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

DOCKET FILE COPY ORIGINAL

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

RECEIVED
SEP 15 1998
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Commission

REPLY COMMENTS

Respectfully submitted,

AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION, INC.

By: _____

Elizabeth R. Sachs, Esq.
Lukas, Nace, Gutierrez & Sachs
1111 19th Street, N.W., Suite 1200
Washington, D.C. 20036
(202) 857-3500

Its Counsel

September 15, 1998

rec'd 0+11
MMB

The American Mobile Telecommunications Association, Inc. ("AMTA" or "Association"), in accordance with Section 1.405(b) of the Federal Communications Commission ("FCC" or "Commission") Rules and Regulations, respectfully submits its Reply to Comments submitted in response to the Association's above-identified Petition for Rulemaking.[1] AMTA is pleased to have this opportunity to respond to those parties that have raised concerns about the Association's proposal and, in particular, to correct certain misunderstandings in respect to the Petition.

I. BACKGROUND

1. There is no dispute that additional capacity will be required to accommodate the demand for business, industrial and local government/public safety wireless communications services in both the near-term and long-term future.[2] These requirements will be met, as they have been for decades, through a combination of internal operations and commercial systems designed to serve the needs of the business and government, as opposed to consumer, wireless community.[3] AMTA's Petition was intended to promote adoption of FCC Rules that would further the interests of the Part 90 licensee industry generally by initiating a proceeding with the objective of deriving more efficient use of already allocated spectrum.

---

[1] In the Matter of Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, Public Notice, Report No. 2288, released July 31, 1998 ("Petition").

[2] See, Land Mobile Communications Council ("LMCC"),Petition for Rulemaking, RM 92-267 (filed Apr. 22, 1998); Report of the Spectrum Planning and Policy Advisory Committee Task Force on Federal Government Spectrum Relocation Implementation (rel. Aug. 7, 1997).

[3] Third party, collective operations first were made available to small businesses without the economic capability or desire to operate their own facilities through the establishment of shared, multi-licensed community repeaters more than three decades ago. Subsequently, the FCC permitted the establishment of both conventional and trunked third-party carrier systems designed for use by business, industrial and local government entities in bands governed by Part 90 of the FCC's Rules. Thus, internal and commercial systems have successfully co-inhabited many of the Part 90 bands for decades.

2. The Petition was limited in scope: it recommended only that deadlines be established after which licensees that elected not to implement equipment with relatively modest efficiency improvements would assume secondary status vis-a-vis entities that deployed more efficient technologies. Contrary to the understanding of a number of commenters, it may be helpful to clarify what the Petition did not state:

- AMTA's Petition did not recommend that its spectrum efficiency standard must be met by deploying narrowband equipment. Rather, it proposed the implementation of technology that can provide a minimum of two times the capacity of current channelization, however that standard is satisfied.

- AMTA's Petition did not suggest that adoption of its proposal would obviate the need for continued FCC action on other aspects of the ongoing "refarming" proceeding.[45] Indeed, the Association has actively participated in industry efforts to resolve the outstanding issues relating to that proceeding.

- AMTA's Petition did not state that private wireless licensees have no interest in increasing spectrum efficiency on internal systems. It did note that private licensees typically adopt capacity-enhancing techniques when they become dissatisfied with the quality or quantity of their current communications capabilities while commercial licensees have an inherent, economic incentive to derive more capacity from their systems.

---

[5] Report and Order and Further Notice of Proposed Rule Making, PR Docket No. 92-235, 10 FCC Rcd. 10076 (1995) ("Refarming").

- AMTA's Petition did not suggest that all communications needs could or should be met on commercial systems. In fact, the Petition specifically stated that the FCC should continue to ensure adequate spectrum for those operations that are best served on private, internal systems and reiterated its support for the LMCC Petition seeking additional spectrum allocations for Part 90 licensees.[6]

3. AMTA's recommendation is consistent with the position taken previously by numerous members of the land mobile industry, at least in respect to the bands below 800 MHz. As described below, the Association remains convinced that the Part 90 licensee community will be well served by adoption of a Notice of Proposed Rulemaking consistent with the proposals contained in the Petition.

II. SPECTRUM EFFICIENCY WILL BE ENHANCED BY ADOPTION OF DATES CERTAIN FOR CONVERSION TO MORE EFFICIENT TECHNOLOGIES.

4. The continued growth of the Part 90 services demands access to expansion spectrum capacity. This capacity can be derived either from new spectrum allocations or from enhanced use of existing channels. AMTA, like other members of the Part 90 land mobile community, is convinced that new allocations will be essential to satisfy long-term requirements, and has supported efforts of the LMCC to secure additional spectrum in anticipation of those needs. However, the Association is also aware that such efforts are not guaranteed to be successful, however meritorious, or completed within a timeframe consistent with the user community's requirements. Therefore, AMTA believes it essential to proceed simultaneously to promote enhanced utilization of existing allocations.

---

[6] See, n. 2, supra.

5. The record in this proceeding, and in the ongoing Refarming rulemaking, reflect general industry support for the introduction of more efficient technologies in the Part 90 services. The issues are how best to achieve that objective, in what time period, and, in respect to the instant Petition, to what spectrum any such obligations should be made applicable. The FCC has elected to rely on the type acceptance process to promote spectrum efficiency improvements.[7] AMTA is convinced that the more proactive measures described in its Petition are needed. To the extent that the Association's Petition has focused the attention of the FCC and the industry on addressing these issues, it can only serve to advance this important public policy goal.

6. At the outset, it is important to note that some parties expressing reservations about the adoption of deadlines for efficiency improvements focused on the 800 MHz Industrial/Land Transportation and Business Pool frequencies.[8] Specifically, they argued that licensees in these bands were still in the process of deploying wide-area systems, the implementation of which would be disrupted by adoption of the Petition, and that most of the systems in these bands, in particular the multi-site systems, already use more efficient trunked technology.

7. AMTA appreciates the concerns raised by these parties, but nonetheless recommends retention of these bands in its proposal. Telecommunications usage is not static: commercial and non-commercial licensees alike constantly are in the process of implementing,

---

[7] The Commission also has concluded that spectrum acquired through the competitive bidding process can be assumed to be put to the most valuable, if not necessarily the most efficient, possible use since there is every incentive to derive the greatest possible value from it.

[8] See, Comments of Atlantic City Electric Company et. al, UTC, and Personal Communications Industry Association ("PCIA").

modifying or expanding systems in response to their ongoing business activities. It would not be possible to pick a date for conversion to improved technology that would conform to the internal requirements of all licensees, and the Petition does not even propose such a conversion obligation. Licensees will not have a regulatory obligation to implement more efficient equipment. Rather, they will have an opportunity to assess whether they should do so to preserve primary status, a decision that will be affected by numerous factors.

8. Moreover, the Association has attempted to balance the very reasonable desire of licensees to amortize their equipment investment with the broader public policy need to promote the deployment of reasonably available, affordable equipment with improved efficiency capabilities. It must be noted that 800 MHz trunked equipment has been available since 1979, a full two decades, and that the 800 MHz frequencies in question have been licensable since 1982. Some entities still may be in the process of implementing trunked systems on these channels, but, by the time of AMTA's proposed deadlines, such systems would be categorized as efficiency-enhancing only by comparison to single frequency, 25 kHz conventional operations.

9. The Association continues to believe that the conservative deadlines it has proposed, along with the relatively modest efficiency improvements required, reasonably balance the competing interests of 800 MHz incumbents and the public for the reasons described above. However, AMTA also anticipates that some of these same 800 MHz licensees may implement efficiency improvements on their exclusive, currently trunked, channels voluntarily as their internal communications requirements expand and technology advances continue to broaden. Therefore, while the Association remains convinced that public policy supports inclusion of the 800 MHz Business and Industrial/Land Transportation Pools, it urges the FCC to move forward on the Petition even if the Commission decides to defer a decision on those channels.

10. Some parties also raised concern about what they understood to be the Petition's recommendation that all systems convert to 12.5 kHz technology. That understanding is inaccurate.[9] As noted above, the Petition specified the following:

> licensees...should be required to implement technology that achieves a minimum of two times the capacity of current channelizations, i.e., technology with the equivalent of one voice path per 12.5 kHz of spectrum, using a 25 kHz frequency... Petition at ¶ 11.

Some licensees may elect to retain primary status by implementing "traditional" narrowband technology of 12.5, 6.25 or even 5 kHz bandwidth, while others may choose EDACS which also is described as providing a 2:1 capacity improvement. Those with access to contiguous spectrum may deploy TDMA techniques with comparable or superior capacity improvements. Still others, in particular those with a preference for a more incremental, channel-by-channel, conversion, may select now nascent DCMA technology. All of these technologies either exist today or are expected to be introduced commercially in the short-term future.

11. The Association also is confident that additional, equally efficient techniques will become available on a timely basis **if** the manufacturing industry has reason to believe that such equipment will be purchased on an equally timely basis. Unfortunately, the reverse is also true: manufacturers will not invest in technology improvements if the regulatory environment deters deployment of more efficient equipment. It is precisely that impasse that AMTA's Petition is intended to address.

12. Finally, AMTA must respectfully disagree with those who suggest either that AMTA's Petition is premature until current **and proposed** Refarming rules have been adopted and given time to be evaluated, or that the current Refarming provisions, without modification,

---

[9] UTC correctly noted that the proposed criteria could be met through technical means other than "narrowbanding". See, Comments of UTC at n. 4.

are adequate to ensure necessary levels of efficiency improvement.[10] These conclusions are contrary to the experience of the Association's members, in particular the members of AMTA's Small Business Council that are attempting to achieve efficiency improvements within the existing regulatory framework.

13. First, and as indicated above, AMTA intends this Petition to be complementary to, not a replacement for, ongoing efforts to advance the Refarming proceeding. However, it must be recognized that for a variety of reasons, Refarming has proceeded in fits and starts over a multi-year period without any indication that critical matters will be resolved soon. In light of its spasmodic history, and moribund present, the Part 90 user and manufacturing community cannot afford to await its conclusion (whatever such a conclusion might entail) and subsequent evaluation before recommending adoption of deadlines for the deployment of more efficient technologies.[11]

14. Further, the experience of AMTA's members with Refarming in its current status is less than satisfactory in respect to the introduction of more efficient technologies.[12] It is accurate that some applicants now are requesting 12.5 kHz, rather than 25 kHz, bandwidth authorizations at 450 MHz. However, most such applications are being filed for new internal

---

[10] See, Comments of PCIA and ITA/TLCC respectively.

[11] It is generally accepted that manufacturers require twenty-four months to bring a technology to market. For example, with respect to implementing the assistance capability requirements of the Communications Assistance for Law Enforcement Act ("CALEA"), the FCC acknowledged that "it should take manufacturers approximately two years from the date technical requirements are standardized to develop and begin deploying technology capable of complying with that standard". Memorandum Opinion and Order, FCC 98-223, ¶47 (rel. Sept. 11, 1998).

[12] Since both PCIA and ITA were active participants in the recent LMCC filing requesting revisions of the Refarming rules relating to trunked operation, their satisfaction with the current rules must be, in at least some respects, conditional.

or commercial systems on 12.5 kHz offset channels newly available for high-power operation and the rules require that these systems not exceed 12.5 kHz bandwidth. By contrast, relatively few incumbents are electing to convert heretofore 25 KHz stations to more efficient operations.[13] Moreover, the lack of consistency of frequency coordination criteria for securing exclusive channel assignments in these bands compromises the ability of prospective licensees to invest in any equipment, much less advanced technologies, with reasonable confidence. The Refarming proceeding, in its current state, is not adequate to promote the spectrum efficiency goals of AMTA's Petition.

III. CONCLUSION

15. The Comments in this proceeding do not refute AMTA's fundamental proposition: there is a compelling need to derive additional efficiencies from allocated Part 90 spectrum, but the current Part 90 rules discourage the implementation of more spectrally efficient technologies.

16. For the reasons described herein, AMTA urges the Commission to initiate a rulemaking proceeding consistent with the Association's Petition.

---

[13] Incumbents making that election generally are doing so when they are able to secure YG (centralized trunking) authority by modifying to a 12.5 kHz bandwidth system, thereby avoiding any requirement to protect or obtain concurrence from adjacent channel licensees. See, 47 C.F.R. § 90.187(b)(2)(i).

CERTIFICATE OF SERVICE

I, Linda J. Evans, a secretary in the law office of Lukas, Nace, Gutierrez & Sachs, hereby certify that I have, on this September 15, 1998, caused to be hand delivered a copy of the foregoing Reply Comments to the following:

Chairman William E. Kennard
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

Commissioner Susan Ness
Federal Communications Commission
1919 M Street, N.W., Room 832
Washington, D.C. 20554

Commissioner Harold Furchtgott-Roth
Federal Communications Commission
1919 M Street, N.W., Room 802
Washington, D.C. 20554

Commissioner Michael Powell
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, D.C. 20554

Commissioner Gloria Tristani
Federal Communications Commission
1919 M Street, N.W., Room 826
Washington, D.C. 20554

Daniel Phythyon, Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 5002
Washington, D.C. 20554

Rosalind K. Allen, Deputy Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 5002
Washington, D.C. 20554

Jeanine Polticonieri
Associate Bureau Chief
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 5002
Washington, D.C. 20554

Steve Weingarten, Chief
Commercial Wireless Division
Wireless Telecommunications Bureau
Federal Communications Commission
2100 M Street, N.W., 7th Floor, Room 24
Washington, D.C. 20554

D'wana R. Terry, Chief
Public Safety & Private Wireless Division
Wireless Telecommunications Bureau
Federal Communications Commission
2025 M Street, N.W., Room 8010
Washington, D.C. 20554

*Clarence L. Irving, Jr.
Asst. Secy., Communications and Information
Administrator, NTIA
Herbert C. Hoover Building
14th St. and Constitution Ave., N.W., #4898
Washington, D.C. 20230

*Emmett B. Kitchen, President
PCIA
500 Montgomery Street, Suite 700
Alexandria, VA 22314

*Mark Crosby, President
ITA
1110 North Glebe Road, Suite 500
Arlington, VA 22201

*S. Jenell Trigg
Asst. Chief Counsel, Telecommunications
Office of Advocacy
U.S. Small Business Administration
409 Third Street, S.W.
Washington, D.C. 20416

*Alan S. Tilles, Esq.
David E. Weisman, Esq.
Meyer, Faller, Weisman & Rosenberg, P.C.
4400 Jenifer Street, N.W.,
Suite 380
Washington, D.C. 20015
Counsel for Personal Communications
Industry Association

*Jeffrey L. Sheldon, Esq.
Vice President and General Counsel
UTC
1140 Connecticut Ave., N.W.
Washington, D.C. 20036

*Ronald H. Runyan, Chairman
USMSS, Inc.
1440 South Isabella Road
Mount Pleasant, Michigan 48858

*Mr. Samuel Klein, Chairman
Council of Independent
Communication Suppliers
1110 North Glebe Road, Suite 500
Arlington, VA 22201-5720

*Mr. Mark E. Crosby
President/CEO
Industrial Telecommunications
Association, Inc.
1110 North Glebe Road, Suite 500
Arlington, VA 22201-5720

*Mr. W.H. Smythe, IV, Chairman
Taxicab and Livery Communications
Council
1110 North Glebe Road, Suite 500
Arlington, VA 22201-5720

*Via First-class Mail

*William K. Keane, Esq.
Arter & Hadden LLP
Suite 400K
1801 K Street, N.W.
Washington, D.C. 20006-1301
Counsel for MRFAC, Inc.

*Shirley S. Fujimoto, Esq.
Kirk S. Burgee, Esq.
McDermott, Will & Emery
600 Thirteenth Street, N.W.
Washington, D.C. 20005
Counsel for: Atlantic City Electric Company,
Cinergy Corp., Entergy Services, Inc.,
Delmarva Power & Light Company, and
Indianapolis Power & Light Company

*Carole C. Harris, Esq.
McDermott, Will & Emery
600 Thirteenth Street, N.W.
Washington, D.C. 20005
Counsel for SCANA Communications, Inc.

International Transcription Services, Inc.
1919 M Street, N.W., Room 246
Washington, D.C. 20554

Linda J. Evans