

APCO REPORTS



ASSOCIATION OF PUBLIC-SAFETY COMMUNICATIONS OFFICIALS INTERNATIONAL, INC.

2040 S. Ridgewood Ave., South Daytona, Florida 32119-8437 U.S.A.

(904) 322-2500 • Fax (904) 322-2501 • (800) 949-APCO

Volume 10 •• 1994 •• Number 4

2 GHz Microwave

'FCC Must Reinstate Public Safety's Exemption to Relocation'

The Public Safety Microwave Committee (PSMC), the County of Los Angeles, APCO and the Forestry-Conservation Communications Association (FCCA) have petitioned the FCC for reconsideration of the Commission's Memorandum Opinion and Order about reallocation of the 2 GHz microwave radio bands. The committee concludes, after presenting persuasive evidence, that the Commission "must reinstate the public safety microwave exemption."

The Petition was filed May 25. About two weeks after that, the FCC would normally issue a formal notice that the Petition had been filed. Then the notice would appear in the Federal Register, and that would signal the start of a 30-day period for comments and oppositions, according to APCO Legal Counsel Robert M. Jurs. If that timetable remained in place, comments on the Petition would be due at the FCC sometime between July 8 and 12th or later.

APCO is encouraging state and local government public safety

agencies to submit comments in support of the Petition to emphasize the disruption that would be caused by forced relocation from their 2 GHz allocations.

In the petition, the four groups, herein referred to as the "Petitioners," said that "in an abrupt reversal of its prior findings and conclusions, the FCC has adopted rules requiring state and local government public safety agencies to vacate 2 GHz microwave radio frequencies that provide the backbone for police, fire, emergency medical, forestry-conservation, highway maintenance and other critical public safety mobile radio communications services."

Forced relocation of these facilities will cause severe and unnecessary disruption to vital taxpayer-supported communications services that protect the safety of life and property. To make matters even worse, the Commission acted surreptitiously, without prior notice and opportunity for public comment."

"If not reconsidered, public safety agencies will be forced to engage in complex negotiations with PCS providers and possible lengthy and costly litigation before the FCC. The endless disputes likely to arise regarding the direct and indirect cost of relocation and the acceptability of replacement facilities will severely strain the limited financial and staff resources of state and local governments. These issues are likely to include frequency selection and coordination, interference protection, system design, equipment requirements, reliability, performance specifications and network redundancy."

Throughout this disruptive process, state and local governments also stand to be unfairly outgunned by PCS providers with millions of dollars at stake and ample resources for extensive engineering and legal support. Negotiating at such a disadvantage, state and local governments could be forced to accept less-favorable terms and, more importantly, less-reliable replacement facilities."

Commission Previously Recognized Disruptive Impact of Forced Relocation

"Previously, the Commission recognized the disruptive impact of forced relocation and repeatedly found that the grandfathering of public safety licensees in the 2 GHz band was in the public interest. This public safety exemption reflected the express Congressional intent that the Commission give top priority to communications services protecting the safety of life and property, and, in particular, to unusually specific Congressional intent that public safety licensees in the 2 GHz band not be subject to forced relocation."

"Nevertheless, on March 8, 1994, on its own motion and without any prior notice to the public safety community or the public at large, the Commission reversed course 180 degrees and summarily dropped the public safety exemption."

"The Commission totally ignored the relevant legislative concerns, acted without any new scientific or technical evidence of record that could possibly support elimination of the exemption, and did not rationally explain its dramatic and unexpected policy reversal. All the Memorandum Opinion & Order contains are overly broad, speculative and internally inconsistent statements regarding the perceived impact of public safety microwave incumbents on PCS deployment."

This sudden reversal of position is predicated solely on the bald claim that PCS providers will not be able to co-exist in the 2 GHz band with those public safety microwave systems that do not relocate voluntarily. Not only is no evidence or technical analysis offered to support this claim, but it directly contradicts the Commission's own recent findings and conclusions in granting extraordinarily valuable PCS pioneer's preference to companies that have purportedly developed and demonstrated spectrum-sharing technologies for the 2 GHz band."

"For these and other reasons ...," the Petitioners said in their Petition, "The Commission must reconsider its decision and reinstate the public safety exemption from forced relocation."

Congress Was Explicit About Public Safety's Use of 2 GHz Band

The Petitioners said that Congress has been explicit when it comes to public safety use of the 2 GHz band. During consideration of the fiscal year 1993 Appropriations Bill for the FCC,

Senator Ernest Hollings (D-South Carolina) proposed restrictions on the Commission's reallocation of the 2 GHz band, including a detailed transition plan very similar to the overall plan subsequently adopted by the Commission. As initially offered, the Hollings Amendment allowed for a period of voluntary relocation of current licensees in the 2 GHz band, followed by a period of mandatory relocation of any licensee where a new user of the band agreed to bear the expenses of relocation.

Senator Bumpers' Amendment's Intention: Preserve, Codify Public Safety Grandfathering

On the Senate floor, during reconsideration of the bill, Senator Dale Bumpers (D-Arkansas) offered a "perfecting amendment" to the Hollings Amendment to exclude state and local government licensees from any mandatory relocation. It was intended to preserve and codify the grandfathering of the right of state and local governments to retain the portions of the 2 GHz band of the radio spectrum which they now control for use by public safety agencies. The "perfecting amendment" would write into law the then-current proposed rule of the FCC that provides for indefinite grandfathering of the rights of public safety users of the 2 GHz band.

The Bumpers Amendment was accepted by Senator Hollings, the floor manager for the bill, and it was unanimously adopted by the full Senate. According to the Public Safety Microwave Committee in its Petition, "The Commission obviated the need for legislation when it adopted rules incorporating many of the provisions in the Hollings/Bumpers Amendment, including the public safety exemption. As a result, Senator Hollings withdrew the specific 2 GHz provisions when the bill reached the Conference Committee, presumably confident that the FCC was ... progressing in a manner consistent with Congressional intent."

"Now, without even acknowledging this history and acting as if it had never happened, the Commission has eliminated the public safety exemption, forcing all microwave licensees to vacate the 2 GHz band. This is exactly the result that Congress sought to prevent in the Hollings/Bumpers Amendment. Yet, the Commission has not even attempted to explain how its action can be reconciled with these express Congressional concerns."

Commission Never Even Hinted At Eliminating Public Safety's Exemption

"Until its most recent action, the Commission has been steadfast in its exemption of public safety licensees from forced relocation. While the Commission narrowed the definition of an exempt public safety entity, it never proposed or even hinted that the wholesale elimination of the public safety exemption was under consideration. Nor did any part file a petition for reconsideration seeking such a result. Rather, the Commission acted on its own and in complete secrecy."

The Petitioners said, "This secret aspect of the Commission's action was particularly troublesome to Commissioner Quello, who expressed 'concerns about the process by which the Commission came to this conclusion and the procedure for relocating these critical public safety communication service providers.' In his view, the 'Commission should have apprised the public safety community of this impending change.' (That comes from a separate statement of Commissioner James H.

Quello issued with the Memorandum Opinion and Order). He reluctantly concurred with the MO&O, as did Commissioner Barrett, who invited further reconsideration of the matter if public safety entities 'believe that additional procedural safeguards are required to support the ability to operate without disruption.' (That comes from a separate statement issued by Commissioner Andrew C. Barrett.)"

The Petitioners, "Until the MO&O, such 'additional procedural safeguards' had been part of every Commission proposal and order in this proceeding. In initially proposing to create an 'emerging telecommunications technology' band at 2 GHz, the Commission clearly recognized the special public safety situation:

We recognize that state and local government agencies would face special economic and operational considerations in relocating their 2 GHz fixed microwave operations to higher frequencies or alternative media. We are particularly sensitive to the need to avoid any disruption of police, fire and other public safety communications. To address these concerns, we propose to exempt state and local government 2 GHz fixed microwave facilities from any mandatory transition periods. Rather, these facilities would be allowed to continue to operate at 2 GHz on a co-primary basis indefinitely, at the discretion of the state and local government licensees. These agencies would be permitted to negotiate the use of their frequencies with other parties. In this manner, transfer of state and local government operations could be arranged so as to accommodate fully any special economic or operational considerations with regard to the institutions affected.

After a presumably thorough review of the record, the Commission completely exempted state and local government licensees from mandatory relocation. While some issues, such as the length of the transition period for licensees subject to relocation, were left for further comment in the Third Notice phase of the action, the public safety exemption was contained in the 'final' rules adopted as part of the First Report and Order. Those rules were included in the amended Section 94.59(b) attached to the Order and subsequently published in the Federal Register, 57 Feb. reg. 49020, 49022 (October 29, 1992)."

No One Filed for Reconsideration Of the State and Local Government Exemption

"Significantly, no party filed a petition for reconsideration of the state and local government exemption from mandatory relocation. ... in rejecting requests that the state and local government exemption include public power companies, the Commission reaffirmed that its 'purpose in providing an exemption from mandatory relocation was to ensure that important and essential safety of life and property communications services are not disrupted' and that its

concerns for exempting such facilities from involuntary relocation were directed toward the economic and extraordinary procedural burdens, such as requirements for studies and multiple levels of approvals, that are often necessary to make changes in public safety systems as well as the unique importance of communications involved in the provision of police, fire and emergency medical services. While our rules ensure that the financial burden of any relocation is placed on the new technology provider, we continue to believe that the public safety and special emergency services warrant special protection.

While reaffirming the need to protect 'public safety' licensees from mandatory relocation, the Commission limited the definition of 'public safety' facilities to those licensed under Part 90, Subparts B and C, and on which a majority of communications are for the protection of life and property. PSMC, FCCA and others subsequently filed petitions for reconsideration of this action. Several parties opposed those petitions. However, again no party filed a petition for reconsideration or otherwise sought to eliminate the public safety exemption."

Repeal of the Public Safety Exemption Was a Surprise, to Say the Least

"Thus, it was a surprise, to say the least, when the Commission ... completely repealed the public safety exemption in its March 8, 1994 Memorandum Opinion and Order. With no prior proposal, notice to interested parties or further record, the Commission had an even greater burden than normal to explain the rationale for the complete reversal of its prior position. As discussed below, the Commission failed to come even close to that burden.

The Petitioners said the FCC failed to provide an adequate basis for its sudden reversal of the public safety exemption.

"An administrative agency must provide a well-reasoned rationale supported by the record for any significant change in its policies or rules ... Previously, the Commission had concluded (presumably after careful analysis) that 'state and local government agencies would face special economic and operational considerations in relocating their 2 GHz microwave operations' (NPRM at ¶25), including 'economic and procedural burdens, such as requirements for studies and multiple levels of approvals, that are often necessary to make changes in public safety systems.' (Third Report and Order at ¶50). Therefore, said the Commission: 'While our rules ensure that the financial burden of any relocation is placed on the new technology provider, we continue to believe that public safety and special emergency services warrant special protection.'"

Commission Said Exemption Was to Ensure Essential Communications Aren't Disrupted

"Even in its most recent decision, the Commission acknowledges that the purpose of the exemption 'was to ensure that essential safety of life and property communications services are not disrupted or otherwise disadvantaged.' (MO&O at ¶30). Yet, nowhere in the MO&O does the Commission suggest that either the disruption or the 'economic and procedural burdens' of forced relocation have been eliminated or even diminished."

What change in circumstances, therefore, could be so compelling as to overcome the serious problems posed by any forced displacement of communications facilities that protect the safety of life and property?" ("Certainly the fact that PCS providers must pay the costs of relocation is not the explanation, as that was also true in the Commission's prior decisions to exempt public safety facilities from forced relocation.").

"To the extent that the MO&O provides an answer, it appears to be that the Commission has suddenly and somewhat mysteriously come to a completely different conclusion that 'it will not be possible for PCS and fixed microwave to operate in the same geographic area on the same frequency without interfering with each

other.' (MO&O at ¶34). Without even mentioning, let alone weighing, its previous findings regarding the impact on public safety of forced relocation, the Commission has completely changed course. Its sudden reversal is based on a 'particular concern' in

providing adequate spectrum for operation of licensed services in major urban areas where there are a large number of incumbent public safety fixed microwave facilities and for operation of unlicensed PCS devices ... allowing all public safety facilities to remain in the band indefinitely would defeat our primary goal in this proceeding of providing usable spectrum for the implementation of emerging technologies.

Failure to Discuss or Balance Competing Concerns Is Cause Enough to Reconsider

"At this late stage and considering the long history of this proceeding, the Commission must do much more than simply assert a 'particular concern' that 'PCS service may be precluded or severely limited in some areas unless public safety licensees relocate.' First, even assuming that the Commission's concern is well placed (and it is not), the Commission must balance that concern against the disruption to public safety communications caused by relocation, the statutory 'priority' for communications that protects the safety of life and property and the unusually specific legislative intent that 2 GHz public safety microwave systems not undergo forced relocation. The Commission's failure even to discuss, let alone balance, these competing concerns is reason enough for the Commission to reconsider its decision in the MO&O."

Yet, there is further, even more compelling, reason for reversal. The conclusion that incumbent public safety microwave licensees will prevent PCS from developing is nothing more than a bald assertion, unsupported by the record or valid technical analysis. To support its claims, the Commission cites just three comments filed after the Third Report and Order. Yet, none of these parties took the position in their comments that the alleged impact of public safety incumbents was so severe as to require complete elimination of the public safety exemption (and none had filed a petition for reconsideration on that point). Rather, their comments were in support of the Commission's decision in the Third Report and Order to narrow the public safety exemption, and in opposition to petitions seeking to restore a broader 'state and local government' exemption."

PCS Providers: Commission's Exempting Vital Services From Relocation a 'Fair' Balance

"Indeed, Cox (one of the three commentators) stated in its comments that the Commission's 'decision recognizes that microwave incumbents providing services that directly and predominately protect lives and property cannot risk any possibility of service disruption or inconvenience.' According to Cox, the 'balance struck by the Commission is equitable, necessary and will benefit ultimately both emerging technology service providers and microwave incumbents.' APC similarly agreed that the Commission decision 'strikes a fair balance between ensuring that spectrum is available for emerging technologies and exempting vital services from involuntary relocation.' Even the PCS industry appears to have accepted the need to protect at least some public safety microwave licensees."

"In going beyond what the PCS industry itself had advocated, the Commission based its conclusion on its own assertion that 'it will not be possible for PCS and fixed microwave to operate in the same frequency without interfering with each other.' (MO&O at ¶34)."

Commission Fails to Cite Any Substantial Evidence

"However, the Commission fails to cite any substantial evidence in the record to support that conclusion. Rather, the Commission merely points to a few comments containing factual statements regarding the number of public safety licensees in particular frequency bands and geographic locations, something which has remained largely unchanged throughout this proceeding. (MO&O at ¶32). No engineering studies or economic analysis, internal or external, analyzing the actual impact of those microwave facilities on PCS deployment is cited, let alone a reasoned attempt to balance that impact against the harm caused by forced relocation of public safety licensees."

The absence of such evidence suggests that either the Commission acted without any basis for its decision (in which case it must be reversed on substantive grounds), or the Commission relied upon information not cited in this MO&O or filed in the record of this proceeding. If the latter case, to the extent studies or other information were not placed in the record for public review and comment, there would be a serious violation of the Commission's rules regarding ex parte communications."

"As the Commission is well aware, there have been numerous allegations regarding improper ex parte communications in the related PCS and pioneer's preference proceeding (Gen. Docket 90-314). These allegations are now the subject of a Congressional investigation, a raging debate before the Commission and numerous judicial appeals of the pioneer's preference awards. Given the apparent lack of support for its abrupt policy shift, it is incumbent on the Commission also to review the potential for infestation of this proceeding by impermissible ex parte contacts."

FCC's Action Totally Inconsistent With Findings Underlying Preferences Award

"The FCC's action is totally inconsistent with the Commission's findings underlying the award of valuable PCS pioneer's preferences."

"The Commission's cursory and unsupported conclusions regarding sharing of the 2 GHz band also directly contradicts its own statements and actions in the PCS pioneer's preference proceeding. (Third Report and Order in Gen. Docket 90-314, FCC 93-550, released February 3, 1994, ¶¶7-36, 51-74). There, the Commission granted extraordinarily valuable PCS pioneer's preferences to APC and Omnipoint, based upon their development of technologies to facilitate exactly the type of sharing of the 2 GHz spectrum that the Commission now says 'will not be possible.'"

APC received its pioneer's preference for developing and demonstrating the Frequency Agile Sharing Technology (FAST), which the Commission said will 'facilitate spectrum sharing by mobile PCS and fixed microwave systems at 2 GHz.' The Commission also concluded that 'APC's analysis and testing demonstrate that unused spectrum exists in the 1850-1990 MHz band sufficient to allow immediate initiation

of PCS services with no need to immediately relocate existing licensees."

"Similarly, Omnipoint received a pioneer's preference for developing spread spectrum PCS technology that it claimed will result 'in less interference to incumbent microwave operations than that of other proposed PCS equipment, and that this permits greater spectrum sharing.' Omnipoint's technology is designed to 'coexist with other users and fixed microwave operations on the same frequencies with minimum disruption and maximum flexibility.' Thus, the Commission concluded that 'the concepts and technological developments pioneered by Omnipoint will facilitate the implementation of PCS in the 2 GHz band and permit sharing with fixed microwave licensees.'"

Commission Can't Have It Both Ways; Either Spectrum Sharing Is Feasible or It Isn't

"The Commission cannot have it both ways," the Petitioners said. "Either spectrum sharing is feasible (as suggested in the significantly more detailed pioneer's preference decision), or it 'will not be possible' as claimed in the latest MO&O in this proceeding. If the latter is true, then the Commission's grant of pioneer's preference to APC and Omnipoint must be re-examined. If sharing is feasible, the Commission must reconsider and reverse its blatantly inconsistent ruling to repeal the public safety exemption from forced relocation."

Wholesale Elimination of Public Safety's Exemption Imposes Added Burdens

"The Wholesale elimination of the public safety exemption imposes added burdens on rural microwave systems."

"The Commission's blanket elimination of the public safety exemption is also overly broad. The Commission's principal concern is with the impact of incumbent microwave licensees in major urban markets and in the unlicensed PCS band. Yet, the public safety exemption was repealed for all public safety entities, including rural systems (which make up the majority of microwave facilities) and those in the licensed PCS portion of the 2 GHz band."

For many rural public safety microwave systems, there is really only a one-year negotiation period under the Commission's rules. The voluntary negotiation period will expire simultaneously for all public safety 2 GHz microwave licensees four years after the FCC accepts the first PCS applications. However, PCS licensees are unlikely to need to relocate rural microwave paths, if at all, until well after the expiration of the voluntary four-year period. Since PCS providers can initiate the one-year mandatory period at any time thereafter, rural microwave licensees will have little or no advance notice that PCS providers need their frequencies, and will have an unreasonably short time period to reach mutually acceptable relocation agreements."

"Therefore, the MO&O, in addition to being unsupported by the record and inconsistent with other Commission actions, will have an arbitrary and capricious impact on rural public safety microwave users."

"Therefore, for the reasons discussed above, the Petitioners urge the Commission to reconsider and reverse its sudden and unsupported decision to force public safety 2 GHz licensees to relocate. The Commission must reinstate the public safety exemption." ■

Spectrum Refarming

Contrary to Rumor, It Won't Make Equipment Obsolete

By Barbara Baffer

Ericsson GE Mobile Communications

The Federal Communications Commission has issued proposed rule changes, known as "Refarming," "Part 88" and "Docket 92-235," which will create additional channels for land mobile radio users. The FCC refarming proceeding began in 1991 when the FCC requested comment from the public in its Notice of Inquiry on how it might proceed in increasing spectrum utilization. In 1993, the FCC again went to the land mobile radio community with proposed rules known as the "Notice of Proposed Rulemaking" or "NPRM" that defined a method to create these additional channels. Since that time, the industry has responded to the NPRM in accordance with federal rulemaking procedures. The industry is now eagerly awaiting the FCC's final rules on how it will proceed in "refarming" the spectrum.

Recently, the FCC announced that the final refarming rules will be completed this month. Unfortunately, since the requirements of the new rules have not yet been determined, some manufacturers are apparently taking advantage of the obscure state of the FCC's refarming rules in an attempt to opportunistically enhance their equipment sales. This article is written to dispel the rumors which suggest the need to immediately replace existing equipment.

Ericsson GE believes that equipment eventually will need to be changed-out to comply with the proposed changes; nonetheless, the FCC's position was made very clear in the FCC's April 18 Public Notice which stated that "equipment purchased by private land mobile licensees before the effective date of any new rules would be able to be used for many years."

The refarming NPRM contains a total rewrite of the Part 90 rules and recodifies the private land mobile rules under a new Part 88. The rules as proposed would require that licensees above 72 MHz and below 512 MHz reduce their channel spacing. Licensees in the UHF and VHF bands would split their 25/30 kHz channels into 12.5/15 kHz channels, and over the long term split the channels again to 6.25/5 kHz. One of the most controversial aspects on the refarming NPRM was the FCC proposed timeline which designated 1996 as the initial year in the 16-year "refarming" program for implementing these proposed rules changes. The FCC was anxious to move forward in creating new channels, but at the same time, had to consider the financial implications for the 12 million licensed users that operate in the private land mobile bands below 512 MHz.

More than 600 parties, including Ericsson GE, filed comments and letters with the FCC. The idea of creating improved spectrum utilization was widely endorsed, but the tremendous cost of implementation was strongly criticized. The FCC has acknowledged the position taken by APCO and the hundreds of other public safety entities which filed comments. The FCC also has heard from Congress, which was inundated with thousands of letters from anxious public safety agencies which were concerned about the possibility of promulgation of FCC rules requiring agencies to replace existing equipment.

The FCC is mandated by law with the responsibility for allocating spectrum for non-federal public safety users. In order to create

new spectrum for public safety land mobile licensees, the FCC believes that it will have to split the channels of existing customers to free more channels for additional land mobile radio users.

When the FCC splits these channels and issues adjacent "split" channel authorizations, the equipment currently in use today will not be able to operate with today's degree of interference protection within these new narrower channels.

As pointed out to the FCC by numerous commentors to the NPRM, a substantial amount of land mobile equipment in use today is not practically convertible to the new narrower channeling, and, thus, new equipment will be required. The FCC is fully aware of this dichotomy; the public safety market requires additional channels, yet the public safety market is also extremely concerned about the costs of eventually replacing existing equipment. Because of this well-publicized concern, the FCC consistently has reiterated its position that land mobile users will be allowed a specified number of years to amortize the cost of their existing equipment.

Therefore, while new equipment eventually will be required, the FCC does not intend to force existing licensees to abandon their systems and buy new equipment. In fact, the FCC recently released a Public Notice which stated:

"We are aware that many licensees are being strongly encouraged by equipment dealers and others to buy new radio equipment

now because of an assumption that they will have to vacate their current channel assignments or replace their existing equipment by 1996. This is not the case.

No licensees will be forced off current channel assignments in 1996 as a result of the refarming issue." (FCC Public Notice April 18).

Some salespersons have used the proposed refarming rulemaking to confuse the public safety land mobile industry. As a result, some public safety users are showing a reluctance to make purchases of needed radio equipment due to the concerns about the mandated obsolescence erroneously perceived from the refarming requirements.

Also, certain manufacturers have apparently seized the opportunity to use these proposed rule changes as a sales tactic to pressure users into making unnecessary equipment purchases by telling customers that 25/30 kHz equipment will not be allowed in the VHF and UHF bands. Ericsson GE is committed to telling the facts based on the information disseminated from the FCC. Since the FCC is the agency that will create the new rules, we believe that the FCC should continue to be the reference source for accurate information on the future requirements for the public safety land mobile radio systems. ■

Editor: Alan W. Chase • Production Coordinator: Kathy O'Connell • Assistants: Gwen Segren, Ray Barnes

APCO REPORTS
2040 S. Ridgewood Ave.
South Daytona, FL 32119-8437



FIRST CLASS MAIL

Serving
Public Safety Communications
Since 1935