

FEDERAL COMMUNICATIONS COMMISSION

47 CFR Part 90

[PR Docket No. 92-235, FCC 95-255]

Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Radio Services

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: The Commission has adopted a Further Notice of Proposed Rule Making which seeks to introduce market forces into the Private Land Mobile Radio (PLMR) bands. This Further Notice of Proposed Rule Making proposes three options to introduce market forces into these bands: exclusivity, user fees, and competitive bidding. The Commission seeks comment on each of these options and believes that the information gathered will assist in developing and implementing an overall strategy on how to promote greater efficiency in these bands.

DATES: Comments must be filed on or before September 15, 1995, and reply comments must be filed on or before October 16, 1995.

ADDRESSES: Federal Communications Commission, 1919 M Street NW., Washington, DC 20554.

FOR FURTHER INFORMATION CONTACT: Ira Keltz of the Wireless Telecommunications Bureau at (202) 418-0680.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's Further Notice of Proposed Rule Making, PR Docket No. 92-235, FCC 95-255, adopted June 15, 1995, and released June 23, 1995. The full text of this Further Notice of Proposed Rule Making is available for inspection and copying during normal business hours in the FCC Reference Center (Room 239), 1919 M Street NW., Washington, DC. The complete text may be purchased from the Commission's copy contractor, International Transcription Services, Inc., 2100 M Street NW., Washington, DC 20037, telephone (202) 857-3800.

Summary of Notice of Proposed Rule Making

1. The Commission initiated the instant proceeding to explore methods to promote more efficient and effective use of the PLMR bands below 800 MHz. This action stems from the Commission's Notice of Proposed Rule Making (56 FR 31097, July 9, 1991) and Notice of Inquiry (57 FR 54034,

November 16, 1992) in PR Docket 92-235 which sought public comment regarding ways to promote more efficient use of the PLMR bands below 800 MHz. The Commission does not believe that the current shared regulatory environment contains the proper incentives to encourage efficient spectrum usage. Introducing market-based incentives into these bands will help to encourage more efficient spectrum use while allowing users to make the equipment choices which best address their needs by attaching an economic cost to inefficient use of the spectrum and promoting the use of more efficient technologies. The user community will ultimately benefit from more efficient use of spectrum through the availability of more channels and better quality service.

2. The spectrum in the PLMR bands historically has been available on a shared use basis. The environment that has emerged is characterized by unlimited sharing of the spectrum by over 500,000 licensees with over 12 million transmitters. Because of the significant and varied spectrum use, the PLMR bands have become highly congested and there is a substantial risk that service in these bands will deteriorate to unacceptable levels. Unfortunately, in this shared use environment, PLMR users generally have little incentive to economize on spectrum use because users do not pay for their spectrum, cannot realize the benefit of more efficient use, and generally share their frequency assignments with a number of other users. Shared use of spectrum also precludes the use of spectrum efficient technologies, such as trunking and time division multiple access (TDMA) because they generally require centralized channel control.

3. This Further Notice of Proposed Rule Making proposes three options to introduce market forces into these bands: exclusivity, user fees, and competitive bidding. The Commission seeks comment on each of these options and believes that the information gathered will assist in developing and implementing an overall strategy on how to promote greater efficiency in these bands.

4. First, the Commission proposes the introduction of exclusivity on channels in the PLMR bands, and to explicitly permit the leasing of excess capacity on these exclusive channels. The Commission believes that offering users the option of exclusivity with the right to resell excess capacity if they agree to convert to narrowband technology by a specified date will promote the use of more efficient technologies. In addition,

affording users the opportunity to obtain exclusivity will enable them to benefit directly from the increased capacity which results from their conversion to more efficient technologies, thus encouraging more rapid transition to narrowband technology. In this regard, users will be more likely to install trunked systems if they are certain that additional users, who might interfere with their trunked systems, would not be licensed on their channel. The Commission's experience with the spectrum above 800 MHz supports this theory. The introduction of exclusivity into the 800 MHz bands facilitated and encouraged the use of more spectrum efficient technologies and equipment. We seek here to provide users of the PLMR bands with that same flexibility to use the most advanced and efficient technology available.

5. Regarding the lease of excess capacity, in order to promote more flexible use of the spectrum, the Commission proposes to allow licensees who choose the exclusivity option to lease excess capacity to any party without restriction. The Commission seeks comment on whether such leasing arrangements should be limited to PLMR eligibles in order to ensure that sufficient spectrum is available to satisfy the needs of the PLMR community. Additionally, the Commission seeks comment on whether these proposals will affect whether traditional PLMR users, who seek to lease excess capacity, are considered commercial mobile radio service (CMRS) providers. The Commission tentatively concludes that licensees who lease excess capacity will have the aspect of their operations regulated as CMRS. The Commission seeks comment on this tentative conclusion.

6. Second, the Commission seeks comment on how a system of user fees can be used in these bands to encourage licensees to make the most efficient and effective use of the spectrum. Under this approach, users would pay a fee based on the estimated value of the spectrum. The spectrum fee would be calculated based on the area and population covered, and the amount of spectrum used. This type of a user fee structure would attach an economic cost to inefficient spectrum use, thereby motivating users to increase their efficient use of the spectrum. Although the Commission does not currently have statutory authority to impose such a fee structure, this option may be the most effective way to encourage efficiency in the PLMR bands while recognizing the varying needs of the incumbent users. The Commission believes that seeking further comment on the imposition of

user fees at this time will enable the Commission to consider how such fees can best be implemented in the PLMR bands, so that if fee authority is granted, the Commission will be able to act quickly to implement such authority.

7. Third, the Commission seeks comment on introducing competitive bidding into the PLMR bands as an alternative to user fees. Specifically, the Commission seeks comment on a proposal to create geographic overlay licenses and use competitive bidding as the assignment mechanism for these overlay licenses. Competitive bidding of overlay licenses could promote efficiency by allowing the marketplace to determine the value of spectrum and by awarding licenses to those who value them most highly, thus ensuring that spectrum will be put to its highest value use. As with exclusivity, competitive bidding of overlay licenses attaches a cost to inefficient spectrum use. The Commission's current auction authority does not permit the use of competitive bidding to assign private licenses because these licenses are not mutually exclusive and the principal use of the spectrum does not involve the provision of service to subscribers for a fee. However, expanded auction authority which could include private wireless users is proposed by the Administration and the U.S. Senate. Accordingly, the Commission believes that it is appropriate at this time to seek comment on how auctions could best be implemented for PLMR licenses, if such authority is granted.

8. Additionally, the Commission tentatively concludes that public safety users should be exempt from market-based incentives. Public safety users are charged with the protection of life and property, and the Commission is committed to ensuring that such users have access to spectrum to perform their critical function. We seek comment on exempting public safety users from spectrum fees and competitive bidding, or developing a reduced fee structure and a protected auction environment for these users.

9. The proposed rules are set forth at the end of this document.

10. FURTHER INITIAL REGULATORY FLEXIBILITY ANALYSIS

Reason for Action

This rule making proceeding was initiated to secure comment on proposals for establishing shared exclusive assignments arrangements in the PLMR bands which will grant licensees flexibility to voluntarily adopt new technology and thereby achieve more efficient use of spectrum. We also

propose to permit licensees who convert to narrowband technology to sell or lease excess capacity to PMRS eligibles as a means of enhancing the competitive potential of the PLMR services in the marketplace. The proposals advanced in the Further Notice of Proposed Rule Making are also designed to respond to the increasing need for spectrum and considerable changes in the mobile communications landscape.

Objectives

The Commission proposes changes to its rules for the PLMR services for use of spectrum in a manner that yields the greatest potential benefit to the public. Specifically, the exclusivity proposal will promote more efficient use of spectrum by encouraging licensees participating in exclusive sharing agreements to convert to innovative narrowband technology in an expeditious manner. Further, the proposal relating to the sale or lease of excess capacity will provide for the enhancement of the PLMR services by allowing marketplace mechanisms to intervene to give insight into the value of the PLMR bands to private eligibles. These new proposals will result in improving the quality of service, increasing the level of technology, and fostering economic growth in the private land mobile environment.

Legal Basis

The legal basis for these rule changes is found in Section 4(i), 303(g), 303(r), 332(a), 332(c), and 332(d) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 303(g), 303(r), 332(a), 332(c), and 332(d), as amended.

Reporting, Recordkeeping, and Other Compliance Requirements

Under the proposal for shared exclusivity agreements in the Further Notice of Proposed Rule Making, existing licensees will be required to report information regarding its plans for implementation of narrowband systems within 5 year guidelines after entering the exclusivity arrangement. These reports will serve as a benchmark for the Commission to measure the progress of licensees in fulfilling their plans to determine whether a specific exclusivity agreement should be rescinded.

Federal Rules Which Overlap, Duplicate or Conflict With These Rules

None.

Description, Potential Impact, and Number of Small Entities Involved

The *Further Notice of Proposed Rule Making* potentially affects numerous

small entities, as the private land mobile services is comprised of millions of small business entities operating in urban and rural areas across the United States. The shared exclusivity and the sale or lease of excess capacity proposals are options available for small business licensees, as well as all other entities utilizing the private land mobile service. Many small entities could be positively affected by the proposals because they provide for new exclusive communications assignments that will foster new technologies and promote the competitive potential of the PLMR spectrum. The full extent of the impact on small entities cannot be predicted until various issues raised in the proceeding have been resolved. After evaluating the comments filed in response to the Further Notice, the Commission will examine further the impact of all final rules in this proceeding on small entities and set forth its findings in the Final Regulatory Flexibility Analysis.

Any Significant Alternatives Minimizing the Impact on Small Entities Consistent With the Stated Objectives

This Further Notice of Proposed Rule Making solicits comments on a variety of alternatives. Any additional significant alternatives presented in the comments will also be considered.

List of Subjects in 47 CFR Part 90

Communications equipment, Radio.

Federal Communications Commission.

William F. Caton,

Acting Secretary.

Part 90 of Chapter I of Title 47 of the Code of Federal Regulations is proposed to be amended as follows:

PART 90—PRIVATE LAND MOBILE RADIO SERVICES

1. The authority citation for Part 90 continues to read as follows:

Authority: Sections 4, 302, 303, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 302, 303, and 332, unless otherwise noted.

2. Section 90.175 is amended by revising paragraph (a) to read as follows:

§ 90.175 Frequency coordination requirements.

* * * * *

(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 include comments on technical factors such as power, antenna height and gain, terrain and other factors which may serve to

minimize potential interference. Tables 1 and 2 in § 90.193 must be used by coordinators to determine co-channel station distance separations between stations participating in a negotiated exclusivity agreement and those stations that are not participating in a negotiated exclusivity agreement. Frequencies in the 450–470 MHz band, when used for secondary fixed operations, shall be assigned and coordinated pursuant to § 90.261.

* * * * *

3. Section 90.189 is added to read as follows:

§ 90.189 Shared Exclusivity—150–170, 421–430, and 450–470 MHz Bands.

To promote spectrally efficient technologies (e.g. trunking, TDMA, etc.) and to increase quality of service for licensees, assignments may be limited on certain frequencies in a specific geographic area as set out in §§ 90.190–90.193.

4. Section 90.190 is added to read as follows:

§ 90.190 User agreements.

Co-channel licensees, operating in the same geographical area can, by mutual agreement, develop sharing arrangements on their currently licensed frequency or frequencies that would facilitate their use of advanced technology. The following guidelines will apply to the development of these sharing agreements:

(a) This agreement must be unanimous among all licensees on a given frequency or frequencies within the composite service area, irrespective of the radio service to which each user belongs. Any license application forwarded from a frequency coordinator to the Commission, prior to the date that the coordinator is notified, in writing, of a licensee action to negotiate an agreement will be considered, for the purposes of the agreement, an existing licensee and must be included in the agreement.

(b) All agreements must be finalized by August 31, 2000. Each participant of the plan must agree to utilize equipment designed to operate single mode with a maximum channel bandwidth of 6.25 kHz or equipment designed to operate single mode with a channel bandwidth of 12.5 kHz provided that it meets the efficiency standard of one communication channel per 6.25 kHz within 5 years after an agreement is finalized.

(c) A 90 day temporary freeze on the assignment of new licensees on a given frequency or frequencies will be made when a licensee, who desires to

negotiate with other co-channel users to enter a sharing agreement, notifies all frequency coordinators who have cognizance of that frequency. This notification must be in writing and include:

(1) The frequency or frequencies under consideration; and

(2) A description of all co-channel licensees who must be a party to the agreement. This description will include: a list of all affected co-channel licensees, their base station locations (latitude and longitude), their current service areas, and their exclusivity service area. The exclusivity service area for each licensee will be defined as a point radius centered on their base station. The maximum radius defining the size of the exclusivity service area will consistant with the specifications of § 90.205.

(d) During the temporary freeze on new licenses in the exclusivity service area, no new licenses will be granted without the consent of all existing users within this area. Co-channel licenses will be granted outside of the exclusivity service area at minimum distances as determined by the tables of § 90.193. Existing licensees who are located outside of the composite service area and closer than the minimum distance to this area as specified by the tables of § 90.193 may continue to operate on a co-primary basis with all licensees inside the composite service area.

(e) If at the completion of the 90 day period, a unanimous agreement is not reached among all licensees, the freeze on new authorizations on the frequency or frequencies within this area will be lifted. No licensee who is located within the exclusivity service area may file a new notification to temporarily freeze this frequency or frequencies in this area for a minimum of one calendar year from the date the temporary freeze expires. All parties are still free to negotiate an agreement, but must include any new licensees who are located within the composite service area.

(f) If prior to or at the completion of the 90 day period, a unanimous agreement is reached among all licensees, the freeze on new authorizations on this frequency or frequencies in this composite service area will be made permanent. No new licenses will be granted on this frequency or frequencies in the exclusivity service area without the consent of participants in the agreement, but systems subject to the agreement can be modified, expanded, or renewed. Existing licensees who are

located outside of the exclusivity service area and closer than the minimum distance to this area as specified by the tables of § 90.193 may continue to operate on a co-primary basis with all licensees inside the exclusivity service area.

(1) The final agreement will be filed with all cognizant frequency coordinators. This agreement will include:

(i) The frequency or frequencies which are covered under the agreement;

(ii) Signatures of all parties to the agreement;

(iii) A description of all co-channel licensees who must be a party to the agreement. This description will include: a list of all affected co-channel licensees, their base station locations (latitude and longitude), their current service areas, and their exclusivity service area; and

(iv) A plan for complying with the requirement to employ narrowband technology within five (5) years from the agreement date.

(2) The coordinator must make this agreement available to the public upon request.

(3) New co-channel licenses will not be granted closer to the composite service area than the minimum distances determined by the tables in § 90.193.

(4) If a licensee expands a system after an agreement is negotiated and filed with the cognizant frequency coordinators, then any portion of the expanded service area which falls outside of the composite service area of the agreement, will not be afforded the protection of the tables in § 90.193 from co-channel licensees, unless a new agreement which includes the expanded area is negotiated.

5. Section 90.191 is added to read as follows:

§ 90.191 Sell or lease of excess capacity.

Licensees who participate in a sharing plan and have fully converted their systems to narrowband or equivalent operation may lease excess capacity of their systems.

6. Section 90.193 is added to read as follows:

§ 90.193 Shared exclusivity separation distances.

The minimum distance between an existing base station that is included in a negotiated exclusivity agreement and a proposed co-channel station not included in the agreement will be determined from tables 1 and 2.

TABLE 1.—150–174 MHz—MINIMUM DISTANCE (KM) BETWEEN EXISTING BASE STATIONS AND PROPOSED STATIONS ¹

Proposed service area (km)	Existing station service area radius (km) ²									
	3	8	13	16	24	32	40	48 ³	64 ³	80 ³
3	16	27	45	60	84	90	100	111	138	162
8	27	32	50	64	88	95	105	118	143	164
13	45	50	55	69	93	100	110	122	148	169
16	60	64	69	70	97	103	113	130	151	172
24	84	88	93	97	105	111	121	134	160	180
32	90	95	100	103	111	119	129	142	167	188
40	100	105	110	113	121	129	140	150	176	196
48 ³	111	118	122	126	134	142	150	158	184	204
64 ³	138	143	148	151	160	167	176	184	194	220
80 ³	162	164	169	172	180	188	196	204	220	237

¹ Distances are based upon 37 dBu desired and 19 dBu undesired signal strengths and are derived from FCC Report R-6602, Figs. 19 and 20 (See § 73.699 of this chapter, Figs. 10 and 10a)

² For those stations licensed before August 1, 1996, whose authorizations do not include a service area radius or area of operation, the service areas will be determined from table 1 using the station's authorized transmitter power increased by 3 dB or its actual ERP when given, and the antenna height above sea level in lieu of HAAT, or the HAAT if given.

³ Permitted only for base stations located 200 km (125 mi) or more from the center of markets 1–60 as listed in § 90.741. Applicants for such systems must demonstrate that the signal strength at the edge of their service area does not exceed 37 dBu.

TABLE 2.—421–430, 450–470 MHz—MINIMUM DISTANCE BETWEEN EXISTING BASE STATIONS AND PROPOSED STATIONS ¹

Proposed service area (km)	Existing station service area radius (km) ²									
	3	8	13	16	24	32	240 ³	248 ³	264 ³	>64 ³
3	16	27	43	55	68	80	97	111	155	180
8	27	32	48	60	72	85	101	118	159	185
13	43	48	53	64	77	90	106	122	164	190
16	55	60	64	68	80	93	109	126	167	194
24	68	72	77	80	89	101	118	134	175	201
32	80	85	90	93	101	109	126	142	184	209
40 ³	97	101	106	109	118	126	134	150	192	217
48 ³	111	118	122	126	134	142	150	158	200	225
64 ³	155	159	164	167	175	184	192	200	216	242
>64 ³	180	185	190	193	201	209	217	225	241	253

¹ Distances are based upon 37 dBu desired and 19 dBu undesired signal strengths and are derived from FCC Report R-6602, Figs. 19 and 20 (See § 73.699 of this chapter, Figs. 10 and 10a).

² For those stations licensed before August 1, 1996, whose authorizations do not include a service area radius or area of operation, the service areas will be determined from table 1 using the station's authorized transmitter power increased by 3 dB or its actual ERP when given, and the antenna height above sea level in lieu of HAAT, or the HAAT if given.

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