



APCO REPORTS



May 1996

APCO Provides Comments Regarding Improvements in Commission's Processes

APCO is pleased to provide its comments regarding improvements in Commission processes. State and local government public safety agencies depend upon reliable radio communications for day-to-day emergency response activities. Those agencies, in turn, rely upon the FCC to provide adequate radio spectrum for their activities, and to adopt rules and procedures that facilitate their operations and take into consideration the special financial constraints and requirements of public safety agencies.

The following comments provide an overview of some basic considerations that must play a role in all FCC decision-making on radio spectrum issues. Thereafter, APCO offers some specific responses to the Commission's questions with regard to the Wireless Telecommunications Bureau procedures.

BASIC CONSIDERATIONS

► Priority

The priority of public safety must be the first concern. The need to provide wireless systems for the purpose of protecting life and property is entirely different from providing a service to commercial users. While the Commission must weigh compet-

ing factors in all its decisions, public safety issues must receive top priority.

► System Coverage

Areas of coverage for the public safety user are determined by the geographical area of responsibility of the governmental agency, rather than by a market area as the requirement in commercial systems. Rules regarding power and other parameters which affect signal coverage must reflect this difference, and be adjusted both higher and lower as appropriate. This can best be accomplished through the recommendations of the frequency coordinator.

► Exclusivity

While air time sharing may be acceptable for commercial users, it is inappropriate for systems which protect life and property. For the commercial user, exclusivity enhances the potential for the licensee to attract more customers and to provide improved services. For the public safety user, quasi-exclusivity is a necessity to ensure that vital communications will not be interrupted at a critical time.

► Procurement Time

Governmental agencies operate on

multi-year budgets and capital outlay is often a multi-year process. While rules for procurement vary from agency to agency, generally all major purchases are made through a strict bid process. This further increases the time required from concept, to planning, to funding, to specification preparation, to award of contract, and finally to procurement.

The slow procurement and implementation times faced by public safety agencies must be considered whenever spectrum/ is available to both public safety and non-public safety entities. For example, public safety agencies lost many critical 800 MHz Public Safety Category channel assignments simply because businesses could move quickly to "justify" intercategory sharing of those channels before relevant public safety were prepared to file applications and construct new facilities.

► Value of Spectrum

Since all public safety applicants are governmental agencies, it is totally inappropriate to assess charges for spectrum or fees for processing licenses. Under no circumstances should a state or local government be forced to pay a fee to the federal government to use an inherently public resource—the airwaves. To date, this has been recognized and honored by the

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Commission. The federal agencies which control the spectrum and its licensing are tax supported, as are the governmental agencies applying for the licenses. Charging for any part of this process would be counter-productive.

Further, the Commission must not let economic factors influence the allocation of spectrum for public safety use. While APCO appreciates the desire to raise additional revenue through auctions, the Commission must first accommodate the needs of public safety.

► **Competition**

In a commercial environment, competition may well be the key to both improved performance and lower costs. Administering either the acquisition or the use of the spectrum by public safety agencies through a competitive process could lead to a totally opposite result. Cooperation, rather than competition, is needed at all levels, between the federal, state and local governments and between the various public safety services. The frequency assignment process must be carefully structured and performance monitored to ensure the public is being adequately served.

► **Enforcement**

Public safety agencies historically have been at the forefront in enforcing the Federal Communications Commission Rules and Regulations. All that is required is supervision and support at the national level for this compliance and self-enforcement. Conversely, this is not true of commercial services who must depend solely upon the FCC for enforcement. Adequate personnel for enforcement at FCC Field Offices must be a high priority in any proposed changes in reorganization.

► **Speed of Service**

Speed of service by the FCC is critical where emergency communications are required. In some cases, there

must be, provisions for temporary licensing can provide a method to satisfy this requirement. While speed of licensing may relate to lost profits in the commercial arena, in public safety, quality of frequency selection and assignment is of far more importance than is saving a week or two in the licensing process. APCO suggests an interim process where temporary authority may be granted to allow the applicant to begin installation and operation while awaiting the final license grant.

► **Interoperability**

The public safety requirements of federal, state and local government services mandate intercommunication. This is important in day-to-day operation and indispensable in disaster situations. Many illustrations can be given, but the basic need for mutual aid and coordinated action at the scene of a life and death situation needs no explanation.

In comparison, there is no requirement for such interoperability in the commercial field that cannot be accomplished through simple interconnection to the public switched telephone network.

Additional channels must be provided and rules for their use prescribed by the Commission to ensure interoperability in emergency situations. Such interoperability also requires compatibility of equipment, both in regard to spectrum and technical configuration. As appropriate, standards must be developed. These may be either mandated or optional, but interoperability cannot be ensured otherwise.

► **Private System**

Public safety communications operations are far too critical to be provided through commercial service providers. Only by maintaining their own communications networks can public safety agencies provide the levels of reliability, coverage, priority access, and security necessary for police, fire, emergency medical and

other public safety services. APCO recognizes that some state and local government communications can, and should, be accommodated through commercial providers. However, any communication operation that has an impact on the protection/ of life and property must be proved through a "private radio" system owned and operated by a public safety agency.

► **Adequate Spectrum**

The priority required for communications to support the protection of life and property far outweighs any use of the spectrum for entertainment or commercial purposes. Adequate spectrum must be assigned and appropriate rules developed for this use. The on-going PSWAC process will lead to recommendations for additional public safety spectrum allocations, and APCO hopes that the Commission will act promptly to implement those recommendations.

WHAT STEPS CAN THE WIRELESS BUREAU TAKE TO IMPROVE ITS PROCESS?

► **Public Safety Division**

There should be a special public safety division within the Wireless Telecommunications Bureau. Such a division must not be considered secondary to the total responsibility of the Wireless Bureau, but viewed as a means to deal with the unique requirements of public safety.

► **Frequency Coordination**

The need to design systems to cover the area of political jurisdiction, ranging from a small town, to a large city, a district, a county, a region, a state, and even to the entire nation, can only be addressed through a coordinated approach to the assignment of available spectrum. For example, the 800 MHz NPSPAC process has worked well. It is based on a regional, user driven process. The service provided by local advisors for the various public safety services is a further example. Recognition of state and wide area

mutual aid plans is a prerequisite. Priorities by and between various public safety services must also be considered.

Radio signals cannot be confined exactly to political jurisdictions. Propagation in mountainous terrain, and anomalies, such as ducting and signal diffraction, are not readily predictable through the use of computerized analysis. The Bureau does not have the staff nor the local knowledge of each local area to consider this type of variation in propagation. Recommendations for assignment must be provided by representatives of the service that is requesting the authority to construct and operate a system.

► Licensing

The actual licensing function must be retained by the Commission, though certain aspects of the licensing process could, perhaps, be delegated. There are several important factors, however, that must first be considered. First, public safety is presently exempt from FCC application fees. Any attempt to provide some portion of the licensing process through a contract agency would require a source of revenue for the that contract agency, either through Federal government grants or by charging fees for processing applications. For example, if APCO were to assume a greater role in the licensing process, it would have to collect additional fees from applicants to cover that additional burden on its operations.

Other factors, such as compliance with the Federal Aviation Administration regulations regarding tower height, cannot easily be delegated. The same holds true for those applications which require a waiver of FCC regulations. Enforcement must also remain the responsibility of the Commission. Some enforcement activities could be delegated, but the ultimate enforcement, including penalties for non-compliance, cannot be effective unless kept at the highest level.

► License Database

It is imperative to maintain a current and accurate license data base. The Bureau should place this issue as one of their highest priorities. Sufficient staff, supported by state-of-the-art electronic equipment and improved methodology must be provided. The actual speed of issuing the final license is not as important as keeping the progress of the application current and available to those who need to know. There is considerable room for improvement in the existing process, and APCO would be pleased to work with the Commission to make the necessary changes.

► Electronic filing

The use of electronic exchange of information can improve both speed and accuracy, starting with the filing from the applicant to the coordinator, continuing from the coordinator to the Bureau, and finally to the actual issuance of the license. This capability should be developed and encouraged. It should not however, be made totally restrictive without providing some type of assistance to needy applicants.

► Legal responsibility

Radio propagation has many variables. The assignment process is not perfect, and regardless of the method of frequency selection and licensing, there will be cases of interference. The Commission must retain the final authority and the final responsibility to resolve those issues. The high cost of indemnity insurance, which would be required for any other entity that took on such obligations, would need to be passed on to the applicant. This would further increase costs to the applicant.

► Privatization

While the process of issuing a license and maintaining a data base may be privatized, the recommenda-

tion for frequency assignment by representative coordinators must remain in place for public safety. If the Commission decides to "farm out" the licensing process, this can not remove its responsibility for management and authority. For example, the ultimate liability for incidents resulting from non-compliance to FAA requirements or inappropriate frequency assignment will fall back upon the agency which "controls" the spectrum.

► Rules

There is a definite need for specific rules for public safety, rather than general rules for all land mobile users. As illustrated, the requirements differ greatly from other users, and must be separately addressed. This can best be accomplished through first consulting with representative advisory groups before issuing specific proposals for rulemaking which make major changes.

The current rules contain some which are too restrictive and others which do not prescribe adequate control. An example is the "Safe Harbor tables". These were not designed for public safety use, and while they may serve a useful purpose, they require a liberal interpretation by Gettysburg and often result in frequent requests for waivers to make them usable. A further need for public safety is realistic loading criteria to ensure proper distribution and use of channels and spectrum. Such criteria should not be simply limited to a specific number of mobiles per channel. For example, it could include the population served, and the recognition that emergency response requires instantly available channels, as opposed to less vital, but also necessary, other types of service.

► Dissemination of information

This process could be greatly improved. Facilitating the exchange of information between the Commission and the users would

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APCO Files Petition for Reconsideration Regarding SMR Future Development, and Competitive Bidding of 800 MHz SMR

APCO previously examined the FCC's license database and determined that there were nearly 300,000 public safety radio units licensed on General Category channels to over 450 State

and local government public safety agencies. These General Category channels are used for basic emergency communications systems for police, fire, emergency medical and other agencies. In most cases, public safety agencies use General Category frequencies because no channels are available in either the 800 MHz Public Safety Category or the 821 MHz National public Safety Plan channels.

PETITION FOR RECONSIDERATION

The Commission, in the First Report and Order, reallocated the General Category for SMRs only, and will no longer accept applications from non-SMRs for General Category frequencies. APCO strongly opposes this reallocation as it closes off an important source of radio spectrum for public safety agencies. The Commission is well-aware of the serious spectrum shortages facing public safety agencies, especially in and near metropolitan areas. The Public Safety Advisory Committee ("PSWAC") is actively attempting to quantify those spectrum shortages and will soon be recommending specific frequency bands for reallocation to public safety. Thus, it is at best ironic, and at worse hypocritical, for the Commission to be reducing the radio spectrum available for public safety use.

The impact of the Commission's reallocation is particularly hard on those public safety agencies with existing systems operating on General Category frequencies. Many of these

agencies will need additional channel capacity in the near future to accommodate growing demands on their operations. Yet, in most metropolitan areas (and many rural areas), the 800 MHz Public Safety Category channels are already fully occupied. Indeed, that is why many public safety agencies ended up on the General Category. Nor are 821 MHz National Public Safety Plan channels available in most areas of the country. Even if the 821 MHz channels were free, special National Public Safety Plan operating requirements require different equipment than used in the General Category. Therefore, the 821 MHz band, even if available, would not be a viable option for expansion of current General Category systems.

The only rationale stated by the Commission for its reallocation of the General Category is its desire to accommodate the perceived spectrum requirements of wide-area SMRs, and to adopt a spectrum allocation scheme that will accommodate auctions. Even assuming that those are reasonable goals, the Commission's first priority must be to meet the spectrum requirements of agencies that protect the safety of life and property. 47 U.S.C. §151. The Commission appears to be ignoring the basic principal that radio services which are necessary for the safety of life and property deserve more consideration in allocating spectrum than those services which are more in the nature of convenience or luxury.

S.Rep. No. 191, 97th Cong., 2d Sess. 14 (1981), reprinted in [1981], U.S. Code Cong. & Ad. News 2237, 2250.

APCO urges the Commission to continue to allow public safety agencies access to the General Category frequencies. At minimum, existing

public safety licensees should be permitted to obtain additional channels for necessary expansion of current communications systems.

COMMENTS IN RESPONSE TO SECOND FURTHER NOTICE OF PROPOSED RULEMAKING

▶ **A.**

Public Safety Incumbents Must Not Be Forced to Relocate

The Commission's First Report and Order does not require incumbent General Category licensees to relocate to other frequency bands. The Commission notes in the Second Further Notice, that we believe that there are no equitable means of relocating incumbents to alternative channels, and that there are no identifiable alternative channels to accommodate all such incumbents.

Yet, in the very same paragraph, the Commission asks commenters to address how non-SMR licensees operating on the lower 80 and General Category channels should be treated. Should these licenses be relocated to non-SMR channels, and if so, under what circumstances and pursuant to what type of relocation plan?

It appears that the Commission intends to allow incumbent site-specific SMRs to remain in the General Category, but is considering the possibility of forcing public safety and other non-SMRs to relocate. This turns the Commission's statutory public safety obligation on its head. Commercial entities should be making room for public safety, not vice versa.

Furthermore, where does the Commission suggest that public safety incumbents go? All other 800 MHz public safety bands are fully occupied in and near most metropolitan areas. Nor are there any other "comparable" frequency bands available. Even if new public safety frequencies are allocated in the foreseeable future (as APCO has repeatedly urged), the purpose of such reallocation will be to accommodate public safety demand for additional spectrum, not for existing public safety operations displaced by commercial SMRs.

Considering the absence of replacement frequencies, perhaps the Commission is contemplating that incumbent non SMR users of the General Category can be accommodated on commercial systems. However, few if any public safety communications requirements can be met by commercial services. Public safety users must maintain their own systems to provide adequate system reliability for their emergency operations and security for sensitive communications. In addition, commercial carriers will have little economic incentive to provide the ubiquitous widearea coverage necessary for public safety systems. Finally, commercial systems cannot meet the peak demands of public safety systems that occur whenever there are major emergencies.

A forced reallocation of public safety General Category licensees would be even worse than the forced relocation of public safety microwave systems in the 2 GHz band. There, at least, the Commission identified replacement frequencies for most of the current 2 GHz incumbents. No such replacements are available for General Category incumbents. There would also be unprecedented costs and system disruption associated with any requirement that cities and counties relocate entire 800 MHz mobile radio systems. Unlike microwave relocation, which requires replacement of just two "radios" for each microwave path, relocating a mobile system to new frequency bands requires replacement of hundreds

(and in some cases, thousands) of mobile and portable radios, new base stations, and other major infrastructure modifications.

Finally, a very small minority of the General Category licenses are held by public safety agencies, and many areas of the country have no public safety systems on General Category channels. Allowing public safety incumbents to remain in the General Category, therefore, will not interfere, with the Commission's overall policy regarding the 800 MHz band.

▶ **B.**

*Incumbent Public Safety Licensees
Should be Given Extended
Implementation Authorizations*

A few of the current public safety licensees in the General Category are still in the process of constructing and implementing their communications systems. The Commission has often recognized the need to allow public safety agencies an extended implementation (i.e. "Slow Growth") period due to the need for multiple levels government approval, complex and often slow funding mechanisms, and other factors that impede rapid deployment of public safety systems upon licensure. In contrast, commercial operators are in a position to quickly apply for and obtain channels and can construct and implement systems far more rapidly than public safety agencies.

No licensee, public safety or otherwise, should be permitted to warehouse frequencies without concrete plans to use those frequencies and without showing reasonable progress towards implementation. At the same time, public safety agencies must not be forced to relinquish channels prematurely. Therefore, reasonable extended implementation rules must continue to apply to public safety systems in the General Category.

▶ **C.**

*The Commission Should Maintain the
Freeze on 800 MHz Intercategory
Sharing*

On April 5, 1995, the Commission imposed a freeze on applications for intercategory sharing between the Public Safety, Industrial/Land Transportation ("I/LT"), and Business Categories in the 800 MHz band. The freeze was necessary due to a flood of applications from SMRs in the I/LT and Business Categories, which, in turn, caused Business and I/LT users to seek Public Safety channels. SMRs are no longer eligible for intercategory sharing in the Business and I/LT Categories. However, the intercategory sharing freeze is still necessary, and should be made permanent, at least for the Public Safety Category.

The General Category is now closed to all non-SMR applicants, and the Commission is contemplating a requirement that incumbent non-SMRs relocate to other bands. These changes and proposed changes will cause even more Business and I/LT entities to seek Public Safety Category channels as a "safe harbor," further depleting what few channels are left. Therefore, a permanent bar on non-public safety applications in the Public Safety Category is necessary to ensure that channels will be available for current and future public safety use. In addition, the original problem which led to the freeze, depletion of Business and I/LT channels has not gone away. ▲


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result in an immediate improvement in public relations. There is a tendency on the part of public safety users to view the Commission as unapproachable. Use of the Internet would be helpful, but the major need is for more readily available information on vital issues. This should include not only actions being considered, but, to the degree possible, status reports on pending actions. ▲

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