

To: Scott/Roger  
From: J<sup>2</sup>

Before the  
Federal Communications Commission  
Washington, D. C. 20554

FCC 86-143  
36530

In the Matter of )  
)  
Frequency Coordination in the ) PR Docket No. 83-737  
Private Land Mobile Radio Services )

REPORT AND ORDER

Adopted: April 3, 1986

Released: April 15, 1986

By the Commission:

Table of Contents

<u>Title</u>	<u>Paragraphs</u>
Summary	1
Background	2-14
A. History of Coordination	3-10
B. History of this Proceeding	11-14
Discussion	
A. Responsibilities of Coordinators	15-53
1. Non-Discriminatory Service	18
2. Application Review and Handling	
a. Review	19-20
b. Processing order	21
c. Filing	22-23
d. Returns	24
e. Post-licensing conflicts	25-26
f. Speed of service	27-28
3. Frequency Selection	29-32
4. Interservice Sharing	33-35
5. Electronic Mail Box	36-37
6. Commission's Data Base	38-41
7. Fees	42-46
8. Single Nationwide Point of Contact	47-49
9. New Technologies	50-52
10. Summary	53
B. Number of Coordinators Per Service	54-61
C. Field Studies	62-69
D. Selection of Coordinators	70-108
E. Application Submission and Filing Requirements	109-125
F. Oversight of Coordinators	126-127
G. Miscellaneous Matters	128-131
Administrative Matters	132-136

### Summary

1. By this Report and Order, the Commission is modifying the procedures by which most of the frequencies allocated to the private land mobile radio services are assigned to individual applicants. These modifications are being made in that phase of the assignment process referred to as "frequency coordination." Frequency coordination is the process by which a private organization recommends to the Commission the most appropriate frequencies for applicants in the designated radio services.

### Background

2. Each year the Commission receives approximately 350,000 applications for licenses to operate radio stations in the private land mobile radio services in order to meet the critical mobile communications requirements of this nation's businesses, utilities, health care providers and state and local governmental entities. The process of identifying appropriate radio frequencies involves a variety of factors that depend on the specific needs of each applicant and the complex environmental conditions in which the station will be operating. In most cases, this task is performed by frequency coordinating committees ("coordinators"). These coordinators play a pivotal role in helping the Commission develop and manage private land mobile frequencies. Their involvement is especially important at a time when the demand for private land mobile radio systems is growing rapidly and the Commission's manpower resources are shrinking. Poor frequency recommendations, if relied on by the Commission, undermine efficient use of the radio spectrum, contrary to our statutory mandate to "...make available to all the people of the United States a rapid, efficient...radio communication service." 47 U.S.C. §151. Conversely, enlightened frequency recommendations help to ensure that the Commission optimizes the use of the available spectrum for the benefit of all members of the public. In this proceeding, we have comprehensively examined all facets of the frequency coordination process in an effort to maximize service to the public by assuring that the assignment and management of the private land mobile spectrum is performed in an efficient and effective manner.

#### A. History of Coordination

3. As a general rule, spectrum is shared in the private land mobile radio services. Even in the 470-512 MHz and 800 MHz bands, where there are provisions for exclusive channel assignments within specified geographic areas, there is an overall requirement that channels must be shared in order to accommodate the extraordinary growth in the use of land mobile communications systems. Before 1958, the private land mobile radio rules contained few specific procedures for frequency coordination by applicants. They did provide, however, that frequencies were available only

on a shared basis. They also required applicants and licensees to cooperate in the selection and use of these frequencies to minimize interference. To facilitate this process, interested parties formed frequency recommendation committees. These committees were generally representative of the entities using the services. Consequently, for the most part, applicants could be assured that, in selecting a frequency for their use, the committees would be both knowledgeable and impartial.

4. In 1958, we amended our rules specifically to recognize coordinating committees.<sup>1</sup> The rules provided that applicants could obtain frequency recommendations from these committees and that coordinator recommendations would be given consideration in our frequency assignment decisions.

5. In 1969, we enunciated the following general principles regarding frequency coordinating committees:<sup>2</sup>

- a. a frequency coordinating committee must be representative of all eligibles in the radio service the committee purports to serve;
- b. its recommendation is advisory, and not binding on either the applicant or the Commission;
- c. the Commission has the power to remedy discrimination or other abuses by coordinating committees;
- d. there is no bar to recognition of an alternative coordinating committee if it is more representative of eligible licensees;
- e. any fee charged by coordinators can only represent the cost of providing the service;

---

<sup>1</sup> In the Matter of Amendment of Part 11, Rules Governing the Industrial Radio Services, To Delete, Modify and Create Services and To Effect Changes in the Availability of Frequencies, First Report and Order, Docket No. 11991, FCC 58-602, 23 Fed. Reg. 4784 (June 28, 1958).

<sup>2</sup> Frequency Coordination in the Industrial Radio Services, 16 FCC 2d 305, 306 (1969).

- f. coordinators cannot discriminate between members and non-members in providing service; and
- g. all requests for coordination must be honored.

These principles have governed all frequency coordinating committees since that time.

6. Since 1958, private land mobile radio applicants have had two options in selecting frequencies. The first is for the applicant to select its own frequency. If this option is chosen, the applicant must submit a report based upon a field study that shows probable interference to all stations operating on the frequency within a set distance, and a statement that the licensees of these co-channel stations have been notified of the proposed operation.<sup>3</sup> The second option is to have a recognized frequency coordinator select the frequency, based on its experience and familiarity with local operating parameters.<sup>4</sup>

7. The current approach has created a number of problems for the Commission and coordinators. First, since there are no defined standards for field studies, the quality of field studies varies widely. Some appear to be virtually arbitrary frequency choices. Further, the notification requirements are sometimes abused or even ignored. In many cases, the Commission has had to send numerous letters requesting further information from applicants. This creates delays in application processing and greater workload for the Commission.

8. Another problem created by field studies is that they introduce an element of uncertainty into the frequency assignment process. Under present procedures, when an application is received by the Commission it is placed in the processing line. Anywhere from 25 to 30 days may elapse before the application is examined. Then, if it is accompanied by a field study, an FCC Form 1049B (Frequency Advisory Committee Form) is completed and mailed to the appropriate

---

<sup>3</sup> If proposing operation in the 150-170 MHz band, the field study must also take into account stations operating on frequencies 17.5 kHz removed. The only exception is for narrowband assignments proposing to operate more than 5 kHz removed from other narrowband assignments.

<sup>4</sup> See Section 90.175 of the Commission's rules. 47 C.F.R. §90.175 (1984).

coordinator. This allows the coordinator to update its data base to reflect this frequency request and to provide comments to the Commission on the proposal. In the 30 to 35 days between the time we receive an application and the time we send a Form 1049B to a coordinator, the coordinator may recommend the same frequency to another applicant, unaware that there is an application already in the processing line requesting the frequency. This, in turn, either leads to applications having to be re-coordinated and additional delays for the parties concerned, or results in the new user operating on a frequency which may not be the most appropriate. In either event, all parties concerned suffer.

9. A third major problem in the current coordination process occurs when a multiple licensed facility seeks to convert to a private carrier operation.<sup>5</sup> This type of system conversion has raised numerous problems for coordinators and the Commission because the new applicant may or may not be acting in conjunction with other licensees on the frequency. It is often not clear whether the new applicant is to be substituted for the previous licensees on the frequency or whether the new applicant's requested mobiles and control stations are in addition to those already licensed on the frequency. If the new applicant is being substituted for previous licensees, all mobiles and control stations for the prior licensees would have to be purged from the data base. Otherwise, existing mobiles and control stations are retained in the data base. The confusion engendered has impaired the coordinators' ability to make sound frequency recommendations.

10. The fact that coordination is not currently required in the Special Emergency Radio Service, and in the Business Radio Service spectrum below 450 MHz, also has led to spectrum inefficiencies. For example, without a certified coordinator, many applicants cannot afford engineering assistance to identify the most appropriate frequency and may simply select a frequency at random. This can needlessly add to the frequency congestion problem. Further, lack of coordination has made it impossible for us to authorize narrowband operations on a primary basis in these two services.<sup>6</sup> In certain

---

<sup>5</sup> A multiple licensed facility is a shared facility for which each user is licensed for the base station as well as its own mobile units and control stations. A private carrier is a licensee who is authorized to provide communications service to Part 90 eligibles on a commercial basis. See Section 90.7. 47 C.F.R. §90.7 (1984).

<sup>6</sup> Narrowband operations were authorized in the Report and Order, Docket 84-279, 50 Fed. Reg. 13596 (April 5, 1985).

cases, the level of adjacent channel interference protection provided by the frequency separation between adjacent narrowband and FM assignments is not sufficient to permit same area operation. As a result, a geographic separation is needed to prevent degradation of communications quality. Since there is no coordinator, narrowband operations in the Special Emergency Radio Service and Business Radio Service below 450 MHz are authorized only on a secondary (non-interference) developmental basis.

#### B. History of this Proceeding

11. In 1982, Congress amended the Communications Act to recognize the role frequency coordinators play in the spectrum management process.<sup>7</sup> Among other things, Congress affirmed that we have the authority to use frequency coordinating committees. 47 U.S.C. 332(b)(1). It also recognized the value of the assistance provided by these committees. The Conference Report accompanying this legislation noted:

...frequency coordinating committees not only provide for more efficient use of the congested land mobile spectrum, but also enable all users, large and small, to obtain the coordination necessary to place their stations on the air. Without such frequency coordinating activity, some of these applicants would not be able to afford the engineering required in the application process. Thus, by essentially equalizing the frequency selection process for all applicants, the applicants are placed on a competitive parity, with no one applicant operating on a better or more commercially advantageous frequency than his or her competitor. The Conferees note that this pro-competitive aspect of frequency coordination is of particular importance to small business operators.

To further promote fairness in frequency allocation, the Conferees encourage the Commission to recognize those frequency coordinating committees for any given service

---

<sup>7</sup> "The Communications Amendments Act of 1982," P.L. 97-259, 96 Stat. 1087, September 13, 1982. Section 331 of the Communications Act of 1934, as amended, is codified at 47 U.S.C. §332.

which are most representative of the users of that service. The Conferees also encourage the Commission to develop rules or procedures for monitoring the performance of coordinating committees. 8

12. In response to this congressional directive and to address the problems outlined above, we commenced a Notice of Inquiry (NOI) on July 14, 1983, to examine the private land mobile radio frequency coordination procedures. 9 Underlying this NOI was our desire to improve the processing in and spectrum management of the private land mobile radio services in order to speed licensing of facilities that are vital for the efficient and effective operation of our nation's businesses, utilities, health care providers and state and local governmental entities. The NOI solicited comments on the following issues:

- a. What should the functions of frequency coordinating committees be?
- b. What authority should frequency coordinating committees have?
- c. Should there be one exclusive or multiple frequency coordinating committees per radio service?
- d. What oversight of frequency coordinating committees should there be by the Commission?
- e. Is the field study option of frequency coordination effective and should it be retained?

13. Based on the record developed in response to these areas of inquiry, on October 17, 1984, we adopted a Notice of Proposed Rule Making (Notice) in this proceeding. 10 In the Notice, we highlighted problems

---

8 Conference Report No. 97-765, 97th Cong. 2nd Sess., August 19, 1982, at 53, reprinted in 1982 U.S. Code Cong. & Ad. News 2237.

9 Notice of Inquiry, PR Docket No. 83-737, 48 Fed. Reg. 35149 (August 3, 1983).

10 Notice of Proposed Rule Making, PR Docket No. 83-737, 49 Fed. Reg. 45454 (November 16, 1984).

inherent in the existing frequency coordination process. To alleviate these problems, we proposed new rules and policies designed to: (1) improve the quality of frequency selections; (2) minimize processing delays; (3) encourage interservice frequency sharing; and (4) facilitate the introduction of new technologies. We noted that an accurate and up-to-date private land mobile data base is fundamental to achieving these objectives. Without accurate and current information, a coordinator cannot make sound frequency recommendations to applicants, and the Commission loses its ability to review frequency recommendations effectively before licensing. We also proposed to certify one coordinator for each private land mobile radio service or pool of frequencies at the conclusion of this proceeding. Accordingly, we asked organizations interested in being the certified coordinator in a particular service to file their requests as comments in this proceeding. <sup>11</sup>

14. Under the approach proposed in the Notice, applicants proposing new stations or modifying existing licenses would send their completed applications to the recognized coordinator in the service in which they are applying. The coordinator would check the application for completeness, accuracy, and compliance with the Commission's rules. The coordinator would then identify the most suitable frequency; this frequency would be either that chosen by the applicant or the coordinator. If an error was detected or the coordinator did not agree with the system parameters proposed, the application would be returned to the applicant. The applicant could then submit a technical showing to support its choice of frequencies or other parameters in question. Once the coordinator was satisfied that the application is in order and that the proposed operation would result in the least amount of interference to existing users, the application would be forwarded to the Commission. If the applicant cannot convince the coordinator that its proposed operation is acceptable, the case would be submitted to the Commission for resolution.

#### Discussion

15. Based on our analysis of 185 comments and replies submitted in this proceeding, we are adopting the package of proposals contained in the Notice, with some modifications. The central issue before us is what role frequency coordinators should play in the private land mobile services. This issue has a number of facets which, while interrelated, we consider separately below for ease of exposition. The decisions made with regard to each issue are

---

<sup>11</sup> A list of all parties filing comments and replies is contained in Appendix A.



extremely sensitive to many of the decisional elements in other issues. The totality of these decisions forms the basis for improving the efficiency, effectiveness and simplicity of the process of applying for and obtaining authorizations to use the spectrum allocated to the private land mobile radio services. We believe that the approach in this Report and Order will help expedite service to businesses, utilities, health care providers, and state and local governmental entities needing mobile radio authorizations while mitigating the demand for Commission resources posed by the increasingly complex and growing number of land mobile radio applications.

#### A. Responsibilities of Coordinators

16. The Notice proposed that certified coordinators would, in addition to providing frequency coordination on a non-discriminatory basis for the particular radio service for which they are certified, also be responsible for: checking the application package to see that it is complete, that all entries are correct, and that the proposed operation is in compliance with the Commission's rules; filing the application and handling returns; facilitating the introduction of new technologies; handling post-licensing conflicts; and handling interservice sharing requests.

17. In response to these proposals, we received extensive comments from a broad range of parties, including users, trade associations, manufacturers, and frequency coordinators. Some of these comments proposed additional or modified coordination responsibilities. In the discussion that follows, we will review these comments, together with our conclusions on each issue addressed.

##### (1) Non-Discriminatory Service

18. Consistent with the principles that have applied to coordinators since 1958, we will continue to expect coordinators not to discriminate among users and to honor all requests for coordination. Although coordinators are generally representative of users in their service, some may have direct affiliation with a class of users through trade associations and the like. Such relationships must not affect the manner in which coordinators perform their services; also the treatment of all applicants must be similar and without discrimination, including charges for services rendered. Individual applicants need assurance that when coordinators provide a recommendation, it is done with total impartiality. Since

representativeness is a primary consideration and criterion in our selection of frequency coordinators, providing non-discriminatory service is not only basic but essential to the success of the coordination process.

(2) Application Review and Handling

19. (a) Application review - The proposal that coordinating committees be responsible for assuring that all data entries on applications are correct generated many different opinions concerning the extent to which coordinators should be involved in the application review process. Forest Industries Telecommunications (FIT) and the Special Industrial Radio Service Association (SIRSA) supported the Commission's proposal to have coordinators review the applications, arguing that the coordinators are in the best position to do so. SIRSA indicated that it already performs this function in handling coordination requests. FIT stated:

FIT also agrees with the Commission's proposal to require that all applications requiring coordination be first submitted with the coordinator for initial review. FIT has had long experience in aiding forest products applicants and, based on its experience, agrees that the procedure proposed by the Commission is appropriate and will result in improved and faster licensing of land mobile radio facilities. (FIT's comments, page 4)

Others, like the Central Station Electrical Protection Association (CSEPA) and the International Taxicab Association (ITA), contended that coordinators should review only those items within the coordinator's area of expertise. Beyond that, these commenters argued, the coordinator should assume the applicant's information is correct. The National Association of Business and Educational Radio (NABER), the Central Committee on Telecommunications of the American Petroleum Institute (API), and the Association of American Railroads (AAR), while stating that they were willing to undertake this additional task, questioned whether it is proper for coordinators to review certain matters associated with the application review process. AAR's comments were typical:

...AAR questions whether it is necessary or proper for coordinators to pass on such matters as statutory qualifications of an applicant, eligibility, permissible usage, ownership changes, compliance of a proposal with the Commission's Rules, or to pass on a request for waiver of the Commission's Rules. (AAR's comments, page 8)

Still others, like Motorola Inc. (Motorola) and Professional Licensing and Liaison Services (PLLS), strongly objected to enlarging the coordinators' role in the license application process. In its reply comments, however, Motorola argued that coordinators should be responsible for screening the technical portion of the application form. Finally, the International Association of Fire Chiefs and the International Municipal Signal Association (IMSA/IAFC) and the Associated Public Safety Communications Officers, Inc. (APCO) expressed concern with the proposal to enlarge coordinator functions on the ground that recent budgetary cuts imposed on local government agencies would make it hard for public safety organizations to assume new duties.

20. The balancing of interests here is a difficult matter. On the one hand, the guidelines accompanying the 1982 Communications Amendments Act encourage us to improve the quality of recommendations and to minimize processing delays.<sup>12</sup> Ensuring that applications filed with the Commission are complete and in general compliance with the applicable rules will promote those goals. On the other hand, we do not want to overburden coordinator resources and capabilities, particularly by having them review data elements that are not essential to frequency coordination. After careful consideration, we agree with the comments of NABER that coordinators should not have to review the entire application but should be responsible for reviewing those matters pertaining to the top portion of the current Form 574. Thus, we will require coordinators to assure that applications are complete and that data items 1-25 on the Form 574 application are correct. Coordinators must already review all the technical data items as a matter of course in handling each coordination request. Checking to see if the application is complete and reviewing additional data items like station address and control point information should not prove to be a significant burden. As indicated by NABER in its reply comments, this is the portion of the application that is essential to proper frequency coordination. Further, NABER stated:

The top portion of the form relates to information regarding the frequencies to be licensed....This process should ensure that the major source of current returns

---

<sup>12</sup> Conference Report, supra, footnote 8.

of applications by the FCC's Gettysburg, Pennsylvania Licensing Bureau, such as obvious typographical and similar errors, will be substantially reduced. (NABER reply comments, pages 4-5)

Coordinators will not be required to make a final determination on eligibility, permissible usage, or whether the use of a particular communication facility is in the public interest. The Notice proposed that an application with a request for waiver of the rules would be submitted to the coordinator who would concur or disagree with the waiver request when it filed the application with the Commission. We have reconsidered this proposal and will not require coordinators to act on waiver requests. Coordinators are free, however, to make comments on these issues and to include them in the application package filed with the Commission. We will continue to review each application and to make all necessary public interest judgments.

21. (b) Processing order - The Notice proposed to require coordinators to process applications in order of receipt. This has not been a formal requirement in the past, but we believe that most coordinators do attempt to act on coordination requests sequentially. In fact, many candidate coordinators indicated in their comments that they already process applications in the order they are received. While we would expect coordinators to continue to process applications in order of receipt without a requirement to do so, we believe a requirement is appropriate and necessary in fairness to all applicants. We recognize, however, that processing in order of receipt does not necessarily lead to coordinator actions or disposals in that same order. Some coordinations are more complicated than others and therefore require greater time to complete. We believe that the requirement that coordinators process applications sequentially, together with the speed-of-service standard discussed in paragraphs 27 and 28 will enhance the orderliness, timeliness, efficiency and fairness of the coordination process. This requirement will apply equally to in-service and inter-service requests. That is, in terms of processing, a coordinator must handle an inter-service request as it would a request from an eligible in the service in which the coordinator is certified.

22. (c) Application filing - We received a number of comments on the proposal that coordinators be responsible for filing applications. FIT supported the proposal, stating that such a procedure would result in improved and faster licensing. Motorola, the Forestry Conservation Communications Association (FCCA), and the American Association of State Highway and Transportation Officials, Inc. (AASHTO), also endorsed the idea of having coordinators file applications. However, most of those interested in

being certified coordinators opposed a mandatory filing requirement. These parties took the position that if the applicant wishes to see its application before it is filed with the Commission, the applicant should be allowed to do so and to forward it on its own to the Commission. For example, the Telephone Maintenance Frequency Advisory Committee (TELFAC) stated:

Although TELFAC is prepared to direct all FCC Form 574s with appropriate evidence of frequency coordination to the FCC, it submits that applicants should be provided with an opportunity to file applications directly with the Commission, with evidence of coordination, if they wish. The type of accuracy that the Commission will apparently require of coordinators will necessitate communication between TELFAC staff and the applicants to resolve discrepancies in applications. Accordingly, applicants may wish to certify the accuracy of the data contained in the application before it is actually provided to the Commission. (TELFAC comments, page 7)

The Utilities Telecommunications Council (UTC) comments were also typical:

However, UTC strongly feels that if the applicant wishes to see his filing before it is submitted to the FCC that the applicant should be allowed to do so and to forward it, on his own, to the Commission. (UTC comments, page 13)

23. We proposed having coordinators rather than applicants file applications with the Commission for two reasons: to minimize defective applications and to reduce the overall time involved in licensing. If we allow applicants to file applications after the coordinators' review, applicants would be able to alter their applications in some way. As a result, we could not hold coordinators responsible for the information provided in applications. Further, allowing applications to be returned to applicants before they are filed with the Commission introduces an additional step and additional time in the licensing process. We are unpersuaded that this added delay and uncertainty are warranted by any countervailing benefits. If an applicant wants to see what the coordinator files with the Commission, it may request a copy of the Form 574 along with a copy of

the coordination document.<sup>13</sup> We believe that having coordinators file applications is both appropriate and consistent with our goals of improving the quality of frequency recommendations and expediting the licensing process.

24. (d) Application returns - Only a few commenters addressed our proposal to have coordinators handle application returns. Those that did were against having coordinators perform this function. For example, CSEPA maintained:

The frequency coordinator needs to know when an application has been granted but has no need to know when or why an application has been returned by the Commission. Accordingly, returning defective applications to the frequency coordinator can have no effect but delay responses to returned applications by the applicant. (CSEPA comments, page 13)

The American Automobile Association (AAA) and E.F. Johnson agreed with CSEPA. SIRSA argued that additional costs will be incurred by coordinators if they are required to handle all applications returned by the Commission. We are persuaded by the comments that requiring coordinators to handle application returns would introduce a delay in the licensing process and additional costs for applicants without any significant benefit. Accordingly, the Commission will return all defective applications directly to the applicant or, if requested, to the applicant's representative. Such applications, when ready for re-submission, must be routed through the appropriate coordinator if they involve any changes in data items 1-25. This will ensure that the coordinator is made aware of any changes that have been made in the system's technical parameters.

25. (e) Post-licensing conflicts - The proposal that coordinators be required to participate in resolving post-licensing conflicts also proved to be controversial. API, FIT, and APCO supported the proposal. Typical of these comments were those of API, which stated:

The Central Committee supports the Commission's proposal to require the participation of coordinating committees

---

<sup>13</sup> Motorola in its reply comments suggested that the yellow copy of the Form 574 be used for this purpose. NABER stated that it presently uses the yellow copy, supplemented by an abbreviated NABER form, as the application for coordination.

in post-licensing conflict resolution. The Central Committee's PFCC (Petroleum Frequency Coordinating Committee) has traditionally aided licensees in the attempted elimination of interference between stations. Because coordinating committees will presumably retain the most accurate information available concerning the use of adjacent and co-channel assignments for each licensee, they will be uniquely equipped to aid licensees in resolving interference between stations. (API comments, page 27)

Most of the comments addressing this subject, however, were not in favor of the Commission's proposal. NABER, AASHTO, SIRSA, and the Manufacturers Radio Frequency Advisory Committee (MRFAC) agreed that it is important for the coordinator to be involved in post-licensing conflicts, but they argued that such involvement should be on an informal basis and not mandated. In this regard AASHTO stated that:

AASHTO believes that the coordinator should not be involved in post licensing conflicts beyond an advisory capacity. The Commission rightly intends to retain final licensing authority, and with that it should also have the responsibility. (AASHTO comments, page 12, emphasis in original)

NABER stated:

NABER has previously been involved in many post-licensing conflicts, and desires to continue its involvement. However, NABER has done this in the past only on an advisory and informal basis. The resources required to formally resolve post-licensing conflicts would be sizeable. In addition, the coordinator might be forced to assume responsibility for success of the applicant's enterprise and thereby expose the coordinator to greater potential liability. (NABER comments, page 30)

26. We have carefully considered the views expressed by commenting parties. Even though most of the comments argue against requiring coordinator participation in post-licensing conflicts, several reasons persuade us to require coordinators to help resolve post-licensing conflicts stemming from frequency selections and recommendations. First, the coordinator, with its specific knowledge of user requirements and local conditions, is in the best position to resolve such problems. Second, we believe that the coordinator should be made aware of such post-licensing problems as soon as possible since knowledge of these problems could affect

pending or future coordination requests. Finally, as an organization representative of the affected licensees, the coordinator is uniquely qualified to provide objective and informed assistance regarding post-licensing problems. It is not unreasonable for coordinators, who will be providing a service for a fee, to have some responsibility to help resolve problems related to their recommendations. Accordingly, a licensee's first point of contact for post-licensing problems involving frequency selection will be the coordinator. We will become involved only if the coordinator and the affected parties cannot agree to a solution. We continue to retain final responsibility in this area.

27. (f) Speed-of-service - The Notice proposed that coordinators handle coordination requests within a reasonable time frame. A specific standard for speed-of-service was not proposed. All of the entities seeking recognition as coordinators stated that they intended to respond as quickly as possible to coordination requests. While most of the parties indicated that 90 per cent of the coordination requests would be disposed of within 14 to 25 days, they argued that the Commission should not set a specific speed-of-service requirement. Others, such as PLLS, contended that a turn-around time requirement is long overdue. According to PLLS, it is not uncommon in some services to wait several months for a frequency coordination. Teletech, Inc. (Teletech) also supported a speed-of-service requirement if the Commission adopted its proposal to certify one coordinator per service.

28. We believe that a speed-of-service requirement would serve the public interest. We realize the time required to recommend a frequency may vary substantially depending on workload at the time and the specific system proposed. However, we believe, based on the comments, that 20 work days is a reasonable time frame to handle most of the coordination requests. Accordingly, we expect that the speed-of-service for 90 per cent of the coordination requests not exceed 20 work days. In addition, we believe interservice sharing requests warrant the same expeditious handling as in-service requests. Therefore, the same speed-of-service requirement will apply, i.e. 90 per cent of all interservice sharing requests should be handled within 20 working days. Separate speed-of-service records must be



maintained for these two types of requests and in such a way so as to demonstrate compliance in the event a question arises. <sup>14</sup>

(3) Frequency Selection

29. (a) Coordinator discretion - Currently, coordinators are required to recommend a frequency that will result in the least amount of interference to all existing stations operating in a particular area. If an applicant requests a specific frequency or band, we have applied this "least interference" rule only to frequencies in that band and have not required coordinators to consider frequencies in other, less congested bands. In the Notice, we proposed to allow, but not to require, coordinators to honor requests for a specific band if a frequency in a different band is superior from the standpoint of spectrum efficiency or is more appropriate for other reasons.

30. The comments from those parties interested in being certified coordinators supported this proposal. They stated that only under such an approach could a coordinator recommend the optimum frequency. Typical of the commenters supporting this proposal was APCO, which stated:

APCO plans to consider the applicant's preferred frequency or select a frequency if no preference is expressed. Frequencies will also be considered in light of state or regional plans which are on file with the Commission. Many local area coordinators presently follow these practices, and many hours are often spent searching and researching records for usable frequencies. The proposed centralized data base, containing records of all public safety frequencies nationwide, will greatly facilitate this

---

<sup>14</sup> For in-service requests the time frame is measured from the time the request is first received by the coordinator (national or local) until a recommendation is mailed to the Commission. Likewise, for interservice sharing requests, the time frame is measured from the time the out-of-service coordinator receives the request to the time that coordinator sends its recommendation to the originating coordinator. The amount of time the out-of-service coordinator takes to complete its coordination is not included in the speed-of-service of the in-service coordinator.

process. APCO totally concurs with the latitude proposed by the Commission in allowing the coordinator to recommend alternate portions of the spectrum as necessary. (APCO comments, page 18)

PLLS opposed the proposal, however, arguing that permitting coordinators to examine frequency bands other than those requested by an applicant would be tantamount to allowing coordinators to determine system design.

31. We have considered this matter in light of the comments and do not find the position advanced by PLLS a persuasive reason for altering our proposal. Although we are giving coordinators greater discretion in choosing frequencies, we believe coordinators need this flexibility to maximize the use of the spectrum. Allowing a coordinator to recommend the most appropriate band within its service will result in more orderly assignment of applicants on the available channels than is now possible; reduce the impact of new systems on existing users; and produce more balanced occupancy of private land mobile channels. Adding an additional user to an already congested environment serves neither the new user nor existing users. Contrary to the position taken by PLLS, we do not believe coordinators will become system designers if they are given this flexibility. Coordinators represent the end users and, therefore, will try to satisfy requests from their constituency for a specific band whenever possible. We recognize applicants often request a frequency in a particular band to maintain system compatibility or to communicate with another licensee. In these cases, while the frequency requested may not always be the one that will result in the least amount of interference, it may be most appropriate under the circumstances. We are confident that coordinators will give these factors appropriate consideration.

32. (b) Assignment methodology - In the Notice we stated that there are too many variables that can affect the coordination process for us to develop a rigid, mandatory assignment methodology. We proposed to allow each coordinator to develop and use its own specific frequency selection methodology. All parties commenting on this issue, except one, supported this approach. Teletex took the position that coordinators could not make compatible frequency recommendations without common standards. This position, however, was premised on the Commission finding that coordination competition, or multiple coordinators, in a service is feasible. Teletex, while not proposing that the Commission prescribe any particular methodology, stated that the Commission should "certify that one coordinator has developed a suitable methodology, and then require competitive coordinators to follow that methodology if they wish to compete in that service." (Teletex comments, page 6) In view of our

decision regarding one coordinator per service and the overwhelming support from the commenters on our proposal regarding the coordination methodology, we are leaving the frequency selection methodology up to the individual coordinators.

(4) Interservice Sharing

33. (a) Interservice sharing requests - Interservice sharing of private land mobile frequencies is an indispensable element in the Commission's overall program for ensuring efficient use of the limited spectrum. Under the interservice sharing provisions embodied in Section 90.176 of the rules, entities eligible to use frequencies allocated for one radio service or frequency group may use frequencies allocated for a different radio service or frequency group when they can show that there are no satisfactory frequencies in their own radio service. In the Notice, we proposed to make coordinators responsible for handling all interservice sharing requests.

34. All comments received on this issue supported the proposal that coordinators be responsible for handling interservice sharing requests. Therefore, we have decided to adopt that requirement. One of the goals of this proceeding is to increase private land mobile spectrum efficiency. Providing frequency coordination for in-service frequencies will go a long way toward accomplishing this goal. In order to maximize private land mobile spectrum efficiency, we must also take advantage of interservice sharing possibilities.<sup>15</sup> We believe, as with in-service frequencies, coordinators are in the best position to handle such requests. Therefore, we are requiring coordinators to be responsible for submitting to the appropriate coordinator interservice sharing requests from entities in the service or category they represent and responding to requests from other certified coordinators. However, we expect a coordinator to make an extensive search of the in-service frequencies prior to making an interservice sharing request. Unjustified, frequent interservice sharing requests will not be acceptable.

35. (b) Interservice sharing request denials - Another problem with interservice sharing that has come to our attention is that some coordinators deny interservice sharing requests without explanation. By providing the reasons for denying a request, the

---

<sup>15</sup> By Report and Order in Docket No. 81-110, released November 5, 1981, 46 Fed. Reg. 55701 (November 12, 1981) the Commission adopted rules governing interservice sharing of frequencies below 470 MHz.

coordinator requesting the sharing will get an insight into how other coordinators select frequencies. This knowledge should save both coordinators time and effort in future interservice sharing requests. While summary denials of sharing requests are the exception rather than the rule, to promote sharing to the maximum extent, we take this opportunity to adopt a requirement that coordinators provide supporting reasons with any denial of an interservice sharing request.

(5) Electronic Mail Box

36. Coordinators have indicated that interservice sharing concurrences are obtained by exchanging documents through the mail. In the Notice we stated that if coordinators could access each others' pending frequency selections in some fashion interservice sharing could be expedited. Comments on this issue were specifically requested. Several parties, like AAA, CSEPA, and FCCA argued that there is no need to change the present procedures in light of the small number of interservice sharing requests processed. Others, like the American Trucking Association (ATA), expressed concern about the security of the data. FIT and API suggested that coordinators be required to have the capability to transmit interservice coordination requests via an "electronic mail box". This suggestion was supported by a number of parties filing reply comments. For example, NABER in its reply comments stated:

NABER supports the electronic mail concept as advanced by the commenting parties. In addition to other conveniences, an electronic mail system would also provide coordinators with a record of interservice sharing requests. As most of these same coordinators must have direct access to the Commission's data base, and thus have the capacity for wire transfer of electronic data, the additional provision of electronic mail capacity should not prove burdensome. (NABER reply comments, page 12)

The Telephone Companies also suggested that pending frequency recommendations be transmitted by electronic mail.

37. We agree that the electronic mail box concept has merit. Interservice sharing contributes significantly to more efficient use of the spectrum and, therefore, such requests should be handled as quickly as possible. Accordingly, we are recommending, but not requiring, that each coordinator establish an electronic mail box to

transmit interservice sharing requests and to receive replies.<sup>16</sup> Not only will the electronic mail concept improve the speed and quality of recommendations, it will also encourage and facilitate the cooperation between coordinators that is so important to the success of the coordination process. We will leave to the coordinators the details of establishing the electronic mail system. We expect that coordinators will confer to determine the specifics of the system and ensure compatibility and interoperability. Coordinators are in the best position to determine how to accomplish this, bearing in mind the standards governing speed of service.

(6) Commission's Data Base

38. In order to make the best possible frequency selection, coordinators must have complete, accurate and current knowledge of the radio environment in which a proposed system will operate. In the Notice, we proposed to require all coordinators to be able to access the Commission's data base and to make frequency recommendations based on that data. It was our belief that this system would provide for a commonality of data at low cost.

39. Most commenters that addressed this subject supported the proposal that coordinators be able to access the Commission's data base. Only AAA stated that it had no need to access the Commission's data base, while stating that it would comply with whatever the Commission required. Since effective coordination relies on Commission-generated information, we believe requiring coordinators to have such a capacity is consistent with our objective of maximizing spectrum efficiency. Accordingly, we will require each coordinator to be able to access the Commission data base once our system becomes available through a third party contractor.

40. ATA, API, SIRSA, NABER, and others opposed the proposed requirement that a coordinator's recommendation be based on the Commission's data. In general, these parties argued that the Commission's data base does not include all assignment and usage criteria used by coordinators in making frequency selections. SIRSA, in comments typical of those entities holding this view, stated:

We only wish to access the FCC's data base for certain research purposes. SIRSA's data base is structured and

---

<sup>16</sup> The extent to which each coordinator implements such a system may depend on such factors as the coordinator's size, the number of coordinations handled per year, and its involvement in interservice sharing.

maintained in a "management information system" method designed to meet the needs of the Special Industrial Radio Service Association, Inc. Our overall data needs for coordination purposes are therefore broader and different than the needs of the Commission and other coordinating committees. For example, we wish to know the commercial activity of each licensee, and the FCC does not carry that designation in its data base. Our recommendations take into account the type of users already employing a channel before it is recommended to a new applicant. Additionally, our data base includes information concerning all "pending" applications, while the Commission's data base is void of that detail. (SIRSA comments, page 20)

In a similar vein, ATA stated:

ATA would prefer to continue to reply primarily on its own data base for the following reasons. First, ATA has maintained its own reliable records for many years and has developed a system which meets its needs. Second, ATA's own data base can include important coordination data which is not required for the Commission's data base. Accordingly, for its activities, ATA's data base may be more complete and useful than the Commission's. Third, an additional requirement for use of the Commission's data base will almost certainly add to fees which applicants will have to pay for frequency coordination. The final form of and mode of access to be provided to the Commission's data base will have a pronounced effect on changes which will have to be made for ATA's frequency coordination service. Accordingly, although ATA will comply fully with the Commission's requirements for data base use, ATA would prefer to be able to continue to rely on its own data base, which well serves its needs. (ATA comments, page 6)

41. After further analysis of this matter, we are persuaded by the arguments against requiring coordinators to use the Commission's data base in making their recommendations. Requiring coordinators to use a single data base which may not include all pertinent information needed (e.g., commercial activity, tone codes, radiation patterns) to discharge their coordination responsibility would be contrary to our purpose in this proceeding. We will leave coordinators free to establish their own enhanced data base, which they may utilize to accomplish their coordination function. Accordingly, we are permitting coordinators to select the data base upon which to make frequency selections. However, in the case of

inconsistencies or discrepancies, the Commission's data base will govern and will be used to resolve any disputes.

(7) Fees

42. The Notice also invited comment on whether the Commission should regulate the fees charged by coordinators or impose restraints on profitability or the use of profits. We proposed only to require that coordinators establish standard charges reflecting the cost of providing various services, that the charges be uniformly applied to all applicants, and that the method of arriving at the charges be made available for public inspection.

43. The issue of the appropriate degree of regulatory oversight regarding fees charged for frequency coordination generated a number of comments with varying points of view. Most of the comments filed by entities applying for certification contended that without knowing precisely the final outcome of this proceeding they could not accurately project costs with any certainty. For example, NABER, FCCA, SIRSA, UTC, and AASHTO stated that any fees would be based on recovering the costs of providing service. NABER argued that the Commission should not get involved in regulating or approving the specific fees charged by coordinators. NABER stated:

NABER is in agreement with the Commission's proposal to refrain from incorporating a set coordination fee schedule into the Commission's rules. The proposed requirement that the coordinators establish standard charges reflecting that cost of providing various services on a non-profit basis, and that these charges be uniformly applied to all would be applicants, represent sufficient oversight on the part of the Commission. (NABER comments, page 30)

AAR also stated that formal standards for fees are not needed. It contended that because coordinators are representative of users, self-regulation will be both feasible and effective. In fact, no comments were submitted which supported our mandating specific fee schedules.

44. In contrast, entities not currently involved in the frequency coordination process generally stressed the need for the Commission to establish adequate safeguards to ensure that coordination fees reasonably reflect the cost of providing the service. For example, the National Mobile Radio Association (NMRA) was concerned about fee abuses that could occur under the single coordinator approach proposed. NMRA cited as an example a coordinator including lobbying costs in a very high coordination fee. It had no

objection, however, to coordinator fees including reasonable costs for filing petitions and comments to a proceeding provided such filings directly affect users in the radio service the coordinator represents. This NMRA position was supported in reply comments from NABER. Teletech also expressed concern over fees. It stated that if the Commission adopted its proposal to designate a single coordinator for each of the private land mobile radio services, it would be necessary to "establish pervasive, on-going regulation to ensure that the monopoly coordinators provide non-discriminatory, quality service at a cost-based price." In addition, the National Ski Patrol System commented that frequency coordination for tax-exempt entities such as volunteer fire departments should be provided on a non-profit basis. NMRA also commented that coordinators should file annual reports demonstrating the relationship between costs and fees. SIRSA, in contrast, opposed any requirement that coordinators make their records available to the public as a matter of course.

45. We have carefully weighed the various arguments raised by the comments addressing the fees issue, and have reached the following conclusions. First, there is no support in the comments nor does there appear to be any compelling public interest reason to establish a fixed schedule of coordination fees. Therefore, we will neither mandate nor review specific frequency coordination fees on a regular basis. Second, if necessary, the coordination fees of each coordinator will be reviewed by the Commission only to ensure that they reasonably reflect the cost of providing the overall coordination service. Coordination service includes filing petitions, comments, and reply comments in Commission proceedings that may affect other users in the radio service the coordinator represents. Coordinators, however, will not be required to provide services on a non-profit basis. Third, we will not require coordinators to make their income and expense records generally available for public inspection as proposed in the Notice and by some commenters. We are persuaded by the comments that this requirement could be very disruptive to the normal operations of the coordinator and that there is no compelling reason to require that this information be routinely made available either to the public or the Commission. We are confident that sufficient oversight of fees can be maintained by requiring that coordinators make pertinent income and expense records available to the Commission upon request. Complaints regarding coordination fees may be filed with us. If a coordinator abuses these standards on fees, we will move appropriately to replace that entity with some other coordinating body.

46. We believe this approach achieves an appropriate balancing of the various fee-related issues by providing coordinators the needed flexibility to allow for differences in the cost of coordinating



frequencies in the various radio services involved, while addressing concerns about monopoly pricing.

(8) Single Nationwide Point of Contact

47. In the Notice we said that certified coordinators would be free to determine their organizational structure. Thus, for example, the coordinator's organization could be comprised of volunteers, a paid staff, or a combination of both. Further, coordination could be performed at a state level, a regional level, or a national level. The only structural requirement we proposed was that each radio service coordinator establish a single nationwide point of contact to deal with the Commission.

48. All of the entities requesting to be a coordinator except one supported this approach. The one comment in opposition was filed by Eastern States Public Safety Radio League (ESPRL). ESPRL proposed to provide coordination in the Police, Local Government, and Special Emergency Radio Services but only in several New England states.

49. We believe a single nationwide point of contact is critical to our objectives in this proceeding. Radio signals do not end at jurisdictional boundaries such as state or county lines. Therefore, in cases where the actual coordination is performed at a state or regional level it may be necessary for the person performing the coordination in one state or region to discuss the impact of the proposed operation with a counterpart in other states or regions. Requiring the certified coordinator to have a single, nationwide point of contact responsible for the final coordination product will help resolve any disputes that may develop in these cases. Further, it will significantly reduce the number of coordinators that the Commission must deal with for the exchange of the paperwork involved in the licensing process, thereby promoting a more efficient process. It will minimize licensing delays and assure that all coordinators have pertinent information necessary to perform their responsibilities. Finally, it will minimize the number of points of contact involved in interservice sharing requests. Accordingly, we are requiring each certified coordinator to establish a single point of contact with the Commission. This does not preclude coordinators from utilizing local coordinators in the actual coordination process, as long as all other requirements including timeliness, are met.

(9) Facilitating New Technologies

50. In the Notice we also proposed that coordinators facilitate the introduction of new technologies into the private land

mobile radio services. All those interested in becoming certified coordinators indicated their support for the development of new technologies that improve communications and increase spectrum efficiency. Some, however, advanced the position that coordinators should not be required to promote one technology over another. API, for example, stated:

The Central Committee will be capable of recommending the employment of narrowband systems and will encourage its application where appropriate. However, it is not the responsibility of coordinating committees to actively promote the employment of narrowband equipment. Marketing of equipment is more appropriately the responsibility of equipment manufacturers, not coordinating committees. (API's reply comments, page ii)

FCCA and AASHTO individually stated:

At this time, there is nothing FCCA [AASHTO] can do specifically in the frequency coordination process to promote the use of spectrum efficient technologies. Economics is as much a part of a change to a new technology as is the technical issue, and public safety agencies cannot be in the lead in either area. At such time as the Commission develops a plan for implementation of such systems, FCCA [AASHTO] will participate fully. (FCCA comments, page 14; AASHTO comments, page 12)

APCO indicated that while it supports the development of technology for improving communications and providing more available channels, it "has repeatedly stated in other filings, it does not consider the public safety bands the appropriate place to experiment with new technologies." (APCO's comments, page 23)

51. In contrast to the above statements, several commenters, including parties seeking certification as coordinators, envisioned coordinators playing an active role regarding the use of new technologies in the private land mobile radio services. For example:

...AAR, as it has done in the past, plans to encourage and to promote the development and use of spectrum efficient technologies in railroad land mobile communications as equipment and system designs become available and as we learn to incorporate those technologies into the current land mobile environment. (AAR comments, page 17)

The introduction and use of new and/or alternative spectrum technologies is greatly influenced by professional frequency advisory committees who manage dynamic radio services. In fact, it is SIRSA's opinion that these committees must play an active role in the use of alternative technologies.... By doing so, the frequency advisory committee permits their respective radio service to develop in an effective fashion over the course of time. (SIRSA comments, page 14)

SIRSA further stated:

...new technologies that may be introduced within a radio service with a minimum interference impact should then be publicized to all new existing licensees. Finally, if a situation is encountered where a new licensee's initial frequency and/or band request may not be accommodated due either to technical or existing co-channel use constraints, that applicant should be advised by its respective coordinator to consider alternative technologies. SIRSA has already adopted this philosophy. (SIRSA comments, page 15)

On this issue, Stephens Engineering Associates (Stephens) stated:

Thus, given the Commission's endorsement of narrowband technology, frequency coordinators should be more than neutral when their counsel is sought regarding the choice of the technology to be employed by a new user: The coordinators should affirmatively encourage the use of technology that will best advance the spectrum conservation goal. Indeed, in areas characterized by frequency congestion, the coordinators should establish a functional presumption to the effect that narrowband systems are the technology of choice, absent a persuasive demonstration from the proposed user of a need for a wideband system. (Stephens comments, pages 7-8)

52. From the above comments, it is clear that the parties do not oppose the introduction of new technologies. Rather, the concern raised is what role coordinators should play in promoting this objective. All agree that use of new technologies is vital to mobile radio users as they seek to initiate or expand their communications capabilities on increasingly scarce spectrum. Since coordinators will play a central role in frequency selection, they will be in an ideal position to see where new technologies can be employed to alleviate frequency congestion; to increase the utilization of the available spectrum; to improve service; or to accommodate an applicant that

might otherwise not be able to obtain service. We believe that it is essential for coordinators to aid implementation of new technologies in the private land mobile radio services. Indeed, one of our major objectives in this proceeding was to devise methods to introduce new technologies in order to satisfy future land mobile communications requirements. We do not intend for coordinators to promote one technology over another or to require new technologies to be used. Rather, coordinators should be familiar with all new radio communication technologies, especially those that have spectrum efficiency benefits, and should consider such technologies when determining the most appropriate frequency for the proposed operation. As part of their service, coordinators should also help users understand the value and benefits of particular new technologies. Finally, coordinators should suggest the use of new technologies recognized by the Commission, such as in the case of newly authorized narrowband operations in the 150 MHz band where the Commission has provided distance separation guidelines instead of requirements. These guidelines allow coordinators to engineer-in such systems where possible.

(10) Summary

53. As proposed in the Notice we have elevated considerably the role and responsibilities of frequency coordinators. We believe that the procedures we have adopted will improve the quality of frequency selections, expedite licensing, and improve spectrum efficiency, all to the benefit of private land mobile radio users. To achieve these objectives, we are requiring certified frequency coordinators to:

- (1) provide coordination services on a non-discriminatory basis;
- (2) review the Form 574 application for completeness and review items 1-25 for general correctness;
- (3) process applications in order of receipt;
- (4) file coordinated applications with the Commission;
- (5) handle post-licensing conflicts involving frequency selection;
- (6) respond to coordination requests and applications in a timely manner;
- (7) recommend the most appropriate frequency;

- (8) handle interservice sharing requests;
- (9) maintain reasonable and uniform fees;
- (10) establish a single point of contact nationally; and
- (11) facilitate the use of new technologies.

B. Number of Coordinators per Radio Service

54. In the Notice we proposed to certify only one coordinator per radio service or frequency group in order to promote a more efficient licensing process. We indicated that if multiple coordinators were involved in coordinations for a single service, it would be extremely difficult to keep track of the pending frequency selections of the various coordinators. Further, with multiple coordinators, applicants could solicit frequency recommendations from different sources. If dissatisfied with the recommendations of one coordinator, an applicant could seek a more favorable frequency from another coordinator. Unless coordinators were given rigid guidelines on frequency selection, it would be likely that different coordinators would recommend different frequencies. We noted that this result would not be consistent with the fundamental purpose of frequency coordination, namely, to identify the best available frequency for an applicant, taking into consideration not only the needs and desires of the applicant but the best interests of other users as well.

55. Those comments that supported the single coordinator approach generally echoed and amplified the reasons we gave in making this proposal. For example, UTC stated:

UTC concurs with the Commission that only one coordinator per service or group should be certified for purposes of providing frequency coordination. Selection of a single coordinator insures the integrity of the associated data and frequency allocation process. Unlike microwave radio signal propagation which lends itself to the use of multiple coordinators, land mobile radio signal propagation is not as predictable nor well defined. This unpredictability creates the likelihood that coordination mistakes may result if several coordinators are delegated allocation assignment authority. (UTC's comments, page 6)

Comments from other currently recognized coordinators closely paralleled those of UTC. SIRSA stated:

The use of a single coordinating committee assures an accurate data base which insures the issuance of sound recommendations and the intelligent disposition of post licensing conflicts. Designation of the single committee is clearly administratively efficient, from the Commission's point of view, since the agency may then limit its communications and oversight activities to a single organization per service. (SIRSA comments, pages 12-13)

NABER stated that:

the frequency advisory committee should be representative of the user group which it coordinates in order to ensure that the frequency recommendations made by the coordinator to an applicant in a competitive market will remain objective. In this respect, NABER supports the Commission's decision to select one recognized frequency advisory committee for each group which will be representative of the users in that service. (NABER comments, page iv)

56. Several parties, however, opposed this aspect of the proposal, arguing that multiple coordinators are feasible and preferable. Teletech's comments were:

Teletech thinks the Commission does not understand the facts. If it did, the Commission would conclude that competition among different coordination service providers within a private radio service or frequency group is feasible. Given the Commission's overall commitment to promoting competition and marketplace deregulation and showing that competition is indeed feasible, the Commission would have no reason to adopt the NPRM's anticompetitive proposal. (Teletech's comments, page 2)

M.W.D. Inc. (MWD) stated:

If the FCC were to permit monopoly frequency service providers, then the FCC would be required to police these providers to ensure that their services are timely, accurate, non-discriminatory, and provided on a non-profit basis. Yet a review of the Communications Act of 1934 provides no legal mechanism by which the

FCC can police these entities. Once the FCC were to empower an entity as the monopoly coordination provider, there are no provisions under the Act for the FCC to "unempower" them. (MWD comments, page 4)

57. We have carefully weighed the arguments made in support of having multiple coordinators for a single radio service. We are convinced the single coordinator per service approach is superior for several reasons. First, having one coordinator in a radio service will substantially simplify the coordination process and will facilitate the basic purpose of coordination, which is to maximize the quality of frequency recommendations. Under a multiple coordinator approach, each coordinator, at a given moment, would have to be aware of all the other coordinators' pending recommendations. With the large number of applications filed each year, this would require a mechanism for ensuring that each coordinator for a particular service or frequency group maintained an identical data base as well as real-time computer interface capability. The logistics of handling this situation would be almost unmanageable. Certifying only one coordinator per service provides a practical solution for keeping track of pending frequency selections. We are unpersuaded that the solution proposed by Teletech - having coordinators routinely file pending authorization requests into the General Docket 83-483 coordinator's computer system - is a practical system. Under this approach every coordinator in a particular service would have to check the pending frequency recommendation data base for every coordination so as not to duplicate another coordinator's recommendations. This would substantially increase the cost and complexity of frequency coordination, as well as increase the likelihood of errors, especially if there were a large number of entities performing frequency coordination.

58. Second, a single coordinator approach prevents "shopping" for a desired frequency. With multiple coordinators, an applicant denied coordination by one coordinator could try another coordinator in the hope of obtaining a desired frequency. We are concerned about the possibility of entities with no long term commitments to the service or the users recommending a frequency that might not be the most appropriate one for use. To provide for multiple coordinators might call for more detailed specifications as to qualifications of coordinators. Easy entry by coordinators could lead to rapid exit by those not able or willing to meet the requirements. Such unsettled atmosphere and arrangement would seriously affect the quality of frequency recommendations. At such a point, the primary objective of the coordination process, to maximize the quality of frequency recommendations, could be thwarted. This could result in an additional burden be placed on Commission resources.

59. A third benefit of the single coordinator per service approach is simplification of the licensing process by minimizing the number of points of contact between the Commission and coordinators. As the number of coordinators per service increases so does the administrative burden on the Commission. This benefit is especially important considering the likelihood of limited agency resources in upcoming years.

60. We are sensitive to the arguments made about the potential for abuse in a single coordinator per radio service system. The coordinators' responsibilities and coordination process adopted herein are designed to minimize the chances of abuse. However, if abuses do develop we will examine coordinator records and, if necessary, withdraw certification of any coordinator. We believe these safeguards, together with the representative nature of certified coordinators, are sufficient to minimize any potential for abuse.

61. Our goal of maintaining and enhancing the integrity of the coordination process must be paramount in this proceeding. Therefore, for the above reasons, we conclude that the public interest will be better served if we certify only one coordinator per service or frequency group. Contrary to the claims of some commenters, we do not view the selection of a single coordinator as a departure from our general preference for competitive offering of communication services. As we stated in the Notice, coordinators do not offer a communications service; their function is to assist the Commission in selecting the most appropriate frequency for the applicant, taking into account the existing user environment. In addition, since the coordinators are organizations representative of end users, we are confident that even as exclusive providers they will fairly and impartially administer the frequency coordination process for the benefit of all. Therefore, competition in the recommendation of frequencies should not be necessary to assure the lowest price or best service.

### C. Field Studies

62. Section 90.175 of the rules permits applicants to submit a field study justifying their frequency selection in lieu of utilizing the services of a frequency coordinator. The Notice proposed to eliminate this option. As noted earlier, the present field study approach has posed problems for licensees, the Commission, and coordinators. These problems stem from poor field study quality, from applicants' failure to observe notification requirements, and from the uncertainty field studies inject into the coordination process. Although we proposed to eliminate the field study option, we did propose to allow applicants whose requested frequency was not supported or recommended by the coordinator to submit to the



coordinator a technical justification for the requested frequency. The Notice further proposed that if the coordinator did not accept this justification, the application along with the technical justification could be sent to the Commission for a final decision.

63. Comments on the elimination of the field study option varied widely. The International Association of Fire Chiefs along with the International Municipal Signal Association (IAFC/IMSA), Comp Comm, Inc. (Comp Comm), and AAR all suggested that the field study option be eliminated entirely, stating that the coordinator should be the exclusive originator of frequency recommendations. AAR indicated that field studies are not practical alternatives to frequency coordination in the Railroad Radio Service. Other commenters, including APCO, FCCA, AASHTO, and CSEPA stated that field studies should be used only for disputed applications. APCO stated:

APCO commends the Commission's stated intent to eliminate the field study as the first step in any license application process. APCO is aware of the problems which are created by this practice. Often lacking defined standards and methods of verification, the field study has been totally inadequate, and severe problems have resulted from its use.

APCO agrees completely that all requests should first go through the designated Coordinator. APCO agrees that the field study should serve in an appeal process in the event the applicant does not agree with the recommendation. Used only in this fashion, the field study will assure fair and uniform treatment for all applicants and preserve the integrity of the coordination process.

The field study should not be confused with an engineered type of field test which is requested in certain instances by the Coordinator to determine field strength of signals under actual parameters. This is often a valuable and even indispensable process, and should be permitted and encouraged to improve the quality of frequency selection. (APCO comments, pages 20,21)

Along similar lines, FCCA stated that it:

agrees that the field study method of frequency selection must be authorized only for an applicant to dispute a coordinator's decision. The inherent delays coupled with bypassing the coordinator's data selection

procedure builds in more problems than it solves. It is FCCA's opinion that the field study method has been used (at least in public safety) primarily because of user dissatisfaction with the time required by the coordination process. If methodologies and procedures of the coordination groups are brought up to speed, the use of field studies would not be necessary. By mandating the use of a common database, however, the circumventing of the coordinating process cannot be allowed on a routine basis. (FCCA comments, page 12)

64. Commenters recommending that the present field study alternative be retained included NMRA, Motorola, Teletech, and the E.F. Johnson Co. For example, NMRA stated:

NMRA respectfully requests that the field study option of selecting frequencies should be maintained. However, in order to preserve the integrity of the Coordinator's data base which must include license applications as well as grants if it is to be meaningful, all applications (or at the very least an exact copy of the application) should be sent to the coordinator for comment. This would preclude the need for notification of co-channel licensees, a meaningless requirement which serves no purpose whatsoever. It is the coordinator, not the co-channel licensees, that needs to be notified when field studies are performed. Logically, if co-channel licensees really need any notification, then such notification should also be required regardless of whether the coordination is performed by a coordinator or by a field study. It is NMRA's firm belief that no license applicant should be forced to utilize the frequency coordinator if he has already made a valid engineering study resulting in selecting the best

frequency on his own and then notified the designated frequency coordinator of his selection. (NMRA comments, pages 4-5)

65. Two commenters, NABER and UTC, stated that field study standards should be changed to make them more effective. UTC proposed that field studies be submitted directly to the coordinator. NABER stated:

NABER's position is that if field studies are to be retained as an alternate coordination other than through use of a frequency advisory committee, standards must be adopted which make them rigorous and effective. Further, that even where the field study option is utilized, the applicant be required to involve the coordinator, so that the data base remains accurate and reliable. NABER agrees that if the Commission does not impose rigorous standards for a field study, that their use should be eliminated altogether. (NABER comments, page 14)

66. We have considered the many differing views expressed on our proposal to eliminate field studies as an alternative to obtaining a recommendation from a frequency coordinator. Our proposal to eliminate the field study was based primarily on two considerations. The first was that without defined standards for field studies, the quality of submitted field study reports varies widely. Second, the present procedures relating to field studies create significant delays in processing. As noted above, upon receipt of an application accompanied by a field study, the Commission completes a Form 1049B and forwards it to the appropriate coordinator. During the period between receipt of a field study at the Commission and receipt of the Form 1049B by the coordinator, it is possible that the coordinator may have already recommended for use by another applicant the same frequency specified in the field study. This can result in the Commission processing two inconsistent applications simultaneously.

67. If we retain field studies, to correct the current situation, standards would have to be established to insure that field studies are of sufficient quality. It appears, however, that while certain general standards could be specified for field studies, detailed standards would be difficult to establish because of the many types of radio systems involved and the many different rules governing private land mobile frequency bands. A number of other standard-setting problems (e.g., how detailed the field study should be, what type of tests should be required) persuade us that we cannot establish standards for field studies that are both workable and useful.

68. While field studies to date have been more disruptive than helpful to the coordination process, a properly prepared technical submission may serve a useful purpose. For example, it can identify a frequency that may be appropriate for a potential user. An applicant who performs such a technical study can include it in an application to support the requested frequency. The study may be useful to the applicable coordinator in making its recommendations. Alternatively, when relevant considerations lead the coordinator to recommend a frequency different from that requested by the applicant, the applicant can have the coordinator forward the application and accompanying technical study to the Commission for review and final determination.

69. A technical justification will, therefore, still be an important part of the coordination and licensing process. It will not be retained as an alternative to a coordination performed by a recognized coordinator but may be a factor in the selection and licensing of a frequency. We believe this course of action combines the benefits of a field study (e.g., field monitoring of frequency usages, detailed engineering) with the benefits offered by recognized frequency coordinators (e.g., central point of contact, uniform standards, simplified procedures).

#### D. Selection of Frequency Coordinators

70. In the Notice we invited organizations desiring to be certified coordinators for a particular service, group, or pool of frequencies to file their requests as comments to this proceeding. For the thirty-two private land mobile services, groups, or pools involved here, we received more than one request to be certified as coordinator in twelve categories, a single request in eighteen categories, and no requests in two categories. Our reasons for selecting each coordinator are discussed in the paragraphs below. Where more than one entity requested certification, we looked first to ascertain whether the organization was representative of users in the radio service it proposed to coordinate.<sup>17</sup> Second, we examined the overall plan to coordinate the service (e.g., how frequency recommendations would be made and whether all applicants would be treated equally). Third, we checked to see if the entity had experience coordinating frequencies in the service involved or any technical expertise in engineering land mobile stations. Finally, we took into consideration whether the entity had nationwide coordination capability, a nationwide data base of users in the service it proposed to coordinate, and whether the data base was automated. We will discuss selection of coordinators for each category separately. A list of the coordinators that we are certifying is contained in Appendix B.

#### Public Safety Radio Services

71. Police Radio Service - We received requests to be the coordinator for this service from APCO and ESPRL.<sup>18</sup> APCO, the present coordinator in this service for most of the country, stated that it is the nation's oldest and largest public safety telecommunications organization. It has over 6000 members comprised of public safety communications officials, engineers, supervisors and technicians that

---

<sup>17</sup> Special emphasis is placed on representativeness since we have decided to certify only one coordinator per service. The Conference Report accompanying the 1982 Communications Amendments Act emphasized this point. "[T]he Conferees encourage the Commission to recognize those frequency coordinating committees for any given service which are most representative of the users of that service." See supra, footnote 8.

<sup>18</sup> ESPRL asked to coordinate this service only for five New England states.

are employed by tax-supported agencies at all levels of government, and by organizations supplying these agencies with goods and services. APCO has represented police communication interests before the Commission for over fifty years and has been a recognized coordinator in the Police Radio Service for over forty years. According to APCO, it has developed and implemented a frequency coordination manual for coordination in the Police Radio Service. Further, it is in the process of completing a centralized automated frequency coordination system data base. APCO's system includes a full time staff and is readily accessible by all local coordinators.

72. ESPRL is a non-profit organization of persons engaged in public safety activities within local and state governments in the New England states. ESPRL is the recognized coordinator in this service in the states of Rhode Island, Massachusetts, Vermont, New Hampshire, and Maine. It stated that it has been promoting the interests of police radio communications in New England since 1934. In 1980, ESPRL established a New England data base in the Police, Local Government and Special Emergency Radio Services. In its comments, ESPRL stated that it does not have the financial resources to coordinate frequencies and perform other related functions for police and local government frequencies throughout the whole country, and does not wish to become a chapter or part of any other organization.

73. We believe both entities are representative of users in this service. Further, both have or will have automated data bases. As for experience, both are currently recognized coordinators in the Police Radio Service. APCO, however, offers a nationwide coordination capability whereas ESPRL does not. As we stated previously, we believe the best way to accomplish our objectives in this proceeding is by certifying a single coordinator per service. We reach this conclusion only after careful consideration of the comments, particularly those of ESPRL. ESPRL indicated that it would use an electronic mail capability to transfer frequency coordination data between local agencies. Further, ESPRL stated that all public safety local coordinators would have computerized capability in the near future. Once the use of computers for processing and exchanging data became widespread, ESPRL reasoned, coordination actions would be both timely and accurate, even without a single nationwide coordinator. However, we seek to ensure, to the extent practical, that frequency coordination procedures for each service are implemented uniformly across the nation. We do not believe that entities organized on a local basis, even with eventual computerization, can provide service to applicants in the same efficient and uniform manner as can a nationwide entity. For these reasons, we are certifying APCO as the coordinator in the Police Radio Service.

74. Fire, Highway Maintenance, and Forestry Conservation Radio Services - For each of these services we received two requests to be the coordinator, one from APCO and one from an association of users in that particular service. In the Fire Radio Service the association of users seeking joint recognition is IAFC/IMSA. IAFC is a voluntary professional membership society, numbering approximately 9000 members, comprised of senior fire officials. It stated that it is the oldest fire service organization in the country. In this joint proposal, IAFC would provide information and resources relating to fire protection needs. IMSA, the present coordinator in the Fire Radio Service, is a non-profit organization dedicated to the development of communication systems in the furtherance of public safety. According to IMSA, it has been extensively involved in emergency communications for a number of years. It has a full-time staff and is currently developing an automated data base. Organized in 1896, IMSA claimed it is the oldest organization in the world dedicated to the activities pertaining to electrical engineering, including the public safety use of radio technology. For the Highway Maintenance Radio Service, the association of users seeking recognition as the coordinator is AASHTO. AASHTO is the present coordinator in the Highway Maintenance Radio Service and is a national organization involved in dealing with safety, efficiency and operation of our nation's highway system. According to AASHTO, one of its functions is to review the radio communication needs and requirements for maintaining America's highways. AASHTO stated that it has a coordinator in every state and has an excellent working relationship with the highway maintenance community. For the Forestry Conservation Radio Service, the association of users seeking recognition is FCCA. FCCA is a non-profit corporation representing the forestry, fish, and wildlife agencies in all fifty states. FCCA stated that it has been the only coordinator in the Forestry Conservation Radio Service since the service's inception. Its membership is open to any agency that is eligible in the radio service. Coordination is performed on a regional level by technical personnel from user agencies. In competition with these requests from associations of users, APCO filed an overall application to be the coordinator for not only these services but for all the Public Safety Radio Services.

75. The factors favoring APCO as the coordinator in each of these services are its available resources because of its nationwide structure and its claim that it will have a single automated public safety data base at its disposal. APCO stated that its membership includes employees of all public safety communications agencies. However, the comments received indicated that it does not have the overall support of the users in these three services as do the individual associations. As we stated before, we believe representativeness should be given the greatest weight in choosing the certified coordinator. We believe these individual associations of users are more representative of the particular licensees in their

service. Moreover, the associations have experience in coordinating frequencies in the particular service for which they are requesting certification. All parties requesting certification for these services are relatively equal in terms of the other two factors. Consequently, we have decided to certify IAFC/IMSA as the coordinator in the Fire Radio Service, AASHTO as the coordinator in the Highway Maintenance Radio Service, and FCCA as the coordinator in the Forestry Conservation Radio Service.

76. Local Government Radio Service - We received requests to be the coordinator for this service from four different entities: APCO, AASHTO, IAFC/IMSA, and ESPRL. As in the other radio services discussed above, we applied the criteria discussed in the Notice to determine which entity should be the certified coordinator in this radio service. ESPRL will not be selected because it will not provide nationwide coordination. None of the other three entities is truly representative of all local government users. APCO has the broadest membership of the three since its membership is open to any public safety communication agency. Further, APCO currently provides coordination for the 800 MHz public safety pool. With regard to experience, each of the entities is currently a recognized coordinator in the Local Government Radio Service. However, over 90 percent of the local government coordinations are presently provided by APCO. APCO, IAFC/IMSA, and AASHTO all stated that they would meet the unified coordination concept proposed in the Notice. As for data base capabilities, APCO stated it is compiling a complete automated public safety data base. Considering the foregoing, we believe APCO would be the best choice for coordinating this service. Therefore, we are certifying APCO as the coordinator in the Local Government Radio Service.

77. Special Emergency Radio Service - Three entities requested to be the certified coordinator for this service: APCO, ESPRL, and NABER/IAFC/IMSA (filing a joint proposal).<sup>19</sup> Again, we will not select ESPRL because it does not meet the nationwide coordination criterion. APCO is in the process of compiling its automated frequency coordination public safety data base. NABER, in providing coordination for business users, has successfully used an automated data base system for a number of years. Both of the remaining coordinator candidates have experience in coordinating emergency services, APCO in the Police Radio Service and IMSA in the Fire Radio Service. As before, we believe the key element in selecting a coordinator is representativeness. Neither candidate is completely representative of all of the diverse

---

19 The NABER/IAFC/IMSA proposal was filed with their reply comments.



groups in the Special Emergency Radio Service. However, we believe NABER/IAFC/IMSA comes closest. We agree that APCO is representative of many emergency users in this service. However, IMSA and IAFC are also representative of emergency users in this service, possibly more so than APCO, since a substantial amount of EMS in this country is provided by fire departments. Moreover, we believe IMSA has shown particular sensitivity to special emergency needs in the past. For example, in PR Docket No. 84-370, IMSA supported the reallocation of two frequency pairs to the Special Emergency Radio Service for shared use with the Police Radio Service. APCO did not support this reallocation. As for the non-emergency users, we believe NABER/IAFC/IMSA is more representative than APCO because of NABER's involvement. In fact, APCO stated that:

its interests lie stronger with Emergency Medical response operations than with non-emergency operations. (APCO reply comments, page 4)

and that:

non-emergency operations be moved to others portions of the spectrum and coordinated by others. (APCO reply comments, page 5).

It is critical that a coordinator be equally representative of all licensees in the service. Accordingly, we are certifying NABER/IAFC/IMSA as the coordinator in the Special Emergency Radio Service.

78. APCO proposed that there be a single coordinator for all the public safety radio services, and asked to be certified as the sole coordinator. According to APCO:

Combining all of the Public Safety Services into a single public safety data base would result in better utilization of the spectrum available to public safety communications. Consolidation would permit close interagency cooperation, expedite the present interservice cross coordination process, reduce costs of coordination through economies of scale, improve standardization of procedures, simplify administrative overview, and reduce significantly the number of coordination agencies with which the Commission must deal. (APCO comments, page 10)

IAFC/IMSA, AASHTO, and FCCA took exception to APCO's proposal. They argued that APCO is not truly representative of users in all of the public safety services and that it has overemphasized the benefits, if any, from consolidation of these services. IAFC/IMSA claimed that APCO is a "Police Service-oriented association" and that being a single purpose association there is no basis on which APCO can rest its claim of representativeness of the Fire Service. AASHTO and FCCA both stated that the fact that some non-police local government personnel hold membership in APCO does not ensure that APCO is truly representative of the Highway Maintenance and Forestry Conservation services.

79. We agree with APCO that there would be advantages to consolidation of coordination of a number of services. For example, having a single point of contact for all public safety services may be more desirable for the Commission from a paperwork standpoint. Additionally, having a single public safety data base could result in increased efficiency in the handling of interservice sharing requests. Nonetheless, different services have different needs and users. Where, as here, existing users indicate a strong preference for a single service coordinator and we have a successful working relationship with that entity, we are not inclined to disturb it. On balance, therefore, we believe the public safety community would be better served at this time by retaining separate coordinators in the public safety radio services.

#### Industrial Radio Services

80. Power Radio Service - The sole request to be the coordinator for this service was received from the Utilities Telecommunications Council (UTC). UTC is a non-profit organization representing in excess of 2000 of the nation's electric, gas, water, and steam utilities in telecommunications matters. UTC is the present coordinator for the Power Radio Service and has proposed to provide frequency coordination for the Power Radio Service by continuing its processing of frequency requests in a manner consistent with present practices as modified to reflect requirements adopted as a result of the Notice. UTC proposed to continue to utilize its regional coordination process because regional coordinators are intimately familiar with the topographies and other unique characteristics of their regions. To assist in the frequency coordination process, in addition to a

centralized data base, regional coordinators have detailed land maps, charts, and the most up-to-date Federal Aviation Administration (FAA) reports available. UTC will establish a centralized National Examination Center in Washington, D.C. to review applications. It stated that the regional coordination/national processing approach will effectively serve the needs of Power Radio Service users. Additionally, UTC indicated that it will take an active role in post-licensing conflicts, ensuring that the interests of all parties will be considered. However, UTC stated that it is unwilling to be financially responsible for the resolution of these conflicts. Performance criteria as outlined in the Notice are realistically within the scope of UTC's abilities. Because of its representativeness, expertise, and experience, we are certifying UTC as the Power Radio Service coordinator.

81. Petroleum Radio Service - The sole request to be the coordinator for this service was submitted by the Central Committee on Telecommunications of the American Petroleum Institute (API). API is composed of representatives of the nation's petroleum and natural gas companies. Further, its Petroleum Frequency Coordinating Committee (PFCC) is the present coordinator for the Petroleum Radio Service. API stated that it will continue to process most requests for frequency coordination as it has in the recent past. Its coordination efforts are automated and centralized in API's offices in Washington, D.C. API's coordination system consists of three subsystems: (1) the Application Tracking Subsystem; (2) the Coordination Subsystem; and (3) the Certificate Procedure Subsystem. It indicated that its coordination process will operate in a fashion similar to that described in the Notice. It proposed to modify its automated system by mutual arrangement with other coordinators to accomplish any necessary interservice and out-of-service functions. In addition, it will modify its equipment when access to the Commission's data base is made available through a third party contractor. It further proposed to encourage the use of spectrum efficient radio equipment that does not cause harmful interference to co-channel users and, where appropriate, it will suggest to applicants the use of new technology. Because of API's representativeness, expertise, and experience, we are certifying API as the Petroleum Radio Service coordinator.

82. Forest Products Radio Service - The only request to be the coordinator for this service was submitted by Forest Industries Telecommunications (FIT). FIT is a national organization of users licensed in the Forest Products Radio Service, and states that at least 85% of the licensees in the Forest Products Radio Service are FIT members. FIT has had more than 35 years of experience as the frequency coordinator for this service and has developed a complete and accurate data base of assignment and usage of forest products frequencies. FIT stated that it now provides to its members many of the services

coordinators would undertake under the Commission's proposals. FIT currently reviews all applications and participates in post-licensing conflicts. It will develop a system for accessing the data base of other coordinators and supported the "electronic mailbox" approach. Because of FIT's representativeness, expertise, experience, and existing data base, we are certifying FIT as the coordinator in the Forest Products Radio Service.

83. Motion Picture Radio Service - We received requests from two entities to be the coordinator for this service, one from FIT and one from the Alliance of Motion Picture and Television Producers (AMPTP). Subsequently, FIT withdrew its request, leaving AMPTP as the lone candidate. AMPTP is a non-profit trade association of organizations engaged in the production of motion pictures and television. AMPTP stated that it represents in excess of 200 of the major and independent producers of motion pictures and television programs in various collective bargaining negotiations. As the single industry-wide representative of the motion picture industry, AMPTP claims it stands prepared to carry out the frequency coordination functions for the Motion Picture Radio Service. AMPTP appears to meet the most important coordination criterion, that of representativeness. The Motion Picture Radio Service has never had a frequency coordinator. AMPTP stated that it has not served as a frequency coordinator and does not possess in-house engineering or computer skills. However, AMPTP has formed a frequency coordination committee composed of individuals experienced in private land mobile communications in motion picture production. They possess the technical expertise necessary to set the coordination policies as well as oversee the coordination process. AMPTP has informed the Commission that it has become a voting trade association member of the Special Industrial Radio Service Association, Inc. (SIRSA). Should it be designated the frequency coordinator for the Motion Picture Radio Service, AMPTP stated that it will enter into an arrangement with Spectrum Management Systems, Inc. covering the use of computer hardware and software programs for the provision of frequency coordination in the Motion Picture Radio Service. Based on its representativeness and proposed arrangements for providing coordination, we are certifying AMPTP as the coordinator for the Motion Picture Radio Service.

84. Relay Press Radio Service - We received requests from two entities to be the coordinator for this service. These requests were submitted by FIT and the American Newspaper Publishers Association (ANPA). FIT subsequently withdrew its request for certification in this service. ANPA is a national, non-profit trade association representing the vast majority of daily and non-daily newspapers. Therefore, it meets the representativeness criterion. The Relay Press Radio Service has never had a frequency coordinator. ANPA has indicated that it is negotiating with qualified organizations for

the provision of technical support in making frequency recommendations. It proposed that all applications submitted to ANPA will first be reviewed by its technical consultant. Applications will then be forwarded to the ANPA frequency coordinating committee with a recommendation. ANPA will decide on the appropriate action needed and will inform the applicant of its decision before filing the application and the recommendation with the Commission. ANPA proposed to utilize the coordination flow process designated by the Commission. Except for the Commission's data base, there is no existing data base for the Relay Press Radio Service. ANPA stated that if economically practical, it will establish a data base as soon as possible. Based upon ANPA's representativeness and proposed coordination procedures, we are certifying ANPA as the coordinator for the Relay Press Radio Service.

85. Special Industrial Radio Service - The only request to be the coordinator for this service was filed by the Special Industrial Radio Service Association, Inc. (SIRSA). SIRSA, a non-profit association with a membership of 12,000 Special Industrial Radio Service licensees, is currently the recognized coordinator in this service. It has invested over \$600,000 in software and hardware to develop a fully automated coordination process that: (1) accepts and initiates an application; (2) identifies all pertinent technical criteria about an application; (3) performs searches of the available bands for assignment; (4) assigns the frequency chosen by the coordinator, automatically updating appropriate technical data files; and (5) prints a frequency coordination certificate. SIRSA stated that it prepares over 1000 license applications annually for its members. For 1985, SIRSA projected that it would issue in excess of 6,500 certificates of frequency coordination. SIRSA indicated that it responded to 80% of the requests for frequency coordination within one week and to 90% of the requests within 2 weeks. SIRSA stated that it is prepared to access by "dial up" equipment, upon being authorized to do so, the data bases of all committees responsible for assignments that may be shared by Special Industrial eligibles. Similarly, it is prepared to grant such "read only" access to its data base to other certified committees having a legitimate need to review that information. Because of SIRSA's representativeness, expertise, and experience, we are certifying SIRSA as the coordinator for the Special Industrial Radio Service.

86. Manufacturers Radio Service - The only request to be the coordinator for this service was filed by the Manufacturers Radio Frequency Advisory Committee (MRFAC). MRFAC is a non-profit, non-stock corporation established to coordinate uses of the radio spectrum, particularly in the Manufacturers Radio Service. MRFAC'S membership comprises a cross section of the manufacturing industry. It stated that its 99 member firms range from large national and multi-national firms to very small firms. MRFAC indicated that since the 1950's, it

and its predecessor organizations have represented the interests of Manufacturers Radio Service licensees before the Commission, attempting to assure the availability of efficient and effective radio communications for the nation's manufacturing firms. MRFAC has been the recognized coordinator in this service since 1958 and utilizes district coordinators, each responsible for a particular area of the country, to provide coordination services. When a district coordinator completes a coordination, the MRFAC committee representative is advised of the recommended frequency and, in turn, sends the applicant a frequency recommendation letter. MRFAC stated that it has acquired the necessary components to establish an automated Manufacturers Radio Service data base. However, it has not totally completed automation plans, particularly for accessing the Commission's data base. It indicated that when the Commission finalizes its access decisions it will take steps necessary to ensure data base access. MRFAC stated that it will endeavor to comply with whatever requirements the Commission ultimately adopts in this rulemaking. Accordingly, because of its representativeness we are certifying MRFAC as the coordinator in the Manufacturers Radio Service.

87. Telephone Maintenance Radio Service - As with the other industrial services, we received only one request to be the coordinator for this service. It was submitted by the Telephone Maintenance Frequency Advisory Committee (TELFAC). TELFAC is a non-profit association responsible for the creation and maintenance of a national, standardized frequency management program for eligible users in the Telephone Maintenance Radio Service. It has a contractual arrangement with Spectrum Management Services, Inc. to obtain automated services to provide the actual mechanism for frequency coordination services. TELFAC's Council, composed in part of licensees in the Telephone Maintenance Radio Service, is representative of the interests of the telephone maintenance industry. TELFAC stated that it is prepared to make any other further financial commitments necessary to implement the frequency coordination services outlined in the Notice in this proceeding. Based upon its representativeness and coordination experience, we are certifying TELFAC as the coordinator in the Telephone Maintenance Radio Service.

88. Business Radio Service - The only request to be the coordinator for this service was filed by the National Association of Business and Educational Radio, Inc. (NABER). NABER has been the coordinator in the Business Radio Service for frequencies above 450 MHz since 1970. It is a national non-profit association of land mobile licensees, users, and vendors of private land mobile products and services. It currently utilizes a centrally located automated data base in support of its coordination activities. In the past four years, NABER stated it has performed an average of 32,000 frequency coordination requests per year and processes over 35 percent of the

requests received in one day; over 50 percent in three days; and over 90 percent in 10 days. NABER also indicated that it has actively been a part of Commission proceedings that affected the interests of the Business Radio Service licensees, users, entrepreneurs and manufacturers in the land mobile services. NABER has also been involved in the promotion of more efficient utilization of already allocated spectrum. In addition to supporting frequency coordination as a means to utilize available spectrum more effectively, NABER also supported, where practicable and not disruptive of service to existing users and systems, the utilization of new, more spectrum-efficient technology such as narrowband techniques in the 150 MHz band. There is presently no coordinator for frequencies in this service below 450 MHz. NABER stated, however, that it will develop a data base and apply its knowledge of business radio user needs to coordinate the frequencies below 450 MHz as well. Because of its representativeness, expertise, experience, and proposed coordination procedures, we are certifying NABER as the coordinator for the Business Radio Service.

89. Industrial Radio Groups - There is a group of ten 450 MHz frequency pairs in the Business Radio Service reserved for servicing and supplying aircraft in and around airports. Beyond certain geographical limitations, these frequencies are available for general Business Radio use. NABER is the only party requesting to be the coordinator for this group of frequencies. Until now, these frequencies have been coordinated by Aeronautical Radio, Inc. (ARINC). In its comments, however, ARINC indicated that since these frequencies are all assigned at most airports, very little coordination effort takes place for these reserved frequencies. Since the frequencies are also available to the Business Radio Service, ARINC asked that its coordination authority be transferred to NABER. Upon consideration of these comments and because the frequencies are listed in the Business Radio Service table of frequencies, we are certifying NABER as the coordinator for the ten frequency pairs in this group.

90. Another group of frequencies in the Business Radio Service are those reserved for central station alarm operations. The Central Station Electrical Protection Association (CSEPA) was the only entity requesting to be certified as the coordinator for these frequencies. CSEPA is a non-profit association of operators of electrical protection central stations, and its frequency advisory committee currently provides coordination for these frequencies. CSEPA stated that it is representative of the central station industry and that it has the staff and facilities required to continue its coordination service. CSEPA is studying proposals for computer assistance with its frequency coordination work, although it states that with only 35 coordinations per year, computer assistance is not indispensable to its coordination efforts. Because of CSEPA's

representativeness and coordination experience, we are certifying CSEPA as the coordinator for this group of frequencies.

91. The last industrial radio group is the Southern Louisiana-Texas Offshore Zone frequencies (see Section 90.315 of the Commission's rules). The only request to be the coordinator for these frequencies was filed by API. Because these frequencies are used almost exclusively by Petroleum Radio Service eligibles, and because API is currently providing coordination for the frequencies, we are certifying API as the coordinator for this group of frequencies.

#### Land Transportation Radio Services

92. Motor Carrier Radio Service - Frequencies in this service are allocated for use by persons or entities providing: (1) a common or contract motor carrier service for distribution, collection and transportation of property within and between urban areas; (2) transportation of passengers between urban areas; and (3) transportation of passengers within a single urban area. Currently, each of these groups has a different coordinator. The only request to be the coordinator for this service, however, was filed by the American Trucking Association (ATA). It asked to remain the coordinator for the frequencies used by motor carriers distributing, collecting, and transporting property within and between urban areas. ATA is the national trade association of the motor carrier industry and utilizes its own mainframe computer for maintaining its frequency data base. Being representative of the industry and having prior coordination experience makes ATA a qualified coordinator in this service.

93. With regard to the two other categories of frequencies in the Motor Carrier Radio Service, i.e., transportation of passengers between urban areas and within a single urban area, no requests to be the coordinator were received. The present coordinators for these two categories chose not to apply. In the Notice we indicated that if there was no interest expressed in coordinating a particular radio service or group, we would combine that service or group with another.<sup>20</sup> There are 29 frequencies allocated for local and long distance passenger transportation services. Consequently, it does not appear that assignment of the coordination responsibility for these

---

<sup>20</sup> Notice, paragraph 15, footnote 18.



frequencies to an existing coordinator would create any significant impact or hardship upon its coordination process. We believe that ATA, which stated in its comments that it is representative of the motor carrier industry, would be in the best position to assume this responsibility. We realize that property and passenger transportation operations are somewhat different. However, since many frequencies in the Motor Carrier Radio Service are shared by all eligibles in this service, a single coordinator for the entire service would be desirable. Accordingly, we are certifying the American Trucking Association as the frequency coordinator for all frequencies assigned to the Motor Carrier Radio Service.

94. Railroad Radio Service - The only request to be the coordinator for this service was filed by the Association of American Railroads (AAR). AAR is a non-profit organization of member railroad companies generating approximately 97% of the total operating revenues of all railroad companies in the United States. AAR is the present coordinator for the Railroad Radio Service and has been coordinating frequencies in this service for 40 years, even before the service was formally established. Besides being representative of users in the service, AAR stated that it has the organization, personnel, data processing capabilities, and intimate knowledge of the industry necessary to provide effective coordination. AAR has developed and uses a national frequency assignment plan which is essential for effective coordination in a complex radio service such as the Railroad Radio Service. Its data base is contained in one of the largest computer installations in Washington, D.C. Considering its representativeness, expertise, and coordination experience, we are certifying AAR to be the coordinator in the Railroad Radio Service.

95. Taxicab Radio Service - The only request to be the coordinator for this service was received from the International Taxicab Association (ITA). ITA is a non-profit trade association for the taxicab industry. It has been the coordinator in this service for the past 14 years. ITA recently replaced its manual frequency coordination system with a computerized system using, under contract, a central computer system that provides frequency search services, applicant and data base access, partial interservice frequency coordination data base sharing, and coordination certificate printing. ITA stated that it supports the Commission's frequency coordination proposals to improve frequency coordination in today's congested frequency bands. Accordingly, because of ITA's representativeness and coordination experience, we are certifying ITA to be the coordinator for the Taxicab Radio Service.

96. Automobile Emergency Radio Service - As with the other land transportation radio services, we received only one request to be the coordinator in the Automobile Emergency Radio Service. The request

was submitted by the American Automobile Association (AAA), the present coordinator in this service. AAA stated that it is in the process of establishing a computerized data base to assist in the frequency selection process. Because of its close coordination with users, and supervision of its relatively small data base, AAA believes that its records may be more detailed and accurate than those of the Commission. With the establishment of its computerized data base, AAA believes that it will have no need to access the Commission's data base, but will do so if required. It also stated that since the frequencies assigned to the Automobile Emergency Radio Service are not shared with any other radio service and since only two requests for interservice sharing have been received to date, direct access to other coordinator's data bases is not necessary. AAA stated that when required, it will participate in interservice sharing requests, but because of the expected low number of such requests, it will do so by letter or telephone. As discussed above, each coordinator will have flexibility in designing its own system to handle interservice sharing requests. Whatever system AAA decides to establish will have to be compatible and interoperable with other coordinators' systems to enable AAA to meet the speed-of-service requirement. Considering AAA's coordination proposal, and based upon its representativeness of users and its experience in coordinating frequencies in this service, we are certifying AAA as the coordinator in the Automobile Emergency Radio Service.

#### 800 MHz and 900 MHz Frequencies

97. General - In addition to the specific radio services regulated under Part 90, the Notice stated that we intend to certify a coordinator in the 900 MHz paging pool and in each of the six 800 MHz categories. <sup>21</sup> In the 900 MHz paging pool and in three of the six 800 MHz categories we are faced with the choice between a coordinator that is an established user group and an entity that is experienced in coordination procedures for common carrier systems (Comp Comm). In the 800 MHz Business category the user group is NABER, in the Industrial/Land Transportation category the user group is SIRSA, in the Public Safety category it is APCO, and in the 900 MHz paging pool it is NABER. Each of these user groups has been coordinating frequencies in the respective frequency categories since the time those frequencies were made available for use. In cases where the category or pool is available to other users in different radio services, such as the Public Safety, Industrial/Land Transportation and 900 MHz pools, these

---

21 The six 800 MHz categories consist of Business, Industrial/Land Transportation, Public Safety, and SMRS pools along with the original trunked frequencies and the original conventional frequencies.

user group coordinators indicated that they are supported by the other user groups representing those services. Comp Comm, in support of its request to coordinate the 900 MHz paging pool and four of the 800 MHz categories, stated that it is a communication consulting firm offering a broad and diverse range of services to the communications industry, including coordination of public land mobile frequency assignments. It maintains a full engineering staff supported by state-of-the-art automation equipment. Comp Comm argued that its extensive experience and technical expertise in the design of land mobile communication systems and in the development and management of data bases makes it the most logical choice to be the coordinator for those frequencies.

98. The primary factor supporting Comp Comm's proposal is its technical expertise in system design. Such technical expertise is a necessity in coordinating public land mobile radio systems because each system must be individually engineered to protect other licensees' service areas. In the private radio services, however, assignments are not based on predicted service area contours, but are either shared or assigned with a specific mileage separation. Coordinators in the private land mobile radio services must also have technical expertise since they may have to "engineer-in" systems when conditions warrant, and must always consider system parameters to minimize interference. However, there are factors other than technical issues that also must be considered in making private land mobile assignments. For example, since frequencies may be shared, user compatibility is often an issue. All established user groups requesting to be coordinators in these pools have demonstrated the necessary technical expertise and capabilities. We have repeatedly stated that the most important criterion in choosing the coordinators is representativeness. In this case, the user groups - NABER, APCO, and SIRSA - are most representative of eligibles for these frequencies. They are endorsed by a broad cross section of the users in the pool they wish to coordinate.

99. NABER was recommended as the frequency advisory committee for the Business Radio category at 800 MHz by consent of the Land Mobile Communications Counsel (LMCC), of which NABER is a participating member. The Commission accepted the recommendation of LMCC, and NABER has coordinated those frequencies since their release in late 1982. NABER has also coordinated the 900 MHz private paging frequencies since the Commission recognized it as the coordinator for such frequencies in 1982. Similarly, APCO has been the coordinator for the 800 MHz public safety category since late 1982. APCO is developing a centralized, automated data base accessible to all its local coordinators. SIRSA is representative of special industrial users through its membership policy and board of directors composition. It is the present coordinator for the Industrial/Land Transportation 800 MHz category. SIRSA was given that responsibility, in part, because of

the support it received from the LMCC, which stated that SIRSA has the "proven skill and experience" as a coordinator "as well as existing computer capabilities" to build and monitor the necessary 800 MHz data base. Accordingly, because of their experience in coordinating these categories, we are certifying NABER as the coordinator in the 800 MHz Business category and the 900 MHz paging pool, SIRSA as the coordinator in the 800 MHz Industrial/Land Transportation category and APCO as the coordinator in the 800 MHz Public Safety category.

100. 800 MHz SMRS category - In this 800 MHz category we received requests to be the coordinator from three entities - Comp Comm, American SMR Network Association (ASNA), and a joint proposal from NABER and the National Mobile Radio Association (NABER/NMRA). Comp Comm advanced the same arguments for certification in this category as it did in the other 800 MHz categories. In contrast, both NABER/NMRA and ASNA stressed the representativeness issue. There is at present no coordinator for the 800 MHz SMRS category. SMRS applicants for trunked frequencies may specify on the basis of a field study the frequencies desired or may request the Commission to select and assign frequencies for the system. Regarding the question of whether the Commission should certify a coordinator in the SMRS category, commenters argued that use of a coordinator would result in greater spectrum efficiency. For example, NABER/NMRA stated that:

Although both NMRA and NABER can appreciate certain arguments which might oppose the need for such coordination, both organizations, as well as NCA (Network Communications of America) and CTIA (California Trunking Interference Association) believe the more efficient and effective utilization of frequencies allocated for SMR systems can be obtained by use of a user representative frequency advisory committee.  
(NABER/NMRA Joint Proposal, page 11)

101. NMRA and NABER have joined efforts with the endorsement and participation of the Network Communications Association and the California Trunking Interference Association to form the NMRA/NABER SMR Frequency Advisory Committee (Committee) to seek certification as the coordinator for the 800 MHz SMRS category. The four organizations jointly represent over 400 licensees of one or more SMR systems. They asserted that the Committee is responsive to the needs of the SMR industry and also reflects the varying and diverse interests of that industry. Such interests include small and large independent SMR licensees, equipment manufacturers who also own and operate SMR systems, and end users on such systems who are licensees and must also be properly represented in the coordination process. NABER has over 6000 members with a special SMRS section. It has represented the

land mobile community since 1965 and has been a recognized frequency coordinator since 1970. It has the requisite experience and expertise to be certified as a coordinator. They argue that they are the only entity requesting certification in this category that is representative of all persons who are eligible for radio facilities in this category. NMRA is a nationwide, non-profit association of small businesses engaged in sales and maintenance of radio equipment and systems. NMRA members, in most cases, own and operate conventional and trunked SMR stations as well as multiple licensed systems ("community repeaters") throughout the United States. NMRA stated that approximately 200 members of NMRA are also licensees of one or more SMR stations. The predecessor organization to the NMRA was formed by a group of California radio sales and service dealers in 1955. One of the functions of that organization was to provide local frequency coordination in Southern and Northern California to its members and non-members. The individuals involved are still active in NMRA. The joint proposal states that the data base management and day-to-day frequency coordination function for the Committee will be performed by NABER under the policies and procedures established by the Committee. However, prior to making the final coordination, NABER, on behalf of the committee, will consult with recognized regional groups for their input so as to take into account local recognized technical concerns. As shown above, NABER brings significant expertise to this joint effort both in terms of technical capabilities and familiarity with the user community.

102. ASNA stated that it is a recently-organized, non-profit, national trade association whose voting membership will be composed exclusively of SMRS base station licensees. ASNA based its request to be the coordinator for this category solely on its representativeness of SMRS base station licensees. It indicated that exclusive of manufacturers, its current members already represent some 250 SMRS systems throughout the country. ASNA did not indicate its size in terms of numbers of members. It proposed to provide effective frequency coordination in accordance with applicable Commission requirements by contracting with a third party to provide such service under ASNA's direct management and control. ASNA stated that its coordination plan would provide an economical and efficient method for assigning frequencies for SMR systems and would minimize the Commission's administrative burden. ASNA does not itself have experience or expertise in frequency coordination nor did it demonstrate independent capability to perform all of the requirements imposed by the Commission.

103. We have considered this matter and the views of the parties carefully. We have decided not to select a coordinator for this category at this time, contrary to our proposal in the Notice. We base this decision on several significant problems that stem from key

differences between this category and the other private land mobile radio services and categories. First, in the other categories and services, the Commission has set procedures for processing applications that are fully established and understood by coordinators. In contrast, our SMR licensing policies are still evolving as this relatively new industry matures. Moreover, there are two disparate sets of rules governing SMR applications; these rules will be harmonized in September 1987 (see Part 90, Subparts M and S).

104. Second, because of the nature of the SMR business, we generally receive applications for more channels than are available for assignment in the SMRS category in a given geographic area. This factor results in on-going Commission actions to cancel the authorizations for channels not loaded to prescribed levels in geographic areas in which all SMR channels have been assigned. Currently, there is a "day-to-day application window" procedure governing channels that become available as a result of license cancellations in the SMRS category. Applications for these channels are accepted only on or after dates specified by the Commission in public notices. Upon receipt, applications are date stamped in the Licensing Division of the Private Radio Bureau in Gettysburg, Pennsylvania. All applications filed on the same date for a given area are considered together. Applications filed after that date for that area are dismissed if no channels are available for assignment. As a result, it is of critical importance that applications be received by the Commission at the appropriate time. We are not prepared at this time to instruct a coordinator on how to handle such applications.

105. A final concern stems from the recent Commission rulemaking which accorded fully loaded systems a priority in the assignment of frequencies. Currently, the Commission checks the loading status of the application prior to affording priority. While a coordinator may be able to perform this function in the future, our licensing processes are not at that stage at the present time.

106. Therefore, even though a coordinator could provide a valuable service by coordinating the SMRS category, the unique licensing procedures in the 800 MHz SMRS category convince us that the anticipated public benefits of certifying a coordinator do not exceed the potential costs. Accordingly, we will continue to select and assign channels in the SMRS category under our current mileage separation standards. As before, however, we will allow SMRS applicants to specify frequencies on their applications. We may revisit the issue of coordination of trunked SMR frequencies at a later time.

107. 800 MHz original trunked frequencies - In the original 800 MHz trunked category we received requests from ASNA, NABER/NMRA,

and APCO to be the certified coordinator. APCO, however, only wants to coordinate public safety use of this category. Since the large majority of these channels are licensed for SMRS operations, the same concerns that we had about utilizing a frequency coordinator in the 800 MHz SMRS category are applicable here. There is an additional concern relating to the administration of the waiting lists applicable to these frequencies and the melding of the two rule subparts referenced above. Until these issues are resolved, the Commission is not prepared to provide the necessary guidance to a frequency coordinator. Accordingly, we will continue to select and assign channels in this category.

108. 800 MHz conventional frequencies - Three parties -NABER, SIRSA, and APCO - filed requests to be the coordinator for the 800 MHz conventional frequency category. Currently, APCO coordinates public safety use, NABER coordinates business use (including conventional SMR systems <sup>22</sup> ) and SIRSA coordinates industrial and land transportation use. The use of three coordinators in this particular category has worked well and has evolved into a workable, manageable system. We see no reason, nor has any been presented, to deviate from the current situation, even though this is a departure from our overall policy and direction. The coordination of frequencies in the 800 MHz conventional category is viewed differently at this time because licensing is based on the type of technology used rather than the category of user who is to employ them. This difference is important in view of our consistent emphasis on the need for a coordinator to be representative of the users in the category for which it would be certified. None of the entities who applied are individually representative of the existing users of the frequencies because, for licensing purposes, there is no separation or distinction made with regard to the service in which a user is eligible. APCO, SIRSA, and NABER combined, however, are representative of most if not all of these users. With more than one coordinator for this category, each one will be expected to coordinate with the other two before it sends a recommendation to the Commission. However, we do not envision this to be a major problem. First of all these three coordinators are successfully working together now to provide effective coordination in this category. Second, the fact that there are only three coordinators coupled with the amount of license activity in this category should minimize the problem potential here.

---

22 A conventional SMR system functions in the same way as a community repeater except the base station (repeater) is not multiple licensed, it is licensed only to the service provider.

In regard to the question of increasing the administrative burden we believe having three coordinators in one limited category should not have an adverse impact on Commission resources. Further, the alternative to this approach would be to have the Commission take on the coordination responsibilities, something it is not in a position to do with the likelihood of limited agency resources in upcoming years. Finally, by requiring applicants to apply through the coordinator representing the category in which they establish eligibility, we can minimize shopping. For these reasons we are making an exception to our one coordinator per category approach. Accordingly, in the 800 MHz conventional category (original 150 channels) we are certifying APCO to coordinate all public safety and special emergency radio use, NABER to coordinate all business use (including conventional SMRs), and SIRSA to coordinate industrial and land transportation use.

#### E. Application Submission and Filing Requirements

109. We now consider which applications will require frequency coordination before Commission processing and which applications will not require frequency coordination prior to submission to the Commission. After careful analysis of the comments, we have decided to modify somewhat the procedures proposed in the Notice. As previously discussed, we have modified the coordinator's application review responsibilities. An applicant can still either specify a frequency or request that the coordinator select a frequency. We also have left the assignment methodology up to the coordinator as proposed in the Notice. Further, under the procedures adopted herein, when a particular frequency is requested by an applicant in the application submitted to the coordinator, a showing supporting the use of that frequency or frequencies must be included. The extent of the showing needed depends upon the particular system proposed.<sup>23</sup> We believe this one-step approach will save time and effort in the overall licensing process and, therefore, is consistent with our objectives in this proceeding. In cases where the application submitted to the coordinator is incomplete or if there is an obvious error, we are allowing the coordinator to make the necessary corrections provided that applicant approval is obtained. Again, we believe allowing the coordinator to make minor changes will speed up the overall licensing process.

---

<sup>23</sup> For example, if the application is for an add-on station to a multiple licensed system only a statement to that effect is needed. If the application is for a completely new system a more detailed showing must be included.



110. The only other modification we are making to the proposals in the Notice is when the coordinator disagrees with an applicant's request for a specific frequency, and the applicant still wants to pursue the request. In the Notice we envisioned a two-step process in this situation. We proposed that an applicant could request a frequency in its application and, if the coordinator disagreed with the requested frequency, the applicant could then submit a technical showing to the coordinator supporting its request. If the coordinator still disagreed with the applicant, the application, technical submission, and the coordinator's written reasons for rejection would be submitted to the Commission for evaluation and decision. We have decided to combine these procedures into a single step to make the process simpler. Under our new procedures, applicants desiring a specific frequency must submit a technical justification for that frequency along with the application. If the coordinator disagrees with the justification, the application, the technical submission, the coordinator's written reasons for rejection, and the alternate frequency recommendation shall be submitted to the Commission for evaluation and decision.

111. Applications requiring coordination - In the Notice, we described a number of problems in the present frequency coordination process and stated that our objective in this proceeding is to improve the quality, speed and efficiency of frequency coordination in the private land mobile radio services. Fundamental to achieving these objectives is maintaining an accurate and up-to-date private land mobile data base. Without access to accurate and current information, a coordinator cannot make sound frequency recommendations to applicants, and the Commission loses its ability to review effectively the frequency recommendations before licensing. In order to ensure that accurate and current data are available, we proposed coordination procedures somewhat different from those in use today. Under our proposal all applications submitted on a Form 574 (with certain minor exceptions) for new stations, add-on users to existing stations, and station modifications, regardless of frequency band, were first to be submitted to the certified coordinator for the applicable radio service or pool. The categories of applications to be coordinated under our proposal included new stations as well as station modifications for changes in frequency, emission, power, antenna height, number of mobile stations, location, ownership, and class of station.

112. We did not receive specific comments on the issue of which general categories of applications should or should not require coordination. However, the commenters generally agreed with our proposals and indicated that any steps that would improve the data base from which frequency selections are made should be taken. For example, NABER stated that "in order to insure the accuracy and reliability of the data base as well as its timeliness, the coordinator must be kept in the

frequency selection and licensing process loop" (NABER comments, pages 8-9). For the reasons stated above, we remain convinced that, as a general rule, all applications filed on Form 574 for new stations in all frequency bands, and all station modifications concerning changes in frequency, class of station, emission, power, antenna height above ground, and location or number of mobiles must be submitted first to the applicable coordinator. Additionally, applications for reinstatement of authorizations expired for more than 6 months shall be submitted to the coordinator.

113. Applications not requiring coordination - Exceptions to the coordination requirement listed in the Notice were applications for:

- (a) frequencies shared with the federal government;
- (b) frequencies below 25 MHz;
- (c) frequencies specified in the rules for itinerant use;
- (d) special temporary authorities (STAs) for less than 180 days;
- (e) frequencies for developmental operations;
- (f) frequencies in the Radiolocation Service;
- (g) frequencies for mobiles operating in the 470-512 MHz band where the frequency pair is assigned on an exclusive basis; and
- (h) frequencies for mobile and control stations in the 800 MHz band where the frequency pair is assigned on an exclusive basis.

We proposed to have applications in these categories sent directly to the Commission.

114. Those commenting on the first six exceptions unanimously supported our proposal. Commenters agreed that these particular applications do not lend themselves easily to coordination because the coordinator cannot be aware of the complete operating environment, even if coordination is required. For example, the use of frequencies shared with the federal government requires coordination with, and the concurrence of, the federal government. A private coordinator cannot provide that coordination, which must be done through the Interdepartment Radio Advisory Committee. Frequencies in the Radiolocation Service pose a similar problem in that they are shared with other entities. Two other groups of frequencies, those reserved

for itinerant use and frequencies used for developmental operations, also fall into this category. Itinerant frequencies are authorized for nationwide use and are not limited to a specific location. Developmental frequencies are authorized on a secondary, non-interference basis on any frequency in the service in which an applicant proposes to operate. Because of these factors, the coordinator could not be assured it is recommending the most appropriate frequency. Frequencies below 25 MHz are also very difficult to coordinate because of the long transmission range and varying propagation characteristics of frequencies in this region of the spectrum. In short, coordination of these applications would not provide a reasonable degree of reliability in selecting the most appropriate frequency. Accordingly, applications for frequencies in these categories should be sent directly to the Commission.

115. Two other exceptions discussed in the Notice involved instances in which frequency pairs are assigned on an exclusive basis. We proposed to have sent directly to the Commission applications for mobiles operating in the 470-512 MHz band and for mobile and control stations operating in the 800 MHz band where the frequency is assigned on an exclusive basis. NABER, in its comments, questioned part of this proposal. It stated that it did not interpret our proposal with respect to applications for mobiles in the 470-512 MHz band on exclusively assigned frequencies to mean that add-on users to systems licensed in this band, even those meeting our loading requirements, would be exempt from coordination. It argued that all add-on users, regardless of whether the frequency assignment is exclusive, should be coordinated.

116. As we have stressed throughout this proceeding, maintenance of a complete and up-to-date data base of frequency usage is essential for rapid, efficient and accurate frequency recommendations and licensing. Therefore, applications proposing uses that could affect other requests or recommendations must be made known to coordinators in order for them to provide a useful service. Conversely, there appears to be little, if any, purpose for coordinators to review applications that cannot have an impact on near-term frequency selections.

117. Applying this standard to the situations described above, once the mobile loading criteria have been satisfied an assignment is exclusive for that area. Therefore, other than add-on users to a multiple licensed system, the frequency cannot be assigned again in the same area. Thus, there does not appear to be a need for coordinators to immediately know if there are pending applications to increase the number of mobiles in systems that have already met loading

requirements. 24 Such exact mobile loading information is not needed to determine whether an additional co-channel assignment can be made, since the possibility of other co-channel assignments will be contingent solely on distance separation between systems, not on the number of mobiles in operation on existing systems. As for determining whether additional mobiles should go on the system, it is the licensee(s), not the coordinator, who determines the overall system loading. It does not make any difference whether the system is single or multiple licensed. The key here is that from an assignment standpoint the frequency is assigned on an exclusive basis and not available to another party at another location in that same geographic area. The same reasoning applies to base stations for add-on users to multiple licensed systems. We believe in each of these cases that permitting applicants with exclusive assignments to forego the frequency coordination process and to file applications directly with the Commission is consistent with our objective of reducing unnecessary regulatory burdens on licensees. 25 Accordingly, we are modifying our rules so that applications for mobiles operating in the 470-512 and 800 MHz bands, and for add-on base stations in multiple licensed systems operating in the 470-512 and 800 MHz bands where the frequency is assigned to a single system on an exclusive basis, do not require frequency coordination and can be filed directly with the Commission. 26

118. 72-76 MHz band - In the Notice we proposed to require coordination of applications specifying frequencies in the 72-76 MHz

---

24 See Sections 90.313, 90.366, and 90.631 of the Commission's rules.

25 See Report and Order, PR Docket 84-109, 50 Fed. Reg. 6179 (February 14, 1985).

26 A frequency is considered assigned on an exclusive basis if the system meets the Commission's loading requirements. In the case of multiple entities licensed on the same system (i.e., community repeater), the frequency pair is considered assigned to a single system on an exclusive basis if the combined mobile count of all licensees using that particular system meets or exceeds the loading requirements. However, if two different entities are licensed for two different systems, where taken separately the mobile loading for each system does not meet the loading standards but, if combined the mobile loading would be met, the frequency pair is not considered as assigned to a single system on an exclusive basis. In this latter case, applications for add-on base stations in multiple licensed systems and applications for mobiles must be first submitted to the frequency coordinator.

band. No comments were received on this proposal. However, upon further review of this issue we have decided not to require coordination for frequencies in this band. The specific frequencies in the 72-76 MHz band available to private land mobile entities are also available for domestic public land mobile operations licensed under Part 22. Requiring coordination of private land mobile use of this band when coordinators do not have access to data on assignments or pending requests in the domestic public land mobile service would not be useful. Therefore, requests to use the 72-76 MHz band should be filed directly with the Commission.

119. Add-on users - In the Notice we proposed to require coordination of add-on users to multiple-licensed systems, especially community repeaters.<sup>27</sup> Parties, like NABER and Motorola, which favor coordination of these types of applications, argued that coordination is a necessary part of maintaining an accurate and current data base. They contended that such a requirement provides the coordinator with useful information as to the activity and utilization of the frequency. On the other hand, opponents of coordination of add-on users, like NMRA, argued that once a system has been coordinated for an area there is no need to require repeated coordination just to record new users. Further, they asserted that it is the community repeater owner who determines the number and types of users on the system and what loading is appropriate. The coordinator does not independently recommend putting new users on the community repeater. Those opposed to coordination of add-on users argued that the integrity of the data base would be maintained in any event, since the information is entered into the Commission's data base and a copy of each license is given to the coordinator. If the coordinator does not wish to use the Commission's data base, it has the option of entering the information regarding add-on-users in its own data base.

120. As discussed above, we believe applications that affect the frequency selection process must be coordinated. Private land mobile frequencies are, in general, available on a shared basis. While the coordinator may not need to know the loading on a multiple licensed system at any specific instance to determine whether additional add-on users should go on the system (it is the system owner rather than the coordinator who determines this), it must have this information in order

---

27 This particular issue was the subject of PR Docket 82-226. This proceeding, however, was terminated with a statement that the subject would be covered in this proceeding. Order Terminating Proceeding, PR Docket 82-226, FCC 83-330, released July 25, 1983.

to determine if a frequency pair already used in the area can be assigned to another entity proposing operation in the same area. Therefore, we will require coordination of add-on users to multiple licensed systems when these systems operate in a shared environment (i.e., when the system does not have exclusive use of the frequency). The requirement to coordinate add-on users is based primarily on the need to maintain up-to-date loading information to optimize future frequency recommendations.

121. Conversions to private carrier systems - In the Notice we stated that the conversion of multiple licensed systems to private carriers has resulted in problems for the Commission and coordinators. It is often not clear from an application for conversion whether the new applicant is to be substituted for previous licensees of the frequency (in which case their mobile and control stations would be purged from the data base), or whether the new applicant's requested mobile and control stations are in addition to those already licensed on the frequency. Pending the outcome of this proceeding, we suspended the licensing of private carriers except for paging systems operating on paging-only frequencies. We received very few comments on this issue. Those that did comment, however, emphasized the need for careful coordination requirements in order to maintain the accuracy of the data base.

122. We agree that the integrity of the data base is of utmost importance here. Consequently, we believe applicants for private carrier systems must provide information elaborating on the nature of the proposed system. Applications for new private carrier systems (not conversions) would follow the same procedures as other applications requiring coordination. The application, however, must clearly indicate that the proposed system is a private carrier. In order to help distinguish these systems we are adding another station classification code. A new code, FB6, will be used to designate private carriers. If mobiles are to be licensed in the name of the private carrier, the number of mobiles requested (including paging units) should be only the number that the applicant will place in service within eight months.

123. Applications involving the conversion of multiple licensed systems to private carriers will also follow this same basic licensing procedure. However, the application must also include a list of all licensees (including call signs) presently operating on the multiple licensed system together with an indication as to whether the licensees intend to obtain service from the private carrier. Current users of the multiple licensed facility intending to obtain service from the private carrier should submit their individual licenses for cancellation. These licenses (or signed statements from the licensees) must be included in the private carrier application package. In view of this decision, we believe the freeze on licensing of private

carriers can be lifted simultaneously with the implementation of the requirements and procedures adopted herein.

124. Coordination of control stations - In the Notice we proposed to require coordination of all control stations regardless of antenna height. The only exception was for control stations operating in the 800 MHz band where the frequency pair is assigned on an exclusive basis. FIT was the only commenter on this issue, but limited their comments specifically to requiring coordination of all control stations in the 150-160 MHz band. Currently, applications for control stations operating below 470 MHz and above 800 MHz where the antenna height meets the "20 foot rule" of Section 90.119 (a)(2)(ii) do not require coordination. Further, under our present procedure, applicants for a control station with an antenna height of 20 feet or less need only list the station address. If we require coordination, the applicant would have to complete items 1-11 on the Form 574 for each control station. The Commission would then have to check these items and input the information into the data base. We do not believe the extra work here is justified. In reviewing the record, we find that our present coordination requirements for control stations have worked well for many years without complaints from either licensees or coordinators. Accordingly, we have decided to maintain the present control station coordination requirements.

125. Renewals/Transfers/Assignments - Few of the entities now serving as coordinators addressed the matter of whether renewal applications or transfer/assignment applications should be submitted for coordination prior to being filed with the Commission. For example, the comments of API, UTC, NABER, AFCCO, and MRFAC did not express any opinion on the coordination of either renewal applications or transfer/assignment applications. SIRSA stated that, although it needs to know the ultimate disposition of renewal applications, there is no need for it to review renewal applications before they are filed with the Commission. AAR's comments indicated that license renewals should be referred to the coordinators "not necessarily for review but as a means for updating the coordinator's records." AAR stated that coordinators should not be required to review applications for assignment of licenses or transfer of control. AASHTO commented that renewals not involving any changes to the original license should not require any coordination. Neither renewal applications nor transfer/assignment applications currently require coordination and we conclude that there is no reason to change our procedures. Therefore, applications for renewal of existing authorizations, as well as applications for transfer of control and assignment of licenses that do not involve a change in the technical parameters of the station, will be submitted directly to the Commission. Changes to an existing

authorization necessitates a modification request and shall be submitted in accordance with Sections 90.135 and 90.175. A copy of the grant of an assignment will be sent to the appropriate coordinator for its use.

#### F. Oversight of Coordinators

126. The decisions reached in this proceeding are the product of an intense effort on the part of the coordinators, other commenters, the Commission and its staff to develop policies and procedures that will significantly improve the frequency coordination process. We have closely scrutinized the entire private land mobile licensing program in an effort to identify all of the applications for which coordination is required. The responsibilities we are assigning to the coordinators reflects, first and foremost, our desire to improve application processing and spectrum utilization. As discussed above, coordinators will be responsible for: providing coordination services on a non-discriminatory basis, reviewing applications for completeness and correctness, processing applications in order of receipt, filing coordinated applications with the Commission, handling post-licensing conflicts, responding to coordination requests on a timely basis, recommending the most appropriate frequency, handling interservice sharing requests, accessing the Commission data base when it becomes available, maintaining reasonable and uniform fees, establishing a single, national point of contact and facilitating new technologies. The decision to require coordinators to perform each of these functions was reached only after careful consideration of all relevant factors. We recognize that some coordinators would prefer a more limited role in the processing of applications. Likewise, some coordinators would prefer greater discretion in how they handle the applications. It is our judgment, however, that we must impose certain fundamental obligations on the coordinators in order to realize the improvements we think necessary. We believe the modifications we are making to the coordination process will significantly improve overall service to the public and are crucial to efficient spectrum utilization.

127. While we expect coordinators to serve the public in a responsible manner, we feel impelled to maintain oversight of the coordinators' actual performance. As noted earlier, Congress has encouraged us to do just that. The unique position in which we are placing the certified coordinators and the importance we place on the integrity of the process makes monitoring and enforcement, if necessary, essential. Coordinators will be providing a service to applicants and will be assisting the Commission in managing the use of the private land mobile radio spectrum. We are elevating the role and importance of coordinators, but we are also imposing certain responsibilities on the coordinators in the process. Assignment of such status cannot go unfettered. We will measure the performance of coordinators against the responsibilities described. Where it appears



that a coordinator is not performing its duties in a manner consistent with the public interest obligations imposed in this proceeding, the Commission may, on its own motion or at the public's request, conduct an inquiry into the coordinator's performance. While we do not foresee initiating such an inquiry on the basis of isolated complaints, we anticipate beginning an inquiry if it appears that a coordinator has established a pattern of failing to perform in accordance with the requirements adopted here or is otherwise acting contrary to the public interest. After our investigation, which may include seeking comments from the public, we will determine whether decertification of the coordinator or other action is warranted. The results of our investigation will be made public. In the event that this investigation results in the decertification of a coordinator, we will then commence action to certify a new coordinator for the particular service involved.

#### G. Miscellaneous Matters

128. The Aerospace and Flight Test Radio Coordinating Council (AFTRCC) filed comments urging the Commission to indicate that the coordination procedures adopted in this proceeding apply only to land mobile operations. We affirm here that this proceeding deals only with frequency coordination in the private land mobile radio services, governed by Part 90 of the Commission's Rules.

129. Motorola, in its reply comments, suggested that the Commission require all coordinators to employ identical paper flow and application tracking systems as well as standardized forms and guidelines. We agree with Motorola that an identical paper flow and application tracking system would eliminate some of the inefficiencies in the present coordination system and simplify private land mobile frequency coordination procedures. The Motorola proposal, however, was made as part of its reply comments and therefore other parties were not able to comment on the proposal. We do not believe it is appropriate to specify requirements in this area without receiving comments from the public, especially since a number of coordinators have large investments in their present automated systems. Further, not all coordinators require the same information. Thus, while we encourage coordinators to try to standardize procedures whenever possible, we will not mandate these changes at this time. We also believe the concept of standardized forms for certain applications has merit. However, in our opinion, this is not the time to adopt such forms, particularly because we are presently reviewing the matter of application forms in the private land mobile radio services. Further, there is a pending rulemaking, RM-5125,

and a Notice of Proposed Rule Making, PR Docket 85-302, dealing with the issues of application filing procedures and the streamlining of forms. 28

130. An issue that has resulted in coordination problems but was not addressed in the Notice is the interconnection of a private land mobile radio system with the public switched telephone network (PSTN). NABER was the only entity to file comments on this issue. In order that coordinators may take into account interconnected systems when making a recommendation, NABER suggested that applicants be required to notify the coordinator if they intend to interconnect their radio system with the PSTN. We agree with NABER that coordinators should be aware of interconnected systems. Since the average transmission on a radio system interconnected with the PSTN is usually longer than if the system is not interconnected, coordinators should be aware of interconnected systems when they are making frequency recommendations. Under our current licensing procedures, applicants wishing to interconnect need only state so somewhere in the application package. Unless the coordinator reviews the entire package, including attachments, it may not be aware the system is interconnected. Licensees wishing to interconnect need only notify the Commission by letter. In such a case, the coordinator has no way of knowing a licensee is interconnecting its system with the PSTN. In order to ensure that the coordinator is aware of interconnected systems, we are adopting a new licensing code "C" to be used as part of the class of station code. Applicants wishing to have interconnect capability must list the letter "C" following the class of station code in their application. Licensees wishing to have an interconnect capability must modify their license by adding the letter "C" to their class of station code. 29

131. As a result of the actions taken in this proceeding the Form 574 instructions must be modified to include instructions concerning submission of applications and the new class of station codes. We will do this in the near future.

---

28 Notice of Proposed Rule Making, PR Docket 85-302, released October 17, 1985, 50 Fed. Reg. 42732 (October 22, 1985).

29 Licensees of systems presently interconnected with the PSTN should modify their license (class of station code) at the next license modification or license renewal.

### Final Regulatory Flexibility Act Analysis

132. Pursuant to the Regulatory Flexibility Act of 1980, the Commission's final analysis is as follows:

#### I. Need and purpose of this action:

The Commission believes that its rules and policies concerning private land mobile radio frequency selection and assignments should be updated and, consequently, has modified its coordination policies and procedures by adopting changes to Parts 0, 1, and 90 of the Rules. The rules and coordination procedures are revised to refine the private land mobile frequency selection process. These changes will improve the quality of recommendations, minimize processing delays, increase spectrum efficiency, and facilitate the introduction of new technologies.

#### II. Summary of the issues raised by the public comments in response to the Initial Regulatory Flexibility Analysis:

We received two comments that specifically addressed our Initial Regulatory Flexibility Analysis. Teletech Inc. (Teletech) and Professional Licensing and Liaison Services Inc. (PLLS) argued that certain parts of the Commission's proposal would have a substantial impact on their current business operations. Teletech is a commercial organization that, among other activities, prepares field studies for private land mobile radio applicants choosing not to employ the services of a frequency coordinator. Teletech has expressed concern over the elimination of the field study option. In its reply comments, it indicated that "implementation of the NPRM would effectively put Teletech and other similar entities out of business." However, we note that in its comments to the NOI in this proceeding, Teletech stated that it "is engaged in providing numerous engineering-related services to the communications user community. As a highly regarded consultant, Teletech is involved in a wide spectrum of communications activities in the broadcast, wireline telephony, interconnect, cable and radio common carrier fields." The rules being adopted require an applicant to submit a technical justification if it requests a specific frequency, and also requires a technical submission by the applicant to justify a requested frequency that is denied coordination by the coordinator. While we have eliminated the field study as an alternative to obtaining a recommendation from a coordinator, we have not eliminated the opportunity for Teletech and other organizations to provide technical services to private land mobile radio applicants. PLLS stated that it is a corporation "engaged, inter alia, in the business of processing and screening for accuracy, completeness, and adequacy applications for radio licenses in the private land mobile radio service." It further stated that "(s)hould the amendment to Section

90.139 be adopted, PLLS will probably be forced to exit the business since 90-100 percent of its total revenue comes from Part 90 application processing." Under the rules being adopted here, an applicant for frequencies in the private radio services may prepare its own application or choose to utilize the services of organizations such as PLLS. Our objective is to improve coordination and application processing procedures so as to minimize the filing of defective applications and improve the Commission's speed of service to the applicant. We believe the final rules and policies contained in this document achieve this objective and, in turn, advance the interests of the end users of communication systems, many of whom are small businesses.

### III. Significant alternatives considered:

The Commission considered all of the alternatives in this proceeding and considered all the timely filed comments directed to the various issues in the Notice. After carefully weighing all aspects of this proceeding, the Commission has adopted the most reasonable course of action under the mandate of the Communications Act of 1934, as amended.

#### Paperwork Reduction Act Statement

133. The decision contained herein has been analyzed with respect to the Paperwork Reduction Act of 1980. We recognize that there are possibly some recordkeeping and reporting requirements imposed upon certified coordinators that cannot be fully defined at this time. Accordingly, when the staff fully develops the procedures for implementing the adopted coordination process, any such recordkeeping and reporting requirements that are identified will be submitted to the Office of Management and Budget for appropriate clearance.

#### Effective Dates

134. In order to give coordinators sufficient opportunity to meet the requirements put forth here, we are making the rules and procedures adopted effective six months from the date the summary of this item is published in the Federal Register. All applications filed after the effective date will have to follow the new coordination procedures as prescribed herein. This effective date will not apply, however, to the capability of the coordinator to access the Commission's data base. We will require coordinators to be able to access the Commission's data base three months after notice is given that such a service is available. We expect each of the certified coordinators to meet the functions and requirements in the time frame specified. Coordinators not meeting the terms of their certification

are subject to Commission review and, if necessary, decertification as discussed above.

Ordering Clause

135. Accordingly, IT IS ORDERED, that effective May 22, 1986. Parts 0, 1, and 90 of the Commission's Rules, 47 C.F.R., ARE AMENDED as set forth in the attached Appendix C and this proceeding is TERMINATED. Authority for this action is found in Sections 4(i), 303, and 331 of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 303, and 332.

136. For further information on this proceeding contact Eugene Thomson or Herb Zeiler, Rules Branch, Land Mobile and Microwave Division, Private Radio Bureau, Federal Communications Commission, Washington, D.C. 20554, telephone (202) 634-2443.

FEDERAL COMMUNICATIONS COMMISSION

William J. Tricarico  
Secretary

Attachments



## APPENDIX A

### Formal comments were filed in this proceeding by:

Aeronautical Radio, Inc.  
Aerotron, Inc.  
Aerospace and Flight Test Coordinating Council  
All Business Communications Co. Inc.  
Alliance of Motion Picture and Television Producers  
American Association of State Highway and  
Transportation Officials, Inc.  
American Automobile Association, Inc.  
American Newspaper Publishers Association, Inc.  
American SMR Network Association, Inc.  
American Society of Hospital-Based Emergency Air  
Medical Services  
American Trucking Association, Inc.  
Honorable Mark Andrews, U.S. Senate  
Arizona State Parks  
Arkansas Forestry Commission  
Arkansas Game and Fish Commission  
Associated Press  
Associated Representatives  
Association of American Railroads  
Associated Public-Safety Communications Officers, Inc.  
Atlantic Emergency Medical Services Council  
  
Beverly Hills Sound Co.  
Butte County Fire Department  
  
California Department of Transportation  
California Fire Chief's Association  
Centralina Council of Governments  
Central Committee on Telecommunications of the  
American Petroleum Institute  
Central Station Electrical Protection Association  
Colorado APCO  
Colorado Division of Fire Safety  
Commercial Radio Services, Inc.  
Commonwealth of Virginia, Commission of Game and  
Inland Fisheries  
Comp Comm, Inc.  
County of Los Angeles, CA  
County of Orange, CA  
County of Stanly, NC  
County of Wilson, NC, Emergency Communications Center  
  
Department of Transportation (NHTSA)

Eastern States Public Safety Radio League

Federal Emergency Management Agency  
Fire Districts Association of California  
Florida Game and Fresh Water Fish Commission  
Forest Industries Telecommunications  
Forestry Conservation Communications Association, Inc.  
Forsyth County, NC

Greater Philadelphia Search and Rescue  
G.R. Tower and Consulting, Inc.

Idaho Department of Fish and Game  
Idaho Department of Lands  
Illinois Department of Public Health, Division of  
Emergency Medical Services and Highway Safety  
International Association of Fire Chiefs Inc. jointly with  
International Municipal Signal Association  
International Association of Fish and Wildlife Agencies  
International Taxicab Association  
Iowa State Department of Health

E.F. Johnson Company  
Joint Council of National Fire Service Organizations

Kansas Fish and Game

Lake County, FL  
LAOAD Radio and Microwave Communications Consultants  
Lycoming County, PA

Manufacturers Radio Frequency Advisory Committee, Inc.  
Maricopa County, AZ  
Maryland Institute for Emergency Medical Services Systems  
Maryland Forest, Park, and Wildlife Service  
Mecklinburg County, NC  
Michigan Department of Natural Resources  
Missouri Department of Conservation  
Missouri State Bureau of Emergency Medical Services  
Honorable J.J. Moakley, U.S. House of Representatives  
Motorola, Inc.  
M.W.D., Inc.

National Association of Business and Educational Radio, Inc.  
National Association of State Emergency Medical Directors  
National Association of State Foresters  
National Mobile Radio Association  
National Ski Patrol System, Inc.  
Nebraska Game and Parks Commission  
New Hampshire Fish and Game Department  
New Jersey Division of Fish, Game, and Wildlife



New Jersey State Department of Health  
New York State Health Department  
North Carolina Department of Human Resources  
North Carolina Wildlife Resources Commission  
North Dakota State Communicaitons  
North Dakota Fire Chiefs Association

Oklahoma Department of Wildlife Conservation

Palm Beach County, FL  
Pennsylvania Fish Commission  
Pennsylvania Game Commission  
Professional Licensing and Liaison Services, Inc.

Merrill T. See

South Carolina Department of Health and Environmental Control  
South Carolina Forestry Commission  
South Carolina Wildlife and Marine  
Resources Department  
Southeastern Massachusetts EMS Council  
Special Industrial Radio Services Association, Inc.  
Spectrum Resources, Inc.  
State Forester of Alabama  
State Forester of Pennsylvania  
State Forester of New York  
State Forester of Tennessee  
State Forester of Virginia  
State Forester of Wisconsin  
State of California, Department of  
Fish and Game  
State of California, Department of General Services,  
Telecommunications Division  
State of California, Emergency Medical Services Authority  
State of Colorado, Division of Telecommunications  
State of Connecticut, Department of Environmental Protection  
State of Idaho, Department of Administration,  
Bureau of Communications  
State of New Mexico, Department of Game and Fish  
State of New Mexico, EMS Advisory Committee  
State of New Mexico, Health and Environment Department  
State of Nevada, Department of Human Resources, Division of  
Health, Emergency Medical Services  
State of Nevada, Department of Wildlife  
State of South Carolina, Department of Health and  
Environmental Control, Division of EMS  
State of Wisconsin, Department of Natural Resources  
Stephens Engineering Associates  
Stokes-Rockingham Fire and Rescue  
Stoughton Police Department

Telephone Maintenance Advisory Committee  
Teletech, Inc.  
Tennessee Wildlife Resources Agency  
Tex Cell  
Texas Department of Health  
Texas Parks and Wildlife Department  
The National Association of State EMS Directors  
The Telephone Companies

United States Telephone Association  
Utilities Telecommunications Council

Washington State Department of Game  
Westchester County EMS Council, Inc.  
Western Piedmont Council of Governments  
Wyoming Hospital Association  
Wyoming State Forestry Division

Yorktown Volunteer Ambulance Corps

Formal reply comments were filed by:

A-1 Communications, Inc.  
AACS Communications, Inc.  
Aircall of California  
Alliance of Motion Picture and Television Producers  
American Association of State Highway and  
Transportation Officials, Inc.  
American Newspaper Publishers Association  
American SMR Network Association, Inc.  
Associated Press  
Associated Public-Safety Communications Officers, Inc.  
Association of American Railroads  
Astro Communications, Inc.

Bay Area Trunking  
J.G. Boswell Co.  
Burtons Communications Inc.

C&C Equipment Co.  
California Fire Chiefs Association  
California Trunking Interference Association  
Central Committee on Telecommunications of the  
American Petroleum Institute  
Communications Engineering Co.  
Comp Comm, Inc.  
Connecticut Bureau of Statewide Emergency  
Communications  
County of Los Angeles, CA  
County of Orange, CA

Forestry Industries Telecommunications  
Forestry Conservation Communications, Inc.  
Frontier Radio, Inc.

General Electric Co.  
B.F. Goodrich, Co.

Hayworth Communication Services, Inc.

International Association of Fire Chiefs jointly with  
International Municipal Signal Association  
IBM Research and Development, Inc.

E.F. Johnson Co.

Manufacturers Radio Frequency Advisory Committee, Inc.  
McGee Communication-Electronics, Inc.  
Metromedia Producers Corporation  
Mitchell Energy and Development Corporation  
Motorola, Inc.

National Association of Business and Educational Radio, Inc.  
Network Communication of America  
Nevada Communications Equipment Co.  
Northern California Chapter of APCO  
North West Radio, Inc.

Parkinson Electronic Co. Inc.

Ritron, Inc.

Sacramento Metro Radio  
Special Industrial Radio Services Association, Inc.

Teletech, Inc.  
Texas Department of Health

United States Telephone Association  
Utilities Telecommunications Council

Valley Mobilfone, Inc.

Note: In the interest of developing a complete record, comments and replies that were received late are hereby accepted and entered into the files of this proceeding.



## APPENDIX B

### List of Certified Coordinators

#### Public Safety Radio Services

Local Government	Associated Public Safety Communication Officers (APCO)
Police	Associated Public Safety Communication Officers (APCO)
Fire	International Municipal Signal Association/ International Association of Fire Chiefs (IMSA/IAFC)
Highway Maintenance	American Association of State Highway and Transportation Officials (AASHTO)
Forestry Conservation	Forestry Conservation Communications Association (FCCA)
Special Emergency	International Municipal Signal Association/ International Association of Fire Chiefs/ National Association of Business and Educational Radio (IMSA/IAFC/NABER)

#### Industrial Radio Services

Power	Utilities Telecommunications Council (UTC)
Petroleum	Central Committee on Telecommunications of the American Petroleum Institute (API)
Forest Products	Forest Industries Telecommunications (FIT)
Motion Picture	Alliance of Motion Picture and Television Producers (AMPTP)
Relay Press	American Newspaper Publishers Association (ANPA)
Special Industrial	Special Industrial Radio Service Association (SIRSA)

Business	National Association of Business and Educational Radio (NABER)
Manufacturers	Manufacturers Radio Frequency Advisory Committee (MRFAC)
Telephone Maintenance	Telephone Maintenance Frequency Advisory Committee (TELFAC)

#### Industrial Radio Groups

Airport frequencies	National Association of Business and Educational Radio (NABER)
Alarm frequencies	Central Station Electrical Protection Association (CSEPA)
Offshore Zone frequencies	Central Committee on Telecommunications of the American Petroleum Institute (API)

#### Land Transportation Radio Services

Motor Carrier	American Trucking Association (ATA)
Railroad	Association of American Railroads (AAR)
Taxicab	International Taxicab Association (ITA)
Automobile Emergency	American Automobile Association (AAA)

#### Frequency Pools

900 MHz Paging	National Association of Business and Educational Radio (NABER)
800 MHz Public Safety	Associated Public Safety Communication Officers (APCO)
800 MHz Business	National Association of Business and Educational Radio (NABER)
800 MHz Industrial/LT	Special Industrial Radio Service Association (SIRSA)

800 MHz SMRS

None

Original 800 MHz  
Conventional

Public Safety

Associated Public Safety Communication  
Officers (APCO)

Business

National Association of Business and  
Educational Radio (NABER)

Industrial/LT

Special Industrial Radio Service  
Association (SIRSA)

Original 800 MHz Trunked

None

2



## APPENDIX C

Parts 0, 1, and 90 of the Commission's Rules and Regulations are amended to read:

### Part 0 Commission Organization

The authority citation for Part 0 continues to read:

AUTHORITY: Sec. 5, 48 Stat. 1068 as amended; 47 U.S.C. 155, unless otherwise noted.

### Part 1 Practice and Procedure

The authority citation for Part 1 continues to read:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, Implement 5 U.S.C. 552, unless otherwise noted.

### Part 90 Private Land Mobile Radio Services

The authority citation for Part 90 continues to read:

AUTHORITY: Secs: 4, 303, 48 Stat., as amended, 1066, 1082; 47 U.S.C. 154, 303 unless otherwise noted.

1. Section 0.131 is amended by adding a new paragraph (g) to read as follows:

\$0.131 Functions of the Bureau.

\* \* \* \* \*

(g) Certifies frequency coordinators in the Private Land Mobile Radio Services, considers petitions seeking review of coordinator actions, and engages in oversight of coordinator actions and practices.

2. Section 1.912 is amended by adding a new paragraph (b) to read as follows:

\$1.912 Where applications are to be filed.

\* \* \* \* \*

(b) All applications for private land mobile licenses which require frequency coordination and all correspondence relating thereto shall be first sent to the certified frequency coordinator for the radio service or frequency group concerned. After the appropriate frequency coordination, such applications shall be forwarded by the coordinator to the Federal Communications Commission, Gettysburg, PA. 17325.

3. In Section 90.7, the term of Frequency advisor is changed to Frequency coordinator and the definition is changed to read as follows:

§90.7 Definitions.

\* \* \* \* \*

Frequency coordinator. An entity or organization that has been certified by the Commission to recommend frequencies for use by licensees in the Private Land Mobile Radio Services.

\* \* \* \* \*

4. Section 90.17 is amended by revising paragraph (c) (3) to read as follows:

§90.17 Local Government Radio Service

\* \* \* \* \*

(c) \*\*\*

(3) The maximum output power of any transmitter authorized to operate on this frequency shall not exceed 2 watts.

\* \* \* \* \*

5. Section 90.53 is amended by revising the Table in paragraph (a) to remove limitation 8 where applicable, deleting and reserving paragraph (b) (8), and amending paragraph (b) (31).

§90.53 Frequencies available.

\* \* \* \* \*

(a) \*\*\*

### Special Emergency Radio Service Frequency Table

Frequency or band *	Class of station *	Limitations *
155.160	Base or mobile	25
155.175	do	25
155.205	do	25
155.220	do	25
155.235	do	25
155.265	do	25
155.280	do	25
155.295	do	25
155.325	do	9, 25, 29
155.340	do	10, 29
155.355	do	9, 25, 29
155.385	do	9, 25, 29
155.400	do	9, 25, 29
*	*	*

(b)\*\*\*

(8) (Reserved)

\* \* \* \* \*

(31) This frequency is removed by 22.5 kHz from frequencies assigned to other radio services. Utilization of this frequency may result in, as well as be subject to, interference under certain operating conditions. In considering the use of this frequency, adjacent channel operations should be taken into consideration. If interference occurs, the licensee may be required to take the necessary steps to resolve the problem. See §90.173(b).

\* \* \* \* \*

6. Section 90.63 is amended by revising paragraph (d)(15) to read as follows:

§90.63 Power Radio Service.

\* \* \* \* \*

(d)\*\*\*

(15) This frequency is available on a shared basis in the Power, Petroleum, Forest Products, Manufacturers, and Telephone Maintenance Radio Services. It may be assigned only when all of the frequencies in the

450-470 MHz band allocated to the service in which the applicant is primarily eligible are assigned within 56 km. (35 mi) of the proposed base station.

\* \* \* \* \*

7. Section 90.65 is amended by revising paragraph (c) (37) to read as follows:

§90.65 Petroleum Radio Service.

\* \* \* \* \*

(c) \*\*\*

(37) This frequency is shared with the Special Industrial Radio Service and is available for assignment in the Petroleum Radio Service only in the states of Texas and Louisiana within 75 miles of the Gulf of Mexico and in adjacent offshore waters. Mobile relay stations will not be authorized.

\* \* \* \* \*

8. Section 90.67 is amended by revising paragraphs (c) (18) and (c) (29) to read as follows:

§90.67 Forest Products Radio Service.

\* \* \* \* \*

(c) \*\*\*

(18) This frequency is available on a shared basis in the Power, Petroleum, Forest Products, Manufacturers, and Telephone Maintenance Radio Services. It may be assigned only when all of the frequencies in the 450-470 MHz band allocated to the service in which the applicant is primarily eligible are assigned within 56 km. (35 mi) of the proposed base station.

\* \* \* \* \*

(29) This frequency is shared with the Taxicab and Special Industrial Radio Services. Use of this frequency is limited to stations located at least 80.5 km (50 miles) from the center of any urbanized area of 600,000

or more population (U.S. Census of Population, 1970). All operations on this frequency are limited to a maximum transmitter output power of 75 watts.

\* \* \* \* \*

9. Section 90.73 is amended by revising paragraphs (d) (28), (30), (32), and (e) (4) to read as follows:

§90.73 Special Industrial Radio Service.

\* \* \* \* \*

(d) \*\*\*

(28) This frequency is shared with the Taxicab and Forest Products Radio Services. Use of this frequency is limited to stations located at least 80.5 km (50 miles) from the center of any urbanized area of 600,000 or more population (U.S. Census of Population, 1970). All operations on this frequency are limited to a transmitter output power of 75 watts.

(29) \*\*\*

(30) This frequency is shared with other Industrial Radio Services and is available for assignment in the Special Industrial Radio Service only in the states of North Dakota, South Dakota, Iowa, Nebraska, Kansas, and Missouri beyond 50 miles from St Louis and Kansas City; Wyoming and Colorado east of Longitude 106 degrees except within a 50 mile radius of Denver; and Minnesota south of Latitude 47 degrees except within a 50 mile radius of St. Paul, Minnesota. The maximum transmitter output power may not exceed 110 watts

(31)\*\*\*

(32) This frequency is shared with other Industrial Radio Services and is available for assignment in the Special Industrial Radio Service only in the States of North Dakota, South Dakota, Iowa, Nebraska, Kansas, Missouri, Colorado, and Wyoming east of Longitude 106 degrees; and Minnesota south of Latitude 47 degrees. The maximum transmitter output power may not exceed 110 watts.

\* \* \* \* \*

(e)\*\*\*

(4) The following frequencies are available only in Puerto Rico and the Virgin Islands. These "Base and Mobile" and "Mobile only" frequencies are available on a shared basis in the Forestry-Conservation and Railroad

Radio Services respectively. These "Mobile only" frequencies may be assigned to a control station associated with a mobile relay system if it is also assigned to the associated mobile station.

Base and mobile  
\*

Mobile only  
\*

\* \* \* \*

10. Section 90.79 is amended by revising paragraphs (d) (4) and (d) (13) to read as follows:

§90.79 Manufacturers Radio Service.

\* \* \* \*

(d)\*\*\*

(4) This frequency is available on a shared basis in the Manufacturers, Special Industrial and Railroad Radio Services.

\* \* \* \*

(13) This frequency is available on a shared basis in the Power, Petroleum, Forest Products, Manufacturers, and Telephone Maintenance Radio Services. It may be assigned only when all of the frequencies in the 450-470 MHz band allocated to the service in which the applicant is primarily eligible are assigned within 56 km. (35 mi) of the proposed base station.

11. Section 90.81 is amended by revising paragraph (d) (4) to read as follows:

§90.81 Telephone Maintenance Radio Service

\* \* \* \*

(d)\*\*\*

(4) This frequency is available on a shared basis in the Power, Petroleum, Forest Products, Manufacturers, and Telephone Maintenance Radio Services. Except for assignments made to non-wire line radiocommunications common carriers authorized in the Point-to-Point Microwave Radio Service

under Part 21 it may be assigned only when all of the base and mobile frequencies in the 450-470 MHz band for which the applicant is primarily eligible are assigned within 56 km. (35 mi.) of the proposed base station.

\* \* \* \* \*

12. Section 90.89 is amended by revising paragraph (c) (10) to read as follows:

§90.89 Motor Carrier Radio Service.

\* \* \* \* \*

(c)\*\*\*

(10) This frequency is shared in the Motor Carrier and Railroad Radio Services. It may be assigned only when all of the frequencies in the 450-470 MHz band allocated to the service in which the applicant is primarily eligible are assigned within 56 km. (35 mi.) of the proposed base station.

\* \* \* \* \*

13. Section 90.91 is amended by revising paragraph (c) (10) to read as follows:

§90.91 Railroad Radio Service

\* \* \* \* \*

(c)\*\*\*

(10) This frequency is shared in the Motor Carrier and Railroad Radio Services. It may be assigned only when all of the frequencies in the 450-470 MHz band allocated to the service in which the applicant is primarily eligible are assigned within 56 km. (35 mi.) of the proposed base station.

\* \* \* \* \*

14. Section 90.93 is amended by revising paragraph (c) (11) to read as follows:

§90.93 Taxicab Radio Service.

\* \* \* \* \*

(c) \*\*\*

(11) This frequency is shared with the Forest Products and Special Industrial Radio Services. Use of this frequency is limited to stations located at least 80.5 km. (50 miles) from the center of any urbanized area of 600,000 or more population (U.S. Census of Population, 1970).

\* \* \* \* \*

15. Section 90.111 is amended to read as follows:

§90.111 Scope.

This subpart contains the procedures and requirements for the submission or filing of applications for authority to operate radio facilities under this part. The procedures described are those utilized by the Commission after receiving filed applications.

\* \* \* \* \*

16. Section 90.119 is amended by revising subparagraph (a)(2)(ii) to read as follows:

§90.119 Application forms.

\* \* \* \* \*

(a)\*\*\*

(2)\*\*\*

(ii) If the control station(s) will operate on the same frequency as the mobile station, and if the height of the control station(s) antenna(s) will not exceed 6.1 meters (20 feet) above ground or an existing man-made structure (other than an antenna structure), there is no limit on the number of such stations which may be authorized. Items 1 through 5 of Form 574 shall be completed showing the frequency, the station class, the total number of control stations, the emission, and the output power of the highest powered control station. Applicants for all control stations in the 470-512 MHz band must furnish the information requested in Items 1-11 of Form 574.

\* \* \* \* \*



17. Section 90.127 is amended by revising the section heading and paragraph (a) to read as follows:

§90.127 Submission and filing of applications.

(a) All applications for station authorizations which require frequency coordination in accordance with §90.175 and any correspondence relating thereto, must initially be submitted to the certified frequency coordinator for the radio service or frequency group involved. After the completion of frequency coordination, these applications shall be forwarded by the coordinator to the Federal Communications Commission, Gettysburg, Pennsylvania, 17325. All other applications shall be filed by the applicant directly with the Federal Communications Commission, Gettysburg, PA, 17325. A listing of the certified frequency coordinators may be obtained from the Federal Communications Commission, Gettysburg, PA 17325.

\* \* \* \* \*

18. In section 90.129, the introductory paragraph is revised to read as follows:

§90.129 Supplemental information to be routinely submitted with applications.

Each application received by the Commission must be accompanied by the applicable information listed below:

\* \* \* \* \*

19. Section 90.135 is revised to read as follows:

§90.135 Modification of license.

(a) The following changes in authorized stations require an application for modification of license:

- (1) Change in frequency.
- (2) Change in the type of emission.
- (3) Change in power from that authorized.
- (4) Change in antenna height from that authorized.
- (5) Change in the location or number of base stations, fixed, control, or mobile transmitters from that authorized, including area of mobile operations.
- (6) Change in the class of a land station, including changing from multiple licensed to cooperative use, and from shared to unshared use.
- (7) Any change in ownership, control, or corporate structure.

(b) The following changes in authorized stations do not require an application for modification of license.

- (1) Change in mailing address of licensee.
- (2) Change of name only of licensee, without changes in ownership, control, or corporate structure.
- (3) Change in the number and location of station control points or of control stations operating below 470 or above 800 MHz meeting the requirements of §90.119(a)(2)(ii).
- (4) Change in the number of mobile units operated by Radiolocation Service licensees.
- (5) Any other changes not listed in paragraph (a) of this section.

(c) Unless specifically exempted in §90.175, requests for modifications listed in paragraph (a) of this section must be submitted on Form 574 to the applicable frequency coordinator.

(d) In case of a change listed in paragraph (b)(1) or (b)(2) of this section, the licensee must notify the Commission immediately. Notification may be by Form 405-A or by letter. The letter must contain the name and address of the licensee as they appear in the Commission's records, the new name or address, the call signs and classes of all radio stations authorized to the licensee under this part and the radio service in which each station is authorized. The completed and signed Form 405-A or the letter must be sent to: Federal Communication Commission, Gettysburg, Pennsylvania 17325. Licensees whose licenses are due for renewal and who have received the renewal Form 574-R in the mail from the Commission must use the appropriate boxes on that form to notify the Commission of a change listed in paragraph (b)(1) or (b)(2) of this section.

(e) In the case of a change listed in paragraphs (b)(3), (b)(4), and (b)(5) of this section, the licensee must notify the Commission within 30 days of the change. The notice may be filed on FCC Form 574 or may be contained in a letter specifying the nature of the change, the name and address of the licensee as appearing on Commission records, and the call sign, class, and radio service of the station. The notice must be sent to: Federal Communications Commission, Gettysburg, Pennsylvania 17325.

\* \* \* \* \*

20. Section 90.137 is amended by revising paragraph (a) and adding subparagraph (a)(3) to read as follows:

§90.137 Applications for operation at temporary locations.

(a) An application for authority to operate a base or a fixed transmitter at temporary locations shall be filed in accordance with the following:

(1)\*\*\*

(2)\*\*\*

(3) Applications for operation at temporary locations exceeding 180 days must be accompanied by evidence of frequency coordination.

\* \* \* \* \*

21. Section 90.139 is amended by revising the section heading and paragraph (b) as follows:

§90.139 Commission processing of applications.

\* \* \* \* \*

(b) Applications which are incomplete with respect to answers, supplementary statements, execution, or other matters of a formal character shall be deemed defective and may be dismissed. In addition, if an applicant is requested to file any additional documents or information not included in the prescribed application form, failure to comply with such request will render the application defective and it may be dismissed. Applications will also be deemed to be defective and be dismissed in the following cases:

(1) Statutory disqualification of applicant;

(2) Proposed use or purpose of station would be unlawful;

(3) Requested frequency is not allocated for assignment for the service proposed.

\* \* \* \* \*

22. Section 90.141 is amended to read as follows:

§90.141 Resubmitted applications.

Any application received by the Commission for frequencies below 470 MHz which has been returned by the Commission to the applicant for correction will be processed in its original position in the processing

line if it is resubmitted and received by the Commission within 60 days from the date on which it was returned to the applicant. Otherwise it will be treated as a new application for the purpose of processing considerations. An application received by the Commission for frequencies above 470 MHz which has been returned by the Commission to the applicant will be processed in its original position in the processing line if it is resubmitted and received by the Commission within 30 days (45 days outside the continental United States) from the date on which it was returned to the applicant. Otherwise it will be treated as a new application for the purpose of processing considerations.

23. Section 90.145 is amended by adding a new paragraph (c) to read as follows:

§90.145 Special temporary authority.

\* \* \* \* \*

(c) Requests for special temporary authority to operate for periods exceeding 180 days require evidence of frequency coordination. Requests for shorter periods do not require coordination and, if granted will be authorized on a secondary, non-interference basis.

24. In Section 90.151, paragraphs (a) and (d) are amended to read as follows:

§90.151 Requests for waiver.

(a) Requests for waiver of the rules in this part shall state the nature of the waiver or exception desired, and set forth reasons in support thereof including a showing that unique circumstances are involved and that there is no reasonable alternative solution within existing rules. When related to a specific application the submission and filing procedures of §90.127 also apply.

\* \* \* \* \*

(d) Requests for waiver of the rules not related to a specific application shall be submitted to the Federal Communications Commission, Gettysburg, PA 17325.

25. Section 90.159 is revised to read:

§90.159 Temporary permit.

An applicant for a private land mobile station license utilizing an already authorized facility may operate the radio station(s) for a period of

up to 180 days under a temporary permit evidenced by a properly executed temporary license certificate (Form 572) after submitting or filing a formal application for station license in accordance with §90.127, provided that all the antennas employed by control stations are twenty feet or less above ground or twenty feet or less above a man-made structure other than an antenna tower to which it is affixed. When required by §90.175, applications must be accompanied by evidence of frequency coordination. The temporary operation of stations, other than mobile stations within the Canadian coordination zone is limited to stations with a maximum of 5 watts effective radiated power and a maximum antenna height of 6.1 meters (20 ft.) ) above average terrain.

26. Section 90.175 is revised to read as follows:

§90.175 Frequency coordination requirements.

Except for applications listed in paragraph (f) of this section, each application for a new frequency assignment, for a change in existing facilities as listed in §90.135 (a), for a reinstatement of an authorization expired for more than 6 months, or for operation at temporary locations in accordance with §90.137, must include a showing of frequency coordination as set forth below. When frequencies are shared by more than one service, concurrence must be obtained from the other applicable certified coordinators.

(a) For frequencies between 25 and 470 MHz:

A statement from the applicable frequency coordinator recommending the most appropriate frequency. The coordinator's recommendation may appropriately include comments on technical factors such as power, antenna height and gain, terrain, and other factors which may serve to mitigate potential interference. Except for narrowband operations, the coordinator must not recommend any adjacent channel frequency 15 kHz removed to existing stations which would result in a separation of less than 10 miles, or 7 miles in the Taxicab Radio Service. If the frequency recommended is in the 150-170 MHz band, and is 17.5 kHz or less removed from a frequency which is available to another radio service, the coordinator's statement must show that approval has been received from the coordinator for the other service. Coordination with another service is not required, however, for narrowband assignments more than 5 kHz removed from other narrowband assignments.

(b) For frequencies between 470 and 512 MHz and 806-821/851-866 MHz.

A statement from the applicable coordinator recommending specific frequencies which are available for assignment in accordance with the loading standards and mileage separations applicable to the specific radio service or category of user involved.

(c) For frequencies in the 929-930 MHz band.

A statement from the coordinator recommending the most appropriate frequency.

(d) Any recommendation submitted in accordance with paragraphs (a), (b), or (c) of this section is advisory in character and is not an assurance that the Commission will grant a license for operation on that frequency. Therefore, applicants are strongly advised not to purchase radio equipment operating on specific frequencies until a valid authorization has been obtained from the Commission.

(e) Applications for facilities near the Canadian border north of line A or east of line C in Alaska may require coordination with the Canadian government. See Section 1.955 of this chapter.

(f) The following applications need not be accompanied by evidence of frequency coordination:

- (1) Applications for frequencies below 25 MHz.
- (2) Applications for a Federal Government frequency.
- (3) Applications for frequencies in the 72-76, 216-220, and 1427-1435 MHz bands.
- (4) Applications for a frequency to be used for developmental purposes.
- (5) Applications in the Special Industrial Radio Service or the Business Radio Service requesting a frequency designated for itinerant operation only.
- (6) Applications in the Radiolocation Service.
- (7) Application for 800 MHz trunked frequencies listed in §90.362 of this part.
- (8) Applications for 800 MHz SMRS pool frequencies listed in §90.617(d) and §90.619.
- (9) Applications indicating license assignments such as change in ownership, control or corporate structure if there is no change in technical parameters.
- (10) Applications for mobile stations operating in the 470-512 and 800 MHz bands if the frequency pair is assigned to a single system on an exclusive basis in the proposed area of operation.
- (11) Applications for add-on base stations in multiple licensed systems operating in the 470-512 and 800 MHz bands if the frequency pair is assigned to a single system on an exclusive basis.
- (12) Applications for control stations operating below 470 or above 800 MHz and meeting the requirements of §90.119(a)(2)(ii).

27. Section 90.176 is amended by revising paragraphs (a)(1), (a)(3), (b)(1), and (b)(3) to read as follows:

§90.176 Interservice sharing of frequencies in the 150-174 and 450-470 MHz bands.

(a) \*\*\*

(1) A determination by the applicable frequency coordinator that there are no satisfactory frequencies available within the applicant's own radio service in the area of desired operation;

\* \* \* \* \*

- (3) A statement from the frequency coordinator having responsibility for coordination in the radio service or group in which the frequency is assigned concurring in its assignment in the manner requested. In cases where concurrence is not given the coordinator must provide an explanation of why the requested sharing is inappropriate.

\* \* \* \* \*

(b) \*\*\*

(1) A determination by the applicable frequency coordinator that there are no satisfactory frequencies available within the applicant's own radio service in the area of desired operation;

\* \* \* \* \*

(3) A statement from the frequency coordinator having responsibility for coordination in the radio service or group in which the frequency in question is assigned concurring in its assignment in the manner proposed. In cases where concurrence cannot be given the coordinator must provide an explanation of why sharing is inappropriate.

\* \* \* \* \*

28. In section 90.237, the introductory paragraph is revised to read as follows:

§90.237 Interim provisions for operations of radioteleprinter and radiofacsimile devices.

These provisions authorize and govern the use of radioteleprinter and radiofacsimile devices for base station use (other than on mobile-only

or paging-only frequencies) in the radio services (except in the Radiolocation and Special Emergency Radio Services) in this part.

\* \* \* \* \*

29. Section 90.477 is amended by revising paragraph (a) to read as follows:

**\$90.477 Interconnected systems.**

(a) Applicants for new land stations to be interconnected with the public switched telephone network must indicate on their applications (class of station code) that their stations will be interconnected. Licensees of land stations that are not interconnected may interconnect their stations with the public switched telephone network only after modifying their license. See §90.135. In all cases a detailed description of how interconnection is accomplished must be maintained by licensees as part of their station records. See §90.433.

\* \* \* \* \*

30. Section 90.494 is amended by revising paragraph (b) to read as follows:

**\$90.494 One-way paging operations in the 929-930 MHz band.**

\* \* \* \* \*

(b) All applications for these frequencies must comply with the frequency coordination requirements of 90.175(c).

\* \* \* \* \*

31. Section 90.605 is revised to read as follows:

**\$90.605 Forms to be used.**

Applications for conventional and trunked radio facilities must be prepared on FCC Forms 574 and 574 A and must be submitted or filed in accordance with §90.127.

\* \* \* \* \*

32. Section 90.607 is amended by adding a new paragraph (e) to read as follows:



§90.607 Supplemental information to be furnished by applicants for facilities under this subpart.

\* \* \* \* \*

(e) Except for applicants requesting frequencies in the SMRS category listed in §90.617(d) and §90.619, all applicants for frequencies governed by this subpart must comply with the frequency coordination requirements of §90.175(b).

33. Section 90.621 is amended by revising paragraphs (a) and (c) to read as follows:

§90.621 Selection and assignment of frequencies.

(a) Applications in the Public Safety/Special Emergency, Industrial/Land Transportation, and Business categories and for frequencies in the conventional category must specify the frequencies on which the proposed system will operate pursuant to a recommendation by the applicable frequency coordinator. Applicants for SMRS trunked frequencies may either request specific frequencies by including in their applications justification for the frequencies requested or may request the Commission to select frequencies for the system.

\* \* \* \* \*

(c) Trunked systems authorized on frequencies in the Public Safety, Industrial/Land Transportation, and Business Categories will be protected solely on the basis of predicted contours. Coordinators will attempt to provide a 40 dBu contour and to limit co-channel interference levels to 30 dBu over an applicant's requested service area. This would result in a mileage separation of 70 miles for typical system parameters. Separations will be less than 70 miles where the requested service areas, terrain or other factors warrant reduction. In the event that the separation is less than 70 miles, the coordinator must indicate that the protection criteria have been preserved or that the affected licensees have agreed in writing to the proposed system. Only co-channel interference between base station operations will be taken into consideration. Adjacent channel and other types of possible interference will not be taken into account.

\* \* \* \* \*

34. Section 90.657 is revised to read as follows:

§90.657 Temporary permit.

An applicant for a Subpart S radio station license utilizing an already authorized facility may operate the radio station(s) for a period of up to 180 days under a temporary permit evidenced by a properly executed certification of FCC Form 572 after filing a formal application for station license together with evidence of frequency coordination (when required), provided that the antenna(s) employed by the control station(s) is (are) twenty feet or less above ground or twenty feet or less above a man-made structure other than an antenna tower to which it is affixed.

\* \* \* \* \*