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	)	
	)	

PETITION FOR RECONSIDERATION OF
THE AMERICAN MOBILE TELECOMMUNICATIONS ASSOCIATION
THE INDUSTRIAL TELECOMMUNICATIONS ASSOCIATION, INC.; AND
PCIA – THE WIRELESS INFRASTRUCTURE ASSOCIATION

The American Mobile Telecommunications Association (AMTA), the Industrial Telecommunications Association, Inc. (ITA) and PCIA – The Wireless Infrastructure Association (PCIA) (AMTA, ITA and PCIA, collectively, "Petitioners") pursuant to Section 1.429 of the Commission's Rules,[1] hereby submit this Petition for Reconsideration in the above-referenced proceeding.[2] Specifically, the Petitioners urge the Commission to establish January 1, 2008, as the date-certain for the conversion of all non-public safety land mobile operations in the 150-174 MHz and 421-512 MHz bands to equipment operating at no more than 12.5 kHz

[1] 47 C.F.R. § 1.429.

[2] *See,* Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended and Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, WT Docket No. 99-87, *Second Report and Order and Second Further Notice of Proposed Rule Making*, (rel. February 25, 2003) ("2nd R&O").

bandwidth or which otherwise satisfies the FCC's spectrum efficiency requirements for these bands.[3]

I. Statement of Interest

AMTA is a nationwide, non-profit trade association and frequency advisory committee dedicated to the interests of the specialized wireless communications industry. The Association's members include trunked and conventional 800 MHz and 900 MHz Specialized Mobile Radio (ASMR@) service operators holding site-specific and/or geographic authorizations, as well as commercial licensees in the 217-220 MHz, 220-222 MHz and 150-512 MHz bands. The vast majority of the Association=s members either operate systems in the bands under consideration in this proceeding or have customers whose systems operate on these channels. The Association and its members therefore have a direct interest in the more efficient, intensive use of this spectrum.

ITA is a Commission-certified frequency advisory committee coordinating in excess of 13,000 applications per year on behalf of applicants seeking Commission authority to operate on a wide-variety of frequency assignments allocated between 30-900 MHz. ITA enjoys the support of a membership including more than 2,100 licensed two-way land mobile radio communications users, private mobile radio service (PMRS) oriented radio dealer organizations, and the following trade associations: Alliance of Motion Picture and Television Producers; Aeronautical Radio, Inc.; and National Propane Gas Association. In addition, ITA is affiliated with the following independent market councils: the Council of Independent Communications Suppliers

[3] To the extent that a licensee can aggregate contiguous channels and provide 12.5 kHz or better efficiency per voice path, we believe it should be permitted to do so as already provided in the FCC's rules. *See* 47 C.F.R. § 90.203(j)(5).

(CICS), the Taxicab & Livery Communications Council (TLCC), the Telephone Maintenance Frequency Advisory Committee (TELFAC), and USMSS, Inc.

Founded in 1949 in the spirit of creating new industries, PCIA has a distinguished history of helping build the industries that comprise the wireless telecommunications sector. From its beginnings in land mobile radio to paging and messaging, and from personal communications services ("PCS") to tower and antenna siting, PCIA has been instrumental in facilitating the emergence and growth of core wireless services. Since the inception of frequency coordination committees in 1986, PCIA has processed hundreds of thousands of applications for licenses and coordinated more of the nation's spectrum than virtually any other coordinating committee. PCIA was the original coordinator for the Business Radio Service and is currently one of several coordinators in the Industrial/Business ("IB") pool. Along with the International Association of Fire Chiefs and International Municipal Signal Association ("IAFC/IMSA"), PCIA jointly coordinates the spectrum for the frequencies that were formerly part of the Special Emergency Radio Service ("SERS").

II. Background

On February 25, 2003, the Commission released the 2nd R&O which included several deadlines for the migration of land mobile operations in the "refarmed" bands to 12.5 kHz technology.[4] Specifically, the Commission adopted the following provisions for equipment manufacturers and private land mobile licensees in the 150-174 and 421-512 MHz bands:

- No new applications would be accepted for wideband systems after January 13, 2004;
- No modification applications expanding the existing contour of a wideband license would be accepted after January 13, 2004;
- 25kHz equipment will not be type-certified after January 1, 2005;

[4] 2nd R&O.

- The manufacture and importation of 25 kHz equipment will be prohibited after January 1, 2008;

- Non-public safety licensees must migrate to narrowband equipment by January 1, 2013; and

- The deadline for migration of public safety systems should be complete by January 1, 2018.[5]

III. Discussion

The Commission's effort to "promote highly effective and efficient use of the PLMR [Private Land Mobile Radio] spectrum and facilitate the introduction of advanced technologies into the private mobile service"[6] was undertaken more than a decade ago. The Petitioners have been in the forefront of those advocating a more aggressive regulatory posture as necessary to achieve this important objective. Each individually urged the FCC to adopt a date-certain for the migration to more efficient technology rather than relying on the Commission's equipment certification process.[7]

Thus, the Petitioners fully endorse the Commission's efforts to maximize spectral efficiency in the land mobile bands and support its goal of migrating private wireless users to narrowband operations. Indeed, they believe that the ten-year conversion deadline for non-

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[5] 2nd R&O at ¶ 12.

[6] PR Docket No. 92-235, Report and Order and Further Notice of Proposed Rule Making, 10 FCC Rcd 10076 at ¶ 1 (1995) ("Refarming R&O").

[7] AMTA Petition for Rulemaking, RM-9332, filed on June 19, 1998 (AMTA Petition). Comments of AMTA, WT Docket No. 99-87, filed on August 2, 1999; Comments of ITA, filed on August 2, 1999; Comments of PCIA, filed on August 2, 1999; Reply Comments of ITA, filed on September 30, 1999; Reply Comments of PCIA, filed on September 30, 1999; Comments of AMTA, filed on March 5, 2001; Comments of PCIA, filed on March 5, 2001; Reply Comments of PCIA, filed on April 2, 2001; Supplemental Comments of ITA, filed on May 29, 2001; Ex Parte Filing of AMTA, filed on August 27, 2002. Unless stated otherwise, all comments listed below were filed in WT Docket No. 99-87 on March 5, 2001.

public safety systems is unnecessarily protracted. Further, for the reasons detailed below, the staggered equipment compliance dates are both unnecessary and unnecessarily complicated. In the Petitioners' opinion, an earlier migration deadline and a reliance on market forces to address the issue of equipment availability are supported amply in the record in this proceeding and would be in the public interest. Spectrum in these bands is extremely congested in the very same markets in which Petitioners' constituents are attempting to deploy the more efficient, advanced technologies anticipated by the Commission and needed by the PLMR community. Petitioners urge the FCC to accelerate and simplify the conversion requirements for non-public safety channels in these bands as requested herein and thereby promote the objectives identified by the Commission a decade ago.

A. THE NON-PUBLIC SAFETY PLMR COMMUNITY WILL NOT BE TECHNICALLY, OPERATIONALLY OR FINANCIALLY DISADVANTAGED BY AN EARLIER CONVERSION DEADLINE.

It has been more than a decade since the Commission took the first steps toward promoting more efficient use of these PLMR workhorse bands. From the outset, there has been broad industry support for this initiative since most PLMR representatives view migration to narrowband or other comparably efficient technology as essential to meeting the growing needs of this important user community. In fact, it was this community that has repeatedly called for dates-certain after which licensees would be required to deploy more efficient technology and which ultimately rejected, as inadequate, the FCC's reliance on the equipment certification process to achieve this result.

The parties explained that even entities prepared to migrate to more efficient equipment nonetheless sometimes are reluctant to do so in a shared spectrum environment such as the refarmed bands. Unless all licensees on a frequency convert to narrowband or other improved

technology, no additional capacity is made available either for the migrating licensee or a new entrant. The benefits of refarming will be realized only when all licensees on a channel within a given area have completed the conversion process. Thus, a date certain is essential not for the great majority of incumbents that have equipment that is capable of being operated at 12.5 kHz and are willing to convert to that bandwidth, but to ensure that a single hold-out will not jeopardize this important initiative.

A review of the record in this proceeding reveals that a majority of commenters supported a non-public safety narrowband migration deadline much earlier than the January 1, 2013 date adopted by the FCC.[8] For example, AMTA, which submitted the Petition for more spectral efficiency that triggered the instant proceeding,[9] sought a mandatory transition by December 31, 2003, in the top 50 markets defined by FCC rule section 90.741,[10] a transition by December 31, 2008 for markets 50-100, and a transition period through December 31, 2020, for all other markets.[11] ITA, while initially supporting a similarly accelerated and geographically-defined conversion process, determined that a nationwide, five-year mandatory migration period, as supported by the record, would benefit the private land mobile industry.[12] MRFAC also supported a timely conversion, stating, "January 1, 2005 – the date when 162-174 MHz Federal

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8 *See*, Comments of the American Mobile Telecommunications Association, Inc. (AMTA) at p. 6; Comments of the American Petroleum Institute (API) at p. 5; Comments of Digital Wireless Corporation at p. 7; Comments of MRFAC, Inc. at p. 2; and Comments of the Personal Communications Industry Association, Inc. (PCIA) at p. 3. *See also*, Reply Comments of AMTA, filed on April 2, 2001, at p. 5; Reply Comments of Digital Wireless Corporation, filed on April 2, 2001, at p. 2; and Reply Comments of PCIA, filed on April 2, 2001, at p. 4.

9 AMTA Petition.

10 47 C.F.R. § 90.741.

11 Comments of AMTA at p. 6.

12 Supplemental Comments of the Industrial Telecommunications Association, Inc., filed on May 29, 2001, at p. 2.

systems are to convert to 12.5 kHz…will provide fair and adequate notice to incumbent licensees to make the conversion."[13] Likewise, PCIA noted that January 1, 2005, would be an appropriate deadline, as it was consistent with a deadline for 6.25 kHz capabilities for type certification.[14] Generally, commenters suggested a four- or five-year migration period to match other relevant industry benchmarks. In fact, only one non-public safety commenter opposed an accelerated transition period.[15]

Thus, it came as no surprise to PLMR users, other, perhaps, than a welcome one, that the FCC adopted date-certain conversion deadlines. The surprise was that the FCC believed another ten years was necessary to complete a process that the industry has been anticipating and for which it has been preparing for a decade.[16] Many PLMR entities had begun incorporating the cost of system migration to narrowband operations into their business plans years ago. During this time, many, more likely all, private land mobile trade associations and frequency advisory committees, including the Petitioners, have been educating their members and clients on the importance of preparedness for the narrowband migration. Equipment manufacturers have had dual-mode equipment capable of operating at either 25 kHz or 12.5 kHz available for more than

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[13] Comments of MRFAC at p. 2.

[14] Comments of PCIA at p. 3. *See also,* 47 C.F.R. § 90.203 (j)(4)-(5).

[15] The Association of American Railroads ("AAR") has taken the position throughout the various proceedings involving refarming that its members have unique, highly specialized requirements that demand continued use of 25 kHz equipment. The FCC will need to determine whether it agrees with AAR's assessment. However, the rules governing the PLMR industry generally cannot be predicated on the needs of a single constituency. If the Commission believes that the railroad industry has justified an exemption from the overall requirements, that exemption should be confined to those eligibles. It should not be the basis for delaying the deployment of spectrally efficient technology on frequencies other than Railroad frequencies.

[16] Of course, even the Petitioners' recommended dates have been revised herein to reflect the intervening two years since their earlier comments were filed.

five years and have been advising prospective customers of the impending conversion requirement as well.

While there inevitably are some entities that have elected to ignore these warnings and that do not want to upgrade their multi-decade-old equipment despite its adverse impact on overall spectrum efficiency, the vast majority of licensees are well-prepared and do not need another ten years to complete the conversion process. It is the interest of these users that should be recognized in the Commission's rules, not entities that have proven unwilling, despite substantial advance notification, to plan for system upgrades that are essential to the efficient use of these bands for the benefit of the entire non-public PLMR community.

For this reason, the Petitioners respectfully believe that the Commission's conclusions regarding the amortization of equipment costs and the life span of equipment were overly cautious.[17] The Commission explained its decision by noting that a ten-year transition period will give incumbent licensees ample time to phase out 25 kHz technologies.[18] Notably, however, Motorola, an equipment supplier for a significant portion of this PLMR community, stated in 2001 that "12.5 kHz capable equipment has been readily available in the market for the past few years."[19] In fact, the Commission has required that 25 kHz equipment also be capable of operating with 12.5 kHz of bandwidth since February 14, 1997.[20] Thus, PLMR users have enjoyed access to12.5 kHz capability for over six years to date. Any entity that has purchased new equipment during this period already has the ability to convert its system to 12.5 kHz

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[17] 2nd R&O at ¶ 8.

[18] 2nd R&O at ¶ 8.

[19] Comments of Motorola, filed on March 5, 2001, at p. 5. Unless otherwise noted, all comments referenced herein were submitted in the above-mentioned docket on March 5, 2001.

[20] 47 C.F.R. § 90.203 (j)(2)-(3).

capability at nominal cost.[21] Those that purchased new equipment before then may have bought 12.5 kHz voluntarily. Even if not, they already would have depreciated fully their 25 kHz equipment as it typically is depreciated over a five-year period for mobiles and portables and seven years for infrastructure.

Based on informal discussions with major equipment manufacturers, the Petitioners believe that a reasonable estimate for the number of dual-mode radios that have been placed in operation since 1997 is approximately 10 million. This combination of dual-mode equipment availability and the well-advertised FCC initiative to migrate to more efficient technology provides assurance that preparation for the conversion to narrowband operations has been occurring for years by all but the most recalcitrant PLMR users. Contrary to the FCC's expectation, the majority of non-public safety users will be able to convert their dual-mode equipment with minimal effort or cost or should be at a point where their equipment is ready to be replaced.[22] That certainly will be the case by the January 1, 2008 deadline requested herein.

Public safety licensees, on the other hand, may have more compelling concerns about budgetary limitations and interoperable networks that dictate a longer transition.[23] While all

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[21] Of course, some users may have elected to purchase less costly, used 25 kHz equipment despite advise from dealers, trade associations and the FCC itself. Those that did so have enjoyed the benefit of those cost savings, thereby reducing the impact on them when they need to migrate to 12.5 kHz technology.

[22] It is difficult to quantify the "useful lifespan" of equipment, and the Petitioners are not certain that such a figure would be determinative for purposes of this proceeding in any event. The question cannot be whether the equipment still works. Rather, it must be whether the continued use of 25 kHz equipment is contrary to the public interest because its relative inefficiency precludes the deployment of more advanced, efficient technologies by other users in the area. The FCC has determined already that it does; that conclusion is the foundation of the entire refarming initiative, including the instant proceeding.

[23] Public Safety Wireless Network (PSWN) Program Petition for Reconsideration of the Second Report and Order, filed on August 1, 2003 (PSWN Petition). *See also,* Petition of the Federal Law Enforcement Wireless Users Group for Reconsideration of the Second Report and Order, filed on August 1, 2003 (FLEWUG Petition).

licensees have financial constraints within which they must operate, public safety entities often have lesser control of those processes than do commercial enterprises. They also may require additional time to engineer and build their networks, which sometimes are highly complex and/or must be interoperable with other public safety entities. For these reasons, the Petitioners recommend that the FCC give serious consideration to the PSWN and FLEWUG proposal of a public safety date-certain of 2013, as well as recommendations on this issue from other public safety representatives.[24]

With these factors in mind, the Petitioners urge the Commission to establish a deadline for each of these PLMR constituencies – January 1, 2008 for non-public safety licensees, and January 1, 2013, for public safety licensees – by which licensees must migrate to 12.5 kHz or comparably efficient technologies. Such deadlines not only would comport with the record in this proceeding, but also with the public interest in enhanced spectral efficiency and a reasonable conversion process.

B. THE COMMISSION SHOULD PROTECT THE INTERESTS OF ALL PRIVATE LAND MOBILE LICENSEES BY MAKING MANUFACTURING DEADLINES CONGRUENT WITH THE LICENSEE COMPLIANCE DEADLINES, WHILE PROVIDING LICENSEES WITH REASONABLE FLEXIBILITY TO OPERATE WIDEBAND SYSTEMS UP TO THEIR RESPECTIVE NARROWBAND DEADLINES.

The 2nd R&O established a sequence of deadlines relating to the manufacture and sale of equipment in these bands. Specifically, the Commission first prohibited the certification of equipment with 25 kHz capability, even if dual-mode, after January 1, 2005. Second, it

[24] PSWN Petition at p. 6. FLEWUG Petition at p. 7. The Petitioners believe a quicker public safety conversion would also be in the public interest, as public safety licensees would benefit by streamlined deadlines and a quicker path to more spectral efficiency. A conversion shortly after non-public safety licensees would also benefit the public safety community and equipment manufacturers by virtue of learning from the first transition process.

prohibited the manufacture and importation of such equipment beginning January 1, 2008.[25] Thereafter, the only equipment that may be manufactured will operate on 6.25 kHz and/or 12.5 kHz bandwidth. This leads to the peculiar result that 25 kHz equipment will be permitted to be operated by PLMR users for five years after suppliers will no longer be permitted to manufacture it.[26]

The Commission's intent presumably was to encourage earlier conversion by constricting the continued availability of 25 kHz bandwidth equipment. It also may have been intended to reduce the likelihood that parties would request last-minute waiver relief to continue using recently purchased 25 kHz bandwidth equipment. The Petitioners are not persuaded that this approach is either necessary or in the public interest.

First, the FCC rules already dictate that all new 25 kHz equipment also be capable of operating at 12.5 kHz. Parties that acquire such equipment between now and the migration deadline will have no basis for claiming or needing waiver relief since the conversion process is easy and inexpensive. The only entities that might seek a delay are those with equipment that operates exclusively at 25 kHz. Of course, such equipment either had to have been purchased prior to 1997 in which case it has been depreciated fully or it was purchased as used equipment since then with full knowledge of the upcoming narrowband requirement. Since the FCC has not proposed to restrict the sale of such equipment, only its certification, manufacture or importation, it will need to address such requests when and if they arise, although neither category of petitioner would appear to have a compelling case for waiver relief.

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[25] 2nd R&O at p. 2.

[26] This assumes retention of the current conversion deadlines.

Conversely, however, the current prohibitions might cause manufacturers to determine that it is not financially prudent to continue producing replacement parts or servicing 25 kHz equipment throughout that period. Since the FCC seemingly has made a public interest determination that licensees should be permitted to continue operating 25 kHz systems for some period of time, whether the 2008/2013 deadlines requested by the PLMR industry or the 2013/2018 dates adopted by the FCC, it is not clear how that interest would be served by regulations that would undermine the operating capabilities of those systems.

Instead, the Petitioners recommend that the FCC adopt a more marketplace-driven approach, consistent with its recent decisions in numerous proceedings, including, but not limited to, its Spectrum Policy Task Force report.[27] As long as the Commission establishes clear rules governing the licensing and use of equipment, it should not be necessary also to restrict the certification, manufacture or importation of equipment. Equipment suppliers have been offering dual-mode equipment for more than five years to permit backward compatibility. The need for such capability will continue until the conversion process is complete. If the Commission wants to accelerate that process, a position the Petitioners would support, it should do so directly by establishing even earlier deadlines than requested herein, not indirectly by restricting equipment availability to the detriment of entities engaged in a good-faith effort to satisfy a timetable established by the FCC. Eliminating the equipment deadlines of 2005 and 2008 would permit manufacturers to provide equipment and service consistent with the final licensee compliance deadlines.

In addition to making the manufacturing deadlines congruent with the final date of licensee compliance, the Petitioners also recommend that the Commission stay the January 2004

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[27] *See* Spectrum Policy Task Force Report, ET Docket No. 02-135, November 2002.

licensing deadline as to license modifications and permit incumbents the flexibility to re-deploy existing systems without converting entirely to narrowband technology.[28] As the FCC is aware, the PLMR industry is dynamic. Licensees often need to modify their licensees to conform to changing business demands. While the Petitioners are eager to promote early adoption of narrowband equipment, they are not persuaded that a system-wide requirement to do so should be triggered by any "major modification" of a license. Again, they recommend that the FCC instead rely on the clear, simple directive of a January 1, 2008 conversion deadline to encourage the earliest possible conversion. Providing licensees with flexibility to meet this deadline based on their individual business models would be consistent with the Commission's desire for maximum flexibility in spectrum regulation without undermining its commitment to improved spectrum efficiency.

Guided by industry awareness, user protection, spectral efficiency, maximum flexibility, and the public interest, the Petitioners suggest that the Commission advance the narrowband migration to 2008 for non-public safety licensees, while permitting equipment manufactures to manufacture and import equipment up to this date and allow incumbent licensees maximum flexibility to seek their own efficiencies in meeting the narrowband compliance deadline.

IV. Conclusion

The Petitioners applaud the Commission for adopting the 2nd R&O. The new rules represent a significant step forward toward more efficient and effective use of congested land mobile spectrum. However, given the benefits of spectral efficiency, the early warning for migration, industry awareness and the public interest, the Petitioners urge the Commission to

[28] The Petitioners propose no change in the upcoming prohibition against the licensing of new 25 kHz systems. As described herein, given the availability of dual-mode equipment, there is no reason for a new entrant to deploy a 25 kHz bandwidth system at this time.

shorten the time allotted for non-public safety narrowband migration to January 1, 2008. Furthermore, the Petitioners recommend that the Commission streamline deadlines to provide incumbent licensees with flexibility and simplicity in determining their own implementation method and financial structure for narrowband compliance. The Petitioners look forward to working with the Commission on this issue.

Respectfully submitted,

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