed to providing a voice in the regulatory and legislative process to its member's constituency of private wireless licensees. Accordingly, USMSS is pleased to have this opportunity to comment on the American Mobile Telecommunications Association's ("AMTA") petition for rule making.

¹ See 47 C.F.R. § 1.405.

² *Public Notice*, Office of Public Affairs Reference Operations Division Petitions for Rulemaking Filed, Report No. 2288, released July 31, 1998.

³ *Petition for Rule Making Submitted by the American Mobile Telecommunications Association*, In the Matter of Promotion of Spectrum Efficient technologies on Certain Part 90 Frequencies, RM-9332, filed June 19, 1998 ("AMTA Petition").

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II. The AMTA petition is already under consideration as part of the Commission's refarming proceeding.

2. The debate over whether or not to have a Commission-mandated migration to spectrum-efficient equipment has been substantially resolved within the Commission's refarming proceeding.⁴ While USMSS recognizes that the AMTA petition would also include 800 MHz systems in the Industrial/Land Transportation and Business pools, it appears that the consideration of a forced migration in these bands would need to be conducted independently of the other Part 90 bands under consideration.

3. The transition to narrowband or spectrally efficient equipment in the refarming bands is being managed through type-acceptance requirements placed on manufacturers of radio equipment.⁵ To date, no such type acceptance requirements have been put in place for 800 MHz equipment, and in fact the supply of narrowband 800 MHz equipment, to the extent it exists at all, is severely limited. Consequently, it is not possible to manage the narrowband transition in the 800 MHz band in the same fashion as the VHF and UHF refarming bands.

4. In the refarming *Report and Order*, the Commission declined to mandate a transition to narrowband equipment, reasoning that market based incentives are almost always preferable to regulatory mandates.⁶ However, the Commission also recognized

⁴ See *Report and Order and Further Notice of Proposed Rule Making*, (FCC 95-255) PR Docket No. 92-235, released June 23, 1995.

See 47 C.F.R. § 90.203(j)(2). Equipment manufactured after February 14, 1997, will only be type accepted if it is capable of operating on 12.5 kHz channels, or with the spectral efficiency equivalent of 12.5 kHz bandwidth if operating on a multi-bandwidth mode.

⁶ *Id* at ¶¶ 30-41.

some of the same problems relating to proper incentives for migration to spectrum efficiency that AMTA raises in its petition. Accordingly, the Commission released a *Further Notice of Proposed Rule Making* regarding market-based incentives for system migration.⁷

5. To date, the Commission has yet to release a *Third Report and Order* outlining its decision in this regard. Until such time as this pending order is published, USMSS believes that the issues raised in the AMTA petition are premature.

III. The narrowband transition is being managed without further Commission action.

6. AMTA presents an economic argument for the need to mandate the transition to narrowband equipment:⁸ "[I]nvestment in improved technologies will be delayed and perhaps deferred entirely, if the party considering making the financial commitment cannot expect to enjoy the economic rewards of doing so. That situation arises when **commercial licensees** operate on shared spectrum, frequencies on which no individual licensee(s) can claim exclusive use of the channel within a defined geographic area [emphasis added]."⁹ From USMSS' perspective, the AMTA petition seems to assume that private wireless licensees have no interest in pursuing the benefits of spectrum efficiency in their own systems. It is the USMSS' observation that the transition to narrowband has already begun, and it is being conducted by both industrial/business and

⁷ *Id.*

⁸ USMSS uses the term "narrowband" to include equipment that operates on bandwidths of 12.5 kHz or less, as well as multi-path equipment that operates on 25 kHz channels.

⁹ AMTA petition at 3.

private carrier systems.

7. USMSS understands the term "commercial licensees," as used by AMTA, to mean primarily small for-profit private carriers operating pursuant to section 90.179 of the Commission's rules,¹⁰ and not CMRS operators. These private carriers have traditionally been based out of radio dealer shops -- such as those operated by the USMSS membership -- and many have evolved from community repeaters that had been managed by local radio dealers. These community repeaters were formed so that small private licensees could pool their resources for the construction and management of a repeater system that each licensee could share in equally, but that no individual licensee could afford. These repeater systems greatly increase the range and effectiveness of the mobile units associated with the repeater, and are a common feature in the private wireless landscape.

8. It has been USMSS' experience that the transition to narrowband has already begun, and it is being managed in much the same way that community repeaters have traditionally been created. Just as community repeaters offer increased range for multiple licensees, spectrally efficient equipment can offer increased capacity for co-channel licensees that are willing to collaborate on the construction of the system. Because additional useful channel assignments have become increasingly scarce, the promise of increased capacity is a strong incentive for collaboration among co-channel licensees.

9. Further, section 90.187 of the commission's rules grants licensees operating

¹⁰ 47 C.F.R. § 90.179.

trunked technology a protected, contour-based service area.¹¹ However, in order to receive a PSA, or "YG" authorization, a licensee must have either a channel clear of co-channel licensees within its 39 dB μ service area contour, or receive the consent of all co-channel, and relevant adjacent channel, incumbents to deploy a trunked system.¹² Because of the high level of congestion on these channels, it has proven very difficult to find "clear" channels upon which to employ a 25 kHz trunked system. However, applicants who propose 12.5 kHz trunked systems are having much greater success in gaining "YG" authorizations. Because 12.5 kHz trunked systems only need to be clear of adjacent channel systems that are 7.5 kHz removed, 25 kHz adjacent channel systems need not be subject to interference consideration. Consequently the coordination of 12.5 kHz systems is much less problematic.¹³

IV. Conclusion

10. AMTA concludes its petition with the following: "It would not be possible today for a licensee to proceed to deploy more spectrally efficient equipment with any assurance that it will prove economically, or even technically, advantageous to have done so. Without such confidence, only the *under-informed or fool-hardy* are likely to pursue such a course.[emphasis added]"¹⁴ As USMSS has demonstrated above, not only is the transition to narrowband equipment both economically and technically

¹¹ See 47 C.F.R. § 90.187(b)(2)(iii).

¹² 47 C.F.R. § 90.187(b)(2)(ii).

¹³ 47 C.F.R. § 90.187(b)(2)(i).

¹⁴ Petition at ¶ 12.

feasible, it is a viable and advantageous strategy that is currently being pursued with great success by hundreds of incumbent licensees, including many USMSS members.

11. The membership of USMSS is moving forward in a **deliberate and confident fashion** — taking full advantage of the Commission's rules as they currently stand — to employ narrowband technology for both their own private carrier systems and on behalf of their industrial and business private wireless licensee clientele. **USMSS prefers to take advantage of the opportunities offered by the existing regulatory environment.**

Respectfully Submitted,

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Ronald H. Runyan

Ronald H. Runyan, Chairman



Date: August 31, 1998