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

In the Matter of

Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them	)	
and	)	PR Docket No. 92-235
Examination of Exclusivity and Frequency Assignments Policies of the Private Land Mobile Services	)	

THIRD MEMORANDUM OPINION AND ORDER

Adopted: June 10, 1999 **Released: July 1, 1999**

By the Commission:

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I. INTRODUCTION AND EXECUTIVE SUMMARY

1. This *Third Memorandum Opinion and Order* (MO&O) addresses petitions for reconsideration and related pleadings concerning the rules governing trunked operation in the Private Land Mobile Radio (PLMR) bands below 800 MHz that were adopted in the *Second Report and Order* (Second R&O)[1] in the captioned proceeding.[2] In this MO&O, we adopt new standards for consent by certain existing licensees when applications are filed for trunked operation on shared spectrum below 800 MHz.[3] We direct the certified PLMR frequency coordinators to be primarily responsible for evaluating trunking proposals on shared spectrum prior to submission and grant of authorizations for trunked operations. We nonetheless reserve to the Commission the right to resolve contested proposals. We also establish procedures for the processing of trunking proposals on shared spectrum in order to guard against speculative applications. Further, we affirm our decision in the *Second R&O* that a trunking proponent must obtain consent from all affected co-channel and adjacent channel licensees before filing an application specifying trunked operation. In addition, we impose a limit on the number of channels that may be requested when trunked operation is proposed. Finally, we terminate without adoption of new rules, the rulemaking initiated in the *First Report and Order and Further Notice of Proposed Rule Making* in this proceeding.[4]

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[1] Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignments Policies of the Private Land Mobile Services, PR Docket No. 92-235, *Second Report and Order,* 12 FCC Rcd. 14307 (1997) (Second R & O).

[2] On April 13, 1999, the Commission released the Second Memorandum Opinion and Order in this proceeding, *See* Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignments Policies of the Private Land Mobile Services, PR Docket No. 92-235, *Second Memorandum Opinion and Order,* FCC 99-68 (rel. Apr. 13, 1999). As part of that action, we addressed petitions for reconsideration concerning the consolidation plan for PLMR services. We also clarified one aspect of the concurrence requirement for trunked operations below 800 MHz. *See id*. at para. 38.

[3] We note that issues related to "decentralized" trunking are being addressed in the Commission's biennial review of its PLMR service rules. Decentralized trunking is a system of dynamic channel assignment in which either the base station or the mobile units continually monitor the system's assigned channels until an unused channel is found. This type of dynamic channel assignment differs from traditional trunking in that the system does not require repeaters specifically designed for trunked operations. *C.f.* 1998 Biennial Regulatory Review -- 47 C.F.R. Part 90 -- Private Land Mobile Radio Services; Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them; and Examination of Exclusivity and Frequency Assignments Policies of the Private Land Mobile Services, WT Docket No. 98-182, PR Docket No. 92-235, *Notice of Proposed Rulemaking*, FCC 98-251, (rel. October 20, 1998) (1998 Biennial Review) at para. 23. Accordingly, because an independent record is being created in that proceeding, we will not address decentralized trunking herein.

[4] Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignments Policies of the Private Land Mobile Services, PR Docket No. 92-235, *First Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd. 10076 (1996) (First R & O and FNPRM).

II. BACKGROUND

2. In the Second R&O, the Commission determined that permitting trunked operations on shared spectrum would allow PLMR licensees to construct systems that are more efficient than conventional systems, thereby allowing licensees to use fewer channels to provide the same communications capability.[5] Centralized trunking uses multiple channel pairs controlled by a computer that automatically assigns a user the first available channel or places the user in a queue to be served in turn.[6] In an effort to foster the development of effective and efficient trunked operations in the PLMR shared spectrum, the Commission adopted rules similar to those adopted for interconnection of PLMR stations with the Public Switched Network.[7] Specifically, it decided to allow licensees to implement centralized trunked systems in the 150-174 MHz, 421-430 MHz, 450-470 MHz, and 470-512 MHz bands, provided that they (1) obtain the consent of all licensees whose service areas overlap a circle with a radius of 113 km (70 mi) from the trunked system's base station and whose operating frequency is 15 kHz or less removed from the operating frequency of a trunked system designed to operate on 25 kHz channels or 7.5 kHz or less removed from a 12.5 kHz trunked system or 3.75 kHz or less removed from a 6.25 kHz trunked system; and (2) comply with all frequency coordination requirements.[8] The Commission further required that statements stipulating the terms of such agreements be forwarded to the applicable frequency coordinator and the Commission as an attachment to the license application or modification.[9] In addition, for those areas where licensees implement trunking, the Commission determined that new licensees could be assigned the same channel(s) as the trunked system if the potential new licensee reaches a mutual agreement with the licensee(s) operating the trunked system.[10] The Commission also determined that if a licensee who previously consented or agreed to participate in a trunked system later decided against such use, and that licensee is unable to negotiate a mutual agreement with the operator(s) of the trunked system, that licensee may request that the Commission reassign it to another channel.[11]

3. Seventeen petitions for reconsideration and related pleadings were filed in response to the Second R&O regarding trunked operations.[12] The issues raised in the petitions for consideration relate to six

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5 Second R&O, 12 FCC Rcd. at 14337.

6 *Id.*

7 *Id*. at 14337-8.

8 Second R&O, 12 FCC Rcd. at 14338.

9 *Id*.

10 *Id*.

11 *Id*.

12 *See, e.g.*, Petition for Reconsideration, American Mobile Telecommunications Association, Inc. (AMTA Petition); Petition for Clarification and/or Reconsideration, Industrial Telecommunications Association, Inc. (ITA Petition); Petition for Partial Reconsideration and Request for Clarification, Kenwood Communications Corp. (Kenwood Petition); Petition for Reconsideration, Small Business in Telecommunications (SBT Petition); Petition of Ericsson, Inc. to the Second Report and Order (Ericsson Petition); Petition for Clarification, UTC, The Telecommunications Association (UTC Petition); Petition for Reconsideration, Manufacturers Radio Frequency Advisory Committee (MRFAC Petition); Comments of Affiliated American Railroads on Petitions for Reconsideration (AAR Comments); Comments of UTC on Petitions for Reconsideration (UTC Comments); Comments of Motorola (Motorola Comments); Comments of Forest Industries Telecommunications (FIT Comments); Comments on Petitions for Reconsideration, INTEK Diversified Corp. (INTEK Comments); Opposition and Comments, Personal Communications Industry Association (PCIA Opposition); Opposition and Comments Responsive to Petitions for

principal subjects: (1) the extent of concurrence from co-channel and adjacent channel licensees that must be obtained before an application may be granted for use of shared spectrum for centralized trunking; (2) the need, if any, to place coordinations on "hold" while trunking consents are sought; (3) whether unanimous or less than unanimous consent of affected licensees should be sought in connection with trunking proposals; (4) whether consent of affected adjacent channel licensees must be sought in connection with trunking proposals; (5) whether there should be a limit on the number of trunked channels for which an applicant can apply; and (6) whether revisions are necessary to the Commission's "Safe Harbor" tables. Subsequently, the Land Mobile Communications Council (LMCC) submitted supplemental comments[13] that purport to be an industry consensus concerning trunked operation of PLMR facilities.[14]

III. DISCUSSION

4. Based on our review and analysis of the petitions for reconsideration and/or clarification pertaining to trunked operations below 800 MHz, we conclude that certain rules adopted in the Second R&O should be modified in order to accommodate efficient and effective trunking on PLMR shared spectrum. As discussed in detail below, we believe that the rule changes we adopt herein will provide PLMR licensees the opportunity to more readily reap the benefits associated with trunked operations -- that is, increased utilization of radio channels in their existing and future systems.

5. Most of the commenting parties who addressed the issue[15] favored amendment of Section 90.187 of the Commission's Rules[16] to substitute a system of protected contours for the current mileage spacing criteria used to identify the licensees from whom consent must be obtained as a prerequisite to trunked operation. As discussed above, Section 90.187(b) of the Commission's Rules requires trunking applicants to obtain the consent of all co-channel and certain other licensees located 70 miles (113 km) or less from the proposed station's service contour (70-mile concurrence area). The principal thrust of the petitions and comments received is that the 70-mile concurrence area is excessive in that it provides greater interference protection than is necessary.[17] Further, several parties contend that less than unanimous consent

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Reconsideration and/or Clarification, Industrial Telecommunications Association, Inc. (ITA Opposition); Request for Clarification of the Personal Communications Industry Association (PCIA Request); Supplemental Comments of the Land Mobile Communications Council on Petitions for Reconsideration of the Second Report and Order (LMCC Supplemental Comments); Reply Comments of UTC (UTC Reply); SBT Consolidated Reply to Oppositions and Comments (SBT Reply); Kenwood Communications Corp Reply to Oppositions to Petition for Partial Reconsideration and Request for Clarification (Kenwood Reply).

[13] Supplemental Comments of the Land Mobile Communications Council on Petitions for Reconsideration of the Second Report and Order filed July 22, 1988 (LMCC Supplemental Comments).

[14] LMCC Supplemental Comments at 5. Therein it is noted that three LMCC member organizations -- the American Automobile Association (AAA), the International Municipal Signal Association (IMSA) and Forest Industries Telecommunications (FIT) -- do not support the filing of the supplemental comments. *Id.* at 2, n.3. LMCC also states that, to the extent that earlier filings of its members are not representative of the consensus petition, those members request withdrawal of the conflicting portions of their filings. Based on LMCC's representation, we have not addressed the substantive arguments raised in the filings of its members, with the exception of AAA, IMSA and FIT to the extent those parties' filings conflict with the consensus position.

[15] *See, e.g.*, AMTA Petition; ITA Petition; Kenwood Petition; SBT Petition; Ericsson Petition; UTC Petition; MRFAC Petition; AAR Comments; UTC Comments; Motorola Comments; FIT Comments; INTEK Comments; PCIA Opposition; ITA Opposition; PCIA Request; LMCC Supplemental Comments.

[16] 47 C.F.R. § 90.187.

[17] *See, e.g.,* LMCC Supplemental Comments at 5-8; Ericsson Petition at 3; AMTA Petition at 10; ITA Petition at

of affected licensees should be sufficient to demonstrate concurrence.[18]

A. Concurrence Area

6. We have considered, but decline to adopt, Ericsson's suggestion that we address the problems associated with a 70-mile separation criterion by reducing the minimum separation to 55 miles.[19] Ericsson asserts that its 55-mile separation recommendation is based on the premise that stations in the 800 and 900 MHz bands may operate as close as 55 miles in proximity of each other. However, we note that the 55-mile separation referenced by Ericsson applies only to short-spaced Specialized Mobile Radio (SMR) stations. In this connection, we note that the typical spacing between 800 and 900 MHz radio facilities is 70 miles, and that a short-spaced SMR station is required to operate at reduced power or antenna height.[20] While reduction of the maximum radius of the concurrence area to 55 miles indeed might provide a modicum of improvement over a 70-mile separation standard, we believe that our modified approach, as discussed below, is both more efficient and less likely to result in harmful interference to existing stations.

7. Along these lines, we agree with the position advocated by the LMCC and other parties that the existing 70-mile separation standard should be supplemented by an alternative standard because, otherwise, implementation of trunking in spectrum-congested urban areas may be completely precluded.[21] Accordingly, as recommended by several of the commenting parties,[22] we adopt a protected contour analysis alternative whereby applicants for trunked operations are required to obtain concurrence whenever the 19 dBu (UHF) or 22 dBu (VHF) interference contour from a proposed trunked station intersects the 37 dBu service contour (UHF) or 39 dBu service contour (VHF) of any existing co-channel or adjacent channel station. We note that a contour analysis is not required if a trunking proponent elects to utilize the 70-mile separation standard.

8. In endorsing the use of contour calculations to ascertain the stations with which coordination is required, Kenwood observes that contour calculation should be based on propagation analysis and that applicants should be entitled to make special showings to incorporate "accepted distance-to-contour formulas, terrain shielding factors and computer modeling."[23] While we will not require the use of any specific contour prediction method, we will rely on the certified frequency coordinators to evaluate proposed trunking applications to ensure either that there is no prohibited contour overlap or that, if there is overlap, consent has been obtained from the relevant licensee or licensees. We expect that the certified

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6; FIT Comments at 2-3; Kenwood Comments at 10-11; Motorola Comments at 7-8.

[18] *See, e.g.*, Ericsson Petition at 2; INTEK Comments at 2; Kenwood Comments at 10; Motorola Comments at 8-9.

[19] *See* Ericsson Petition at 3.

[20] *Id.* The necessary power or antenna height reduction is taken from tables that are based on the maintenance of a minimum 18 dB signal to interference ratio at the 40 dBu contour of the station with which the proposed station is short spaced, *i.e.*, the 22 dBu interference contour of the proposed station may not overlap the 40 dBu contour of the protected station. *Id.*

[21] *See, e.g.,* LMCC Supplemental Comments at 5-8; AMTA Petition at 10; ITA Petition at 6; FIT Comments at 2-3; Kenwood Comments at 10-11; Motorola Comments at 7-8. *See also* Kenwood Reply at 4-7.

[22] *See*, *e.g.,* LMCC Supplemental Comments at 5-8; Motorola Comments 8; Kenwood Petition at 10; FIT Comments at 2-3.

[23] Kenwood Petition at 10-11.

frequency coordinators will use their existing techniques, or improvements thereon, to determine contour overlap. The only restriction we will place on the process is that the contour prediction methodology used represent the consensus of all certified frequency coordinators. Individual trunking applicants will be permitted to contest coordinators' determinations; however, the burden of showing that a coordinator's conclusions are faulty will rest with the trunking applicant. We anticipate that should controversies arise, they, for the most part, will be resolved by the certified frequency coordinators. Thus, we believe that few contested trunking coordinations will be referred to the Commission.

9. In addition, we reject SBT's and PCIA's recommendation that trunked stations be licensed on a developmental basis and then be given regular licensing status within a certain period of time if there is no reported harmful interference.[24] We do not believe that their recommended method has any significant advantage over the approach that we adopt herein. In fact, we are concerned that, if implemented, the developmental license method could result in harmful interference to existing licensees. Also, we are loathe to involve the Commission and affected licensees in the burdensome determination of the existence of harmful interference *vel non*, from what potentially could be a large number of developmental licensees. Moreover, as UTC notes, developmental licensing imposes a burden on existing licensees who must identify the sources of interference, negotiate with the interfering stations for interference resolution and, if unsuccessful in that effort, seek redress at the Commission.[25]

B. Coordination "Hold" While Consents are Obtained

10. As some commenting parties have noted, we recognize that when applicants for trunked facilities begin the process of seeking consent from existing stations, there is the potential that other persons may seek to file conflicting applications in order to frustrate the trunking proposal or exact monetary consideration from the potential trunking applicant in exchange for a consent agreement.[26] To forestall this possibility, some commenting parties have suggested that potential trunking applicants be allowed to place a "hold" on coordinations on their intended channels for a period sufficient to enable them to obtain the requisite consents and file their applications.[27] Under the "hold" construct, a certified frequency coordinator receiving formal notice from a trunking proponent of the proponent's intent to pursue trunking on given frequencies would so advise all other relevant certified frequency coordinators.[28] Thereupon, the subject frequencies would be protected from conflicting applications for a certain period of time sufficient for the trunking proponent to obtain the requisite consents from existing affected co-channel and adjacent channel licensees. AMTA has suggested that the "hold" period be 120 days,[29] while ITA proposes a 90 day period.[30] FIT opposes "holding" coordinations on the basis that it would be unfair to other applicants whose coordination requests would be delayed and because it would encourage speculative applications.[31]

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[24] *See* SBT Petition at 20; PCIA Petition at 3-4. *See also* SBT Reply at 2-5.

[25] *See* UTC Comments at 7.

[26] *See, e.g.,* LMCC Supplemental Comments at 9; AMTA Comments at 8.

[27] *See, e.g.*, LMCC Supplemental Comments at 9-10; Kenwood Petition at 9-10; AMTA Petition at 7-9; ITA Petition at 8-9. *See also* Kenwood Reply at 2-3.

[28] *See id.*

[29] *See* AMTA Petition at 9.

[30] *See* ITA Petition at 8.

[31] *See* FIT Comments at 5.

11. We agree that some protection should be afforded against the submission of "strike" applications during the period in which a trunking proponent is seeking consent from existing licensees and note that the holding period will be an additional bar against "greenmail" attempts proscribed by Section 1.935 of the Commission's rules.[32] However, in providing such protection, we must balance our action against the effect that the "hold" on coordinating frequencies would have on *bona fide* applications. We believe that a diligent trunking proponent should be able to negotiate and obtain the requisite consents within a period of 60 days and that a 60-day "hold" period should not have a significant adverse effect on parties intending to submit *bona fide* applications for frequencies subject to a proposed trunked operation. In that connection, we note that the action we have taken herein to afford trunked applicants a contour overlap alternative as the criterion for defining the licensees from whom consent must be obtained substantially reduces the number of licensees from which a trunking proponent must obtain consent, with an expected concomitant reduction in the amount of time required to do so. Accordingly, we are instituting a rule that provides that the submission of a formal notice to a certified frequency coordinator of a potential applicant's intent to pursue trunking on specified frequencies will toll the coordination of conflicting applications for those frequencies for a period of 60 days. Further, we are requiring that a certified frequency coordinator who receives such a notice shall so advise all other associated certified frequency coordinators within one business day of receiving the notice. We also recognize that there is a potential for abuse of the "hold" provisions were a trunking proponent to submit consecutive notices to the certified frequency coordinator thus effectively extending the 60-day tolling period. Accordingly, we are requiring that, once a trunking proponent submits a "hold request" to a certified frequency coordinator, at least six months must expire before that proponent may submit a request to hold frequencies in the same general area.

C. Degree of Consent Required

12. Our current rules require unanimous consent for trunking from all affected existing stations. Ericsson asserts that consent of a simple majority of affected stations should be sufficient to support a trunking application, but that the applicant should be required to pay relocation costs for any existing station that encountered harmful interference from the trunked facility.[33] If unanimous consent is required, Ericsson contends that any "holdout" licensee could thwart a trunking proposal.[34] INTEK believes that requiring unanimity will deter or defeat trunking and suggests that the Commission relax the consent requirements to some unspecified value below 100%.[35] Motorola suggests that only users representing at least 85% of the mobile units operated on the channel need consent.[36] In the alternative, Motorola suggests that, if unanimity is required, the Commission adopt a mechanism whereby intransigent, unreasonable licensees could be forced to accept the presence of a trunked system on their current channel(s).[37]

13. Kenwood asserts that trunking proposals may safely be implemented without the consent of any affected licensees: that monitoring a channel for a period of weeks -- and finding no traffic -- should

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32 47 C.F.R. § 1.935.

33 *See* Ericsson Petition at 2.

34 *Id.*

35 *See* INTEK Comments at 2.

36 *See* Motorola Comments at 8-9.

37 *Id*.

establish the availability of that channel for use in a trunked facility.[38] As Kenwood itself concedes, monitoring for a period of weeks would not capture "seasonal" users of channels such as beach patrols, ski lift operators, etc.[39] Moreover, we note that the use of some communications systems is a function of emergency conditions such as forest fires, mass disasters, etc. Kenwood proposes that a trunked licensee would remain accountable for, and must remedy, interference to such operations.[40] However, we are concerned that such remediation would come too late and that the public welfare could suffer on that account. In any event, we find that Kenwood's proposal offers no advantage over the use of contour analysis -- which Kenwood itself also endorses in the alternative[41] -- in determining the stations from which consent must be sought as a prerequisite to trunked operation, and that the monitoring proposal would pose significant administrative difficulties in the resolution of interference controversies that implementation of the proposal likely would engender.

14. Given that use of a channel for trunking can render the channel unusable by other than the trunked licensee and that the trunking proponent may negotiate any necessary relocation in advance of submitting its application, we are reluctant to deviate from the requirement that unanimous consent of affected stations be obtained. As FIT has pointed out, we are concerned that allowing less than unanimous consent may allow trunking proponents to force out incumbents.[42] Similarly, UTC argues that allowing a group of licensees to be subjected to interference merely because another group of licensees concur with a trunking proponent's proposal relegates the non-concurring licensees to secondary status.[43] We therefore decline to adopt either Ericsson's or Motorola's proposals for requiring less than unanimous consent of affected licensees if a channel is to be used for trunking. Moreover, we do not believe that the public interest would be served or that it is necessary for the Commission to become embroiled in controversies concerning whether an existing licensee has acted "reasonably" in withholding consent to a trunking proposal. Rather, we believe that this is a matter that should be handled among the affected parties without Commission intervention. To the extent that there is concern that trunking operations will tend to force out non-trunked incumbents, we note that an incumbent licensee may condition its consent on the trunking proponent providing service on the trunked system to the incumbent licensee.

15. In sum, we recognize that implementation of trunked systems could be inhibited to a degree by the unanimous consent requirement. However, the burden of obtaining unanimous consent has been substantially mitigated by our allowing the use of protected contours, rather than mileage separation, to determine the number of stations from which consent must be obtained. Should experience prove that the unanimous consent requirement is materially inhibiting the implementation of trunked systems -- and hence impairing more efficient use of the spectrum -- we will revisit the issue of whether less than unanimous consent of affected licensees would be sufficient to support an application for trunked operation.

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38 *Id*. at 9, n.6.

39 *Id.*

40 *Id.* at 9.

41 *Id*. at 11.

42 *See* FIT Comments at 3-4.

43 *See* UTC Comments at 6-7.

D. Adjacent Channel Interference

16. Kenwood submits that the consent requirement should be eliminated with respect to adjacent channel licensees and that it should be sufficient for a trunking proponent to merely certify that no interference is calculated to be due to any adjacent channel licensee.[44] Implicit in Kenwood's proposal is the conclusion that the likelihood of a trunked system causing interference to an adjacent channel licensee is inconsequentially slight. However, we find that Kenwood has cited no authority for that conclusion nor provided technical data to support it. In opposing Kenwood's proposal, Motorola observes that the channeling plan adopted for refarming assigns channels every 6.25 kHz while allowing varying bandwidth equipment, *i.e.* equipment employing 25 kHz and 12.5 kHz bandwidth. Accordingly, Motorola submits, "systems assigned to adjacent frequencies are actually co-channel in many instances."[45] Similarly, FIT opposes Kenwood's proposal, arguing that incumbent systems will require protection from adjacent channel stations until narrowbanding has been fully implemented.[46]

17. Based on the record in this proceeding, we have decided not to adopt Kenwood's proposal to exempt trunking proponents from obtaining consent from existing licensees that have an adjacent channel relationship to the proposed trunked facility. Kenwood has not shown that harmful interference to adjacent channel licensees would not occur when a trunked facility is implemented. Further, we do not agree that a certification that "no interference is calculated . . . to any adjacent licensee" would provide the same certainty as actual consent from the affected licensee. Moreover, we note that we have substantially addressed Kenwood's concern about requiring "consent of adjacent channel licensees at the same mileage limits as those for co-channel licensees"[47] by allowing protected contour analysis as a substitute for "mileage limits."

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44 *See* Kenwood Comments at 11.

45 *See* Motorola Comments at 9.

46 *See* FIT Comments at 5.

47 Kenwood Comments at 11.

E. Limitation on the Number of Channels Requested

18. Under our current rules, there is no limit on the number of trunked channels for which an entity may apply in one application. Some petitioners have asserted the need for such a limit lest an applicant inhibit effective use of the spectrum by obtaining authorizations for trunked channels that would not be immediately used.[48] We share the petitioners' concern regarding the potential for spectrum "warehousing" in the PLMR shared spectrum. We are persuaded that a limit is appropriate. Further, in terms of determining such limit, we are guided by the industry consensus position reflected in the LMCC's filing;[49] thus, we conclude that the maximum number of channels that may initially be requested for any given trunked system is ten. We note that such a limit would not preclude an applicant from requesting additional channels in subsequent applications. However, consideration of such subsequent applications would be dependent upon a certification from the applicant that the channels for which it is then authorized have been constructed and placed into operation. Certified frequency coordinators are authorized to verify such certifications. LMCC has proposed that a channel limit not be imposed on public safety entities seeking trunked operation because such entities often construct complex communications systems requiring a large number of channels.[50] Although we decline to adopt LMCC's proposed blanket exclusion of public safety applicants from the 10-channel limit, we recognize that large public safety communications systems may require more than 10 channels at a single location. Accordingly, we will allow public safety applicants to apply for more than 10 channels provided that such applications are accompanied by a showing of sufficient need; for example loading studies demonstrating that each requested channel in excess of 10 will be loaded with 50 or more mobiles per channel within a five year period commencing with grant of the applications.[51]

F. Operational Issues

19. LMCC states that, once all trunking consents have been obtained, the trunking applicant would file its application with the Commission "with consent forms attached as specified in the current rules."[52] We believe that LMCC's statement does not accurately reflect the substance of our rules. Specifically, Section 90.187(b)(3) of the Commission's Rules[53] provides that "a statement [not the agreements] must be submitted to the Commission indicating that all licensees have agreed to the use of trunking." Thus, trunking proponents are required to include a certification to the effect that they have obtained the requisite consents from affected licensees and that the terms of such consents are consistent with the Commission's Rules. We further will require that trunking applicants maintain a copy of the consent agreements, which can be made available for inspection upon the Commission's request.

20. UTC submits that Section 90.187(b)(2)(iii) of the Commission's rules implies that a licensee authorized to employ trunking is afforded a "protected service area" with regard to new applicants specifying the same channel or channels as those used by the licensee employing trunking.[54] UTC recommends that

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48 *See*, *e.g.,* LMCC Comments at 8-9; AMTA Comments at 9.

49 *See* LMCC Comments at 8-9.

50 *See* LMCC Supplemental Comments at 8.

51 *C.f.* 47 C.F.R. § 90.313.

52 LMCC Supplemental Comments at 10.

53 47 C.F.R. § 90.187(b)(3).

54 *See* UTC Reply at 3.

such protected service area be established by reference to the service area contour realized by use of the parameters (effective radiated power and antenna height above average terrain) employed to determine whether or not consent needed to be sought from existing licensees.[55] We agree with UTC that the protected service area of a trunked station should be so defined. However, the service area will no longer be protected should the trunking licensee discontinue trunked operation. Moreover, in response to the clarification sought by UTC,[56] we hereby state that the service area shall be protected against both co-channel and adjacent channel interference.

G. Trunking in the Bands Below 150 MHz

21. FIT argues that trunking should be confined to bands above 150 MHz because of the propagation vagaries of lower frequencies.[57] We agree with FIT's contention. It would be difficult, if not impossible, to apply either the protected contour or mileage separation principle to obtain trunking consents for channels below 150 MHz because, given favorable propagation conditions, signals on those frequencies can cause interference to stations hundreds or thousands of miles distant. Accordingly, at this time, we are limiting trunked operation to frequencies 150 MHz and above.

H. Alleged Bias Against Spectrally Efficient Systems

22. Ericsson contends that Section 90.187(b)(2)(1) of the Commission's Rules discriminates against licensees who employ highly spectrally efficient equipment using 12.5 kHz or 25 kHz bandwidths.[58] The basis of Ericsson's argument is that applicants proposing trunked operation with 25 kHz or 12.5 kHz bandwidths -- even when using what Ericsson characterizes as "spectrum-efficient" equipment -- must obtain the consent of co-channel and adjacent channel licensees, whereas applicants proposing trunked operation on 6.25 kHz channels need only obtain consent of affected co-channel licensees.[59] To remedy this perceived inequity, Ericsson suggests two alternative solutions. The first is to limit trunking to: (a) those channels that are the same as the "original 25 kHz channels," *i.e.* the channels as they existed prior to refarming; and (b) those channels that are offset by 25 kHz from the original 25 kHz channels.[60] The second proposed solution is to require applicants that propose trunking on 6.25 kHz channels to obtain consent from affected adjacent channel licensees using 12.5 kHz channels if the operating frequency of those adjacent channel licensees falls within 7.5 kHz of the proposed trunked channel.[61] The referenced consent would be required only if the licensee using 12.5 kHz channel bandwidth met an efficiency standard of at least one "talk path" per 6.25 kHz of bandwidth.[62]

23. We disagree with Ericsson's contention that our rules governing trunking below 800 MHz

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55 *Id.*

56 *Id.* at 4.

57 FIT Comments at 6.

58 *See* Ericsson Petition at 3.

59 *See id*. at 4.

60 *Id.*

61 *Id.*

62 *Id.*

present adverse consequences for what Ericsson characterizes as "spectrally efficient systems." As an initial matter, we note that Ericsson has not shown that its systems are any more spectrally efficient than those using other technology. Further, we do not believe that implementation of either of Ericsson's proposals would further the public interest or improve upon our trunking rules. In this connection, we believe that Ericsson's first proposal could artificially limit the number of channels available for trunked operation without a concomitant public interest benefit to doing so. This is contrary to our express goal of maximizing the number of channels available for trunked operation. Moreover, we are concerned that Ericsson's second proposal could penalize certain licensees by requiring them to afford an unwarranted additional degree of interference protection to certain stations using Ericsson's technology which Ericsson asserts, but has not shown, has superior spectral efficiency. Thus, we believe that adoption of this second of Ericsson's proposals could also limit the number of channels available for trunked operation and, in any event, would be administratively cumbersome.

I. Limiting Trunked Operation to Incumbent Licensees

24. ITA urges that trunking authorizations be issued only to existing stations that file a notice to convert to trunked operation.[63] We believe that the net effect of such a limitation would be to relegate new applicants to a single channel -- or if their communications requirements so justified -- to multiple untrunked channels. One of the goals underlying the rules adopted in this proceeding for allowing trunked operation is to realize spectrum use efficiencies.[64] We are not convinced by ITA that it would serve the public interest to deny new applicants the opportunity to realize such efficiencies and thus decline to adopt ITA's suggested restriction.

J. Other Related Matters

1. Further Notice of Proposed Rulemaking

25. In the First R&O and FNPRM, the Commission sought comment on: (a) means to afford exclusivity on PLMR channels that currently are shared; (b) permitting leasing of excess capacity on exclusive channels; (c) introduction of user fees for PLMR spectrum; and (d) whether spectrum auctions could achieve the same policy goals as user fees.[65]

26. The regulatory landscape has changed since these proposals were introduced in 1995. In particular, the Balanced Budget Act of 1997[66] has overtaken the issues raised in the First R&O and FNPRM concerning auctions. With enactment of the 1997 Balanced Budget Act, competitive bidding is now mandatory when mutually exclusive initial applications are filed for any service, subject to certain specified exceptions,[67] and questions concerning the auctionability of spectrum used to provide private internal radio

63 *See* ITA Petition at 9.

64 "Trunked systems will allow PLMR licensees to construct systems which are more efficient than conventional systems, thereby allowing licensees to use fewer channels to provide the same communications capability." Second R & O, 12 FCC Rcd. at 14337.

65 10 FCC Rcd. at 10079.

66 Pub. Law No. 105-33, Title III, 111 Stat. 251 (1997).

67 The statute exempts from auctions applications for public safety radio services and private internal radio services used to protect the safety of life, health, or property and that are not made commercially available to the public and for initial non-commercial broadcast applications and certain digital television applications. *See* 47 U.S.C. §§ 309(j)(1), 309(j)(2). *See also* 47 U.S.C. § 397(6).

services are the subject of a pending proceeding.[68] Further, a proposal in the First R&O and FNPRM concerning user fees[69] was premised on Congress giving the Commission statutory authority to impose such fees.[70] However, that anticipated authority was not forthcoming, although user fees could, of course, be authorized in the future. Also, the First R&O and FNPRM introduced the concept of "exclusive use overlay" whereby a licensee employing spectrum-efficient technology could "cap" the number of users on that licensee's channel, thereby foreclosing additional interference on the channel. The exclusive use overlay construct was viewed as having particular benefits for centralized trunking operations.[71] We note that the rules adopted herein provide that, once a trunking licensee obtains consent from other licensees potentially affected by the trunked operation and obtains a license for trunked operation, no additional users may be added to the trunked channel, *i.e.* the number of users of the trunked channel is "capped" at the existing level. Thus, for trunked operations, we have provided the functional equivalent of exclusive use overlay. Accordingly, some of the issues addressed in the First R&O and FNPRM are no longer germane to this proceeding's spectrum conservation goals and portions of the record are stale. We therefore terminate the rulemaking portion of the First R&O and FNPRM as it relates to matters, such as exclusive use overlay, rendered moot by decisions in the instant docket. However, to the extent that issues raised in the First R&O and FNPRM may have a bearing on the Commission's proceeding concerning implementation of the 1997 Balanced Budget Act[72] we will incorporate the record of the First R&O and FNPRM into that proceeding.

2. Amendments to Safe Harbor Tables

27. We find that the question of the technical appropriateness of the Safe Harbor tables should not be addressed herein because it is a matter outside the scope of the Second R & O.[73] The Safe Harbor tables were established in the First R&O and FNPRM. Any petition for reconsideration of that order was required to be filed within 30 days of its release date, *see* 47 C.F.R. § 1.429(d); thus, we conclude that requests for reconsideration of the Safe Harbor rules in the context of the instant proceeding are untimely.[74] Proposals for revision of the Safe Harbor rules, at this juncture, would be appropriate for a petition for rulemaking and not a petition for reconsideration.

IV. CONCLUSION

28. In this *Third Memorandum Opinion and Order*, the Commission has fashioned amended rules that will permit greater numbers of licensees to realize the efficiencies attainable through the use of

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[68] Implementation of Sections 309(j) and 337 of the Communications Act of 1934, as amended, Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, Establishment of a Public Service Radio Pool in the Private Mobile Frequencies Below 800 MHz, WT Docket No. 99-87, RM-9332, *Notice of Proposed Rulemaking,* FCC 99-52 (rel. March 25, 1999).

[69] User fees, which are intended to recover from the user the market value of spectrum, are to be distinguished from application fees, which are fixed by statute, and regulatory fees, which the Commission is mandated to collect in order to recover its own costs. *See* 47 U.S.C. §§ 158, 159.

[70] *See* First R&O and FNPRM, 10 FCC Rcd. at 10136-10137.

[71] *See id*. at 10129-10131.

[72] *See* n. **Error! Bookmark not defined.** *supra.*

[73] *See* Motorola Petition at 10; AMTA Petition at 12.

[74] *See* PCIA Opposition at 8.

trunking consistent with protecting neighboring stations against harmful interference. Additionally, the Commission has clarified certain of its trunking rules and has incorporated other rule modifications that will simplify the preparation and coordination of trunking applications. These decisions affirm the general framework for trunking adopted in the *Second R&O*. In sum, the rule amendments and clarifications adopted herein continue our efforts to promote effective and efficient use of the PLMR spectrum through spectrum refarming.

V. PROCEDURAL MATTERS

A. Regulatory Flexibility Act

29. Appendix B contains a Final Regulatory Flexibility Analysis with respect to this *Third Memorandum Opinion and Order*.

B. Paperwork Reduction Act Analysis

30. This *Third Memorandum Opinion and Order* contains either a new or modified information collection. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public to comment on the information collection contained in this *Third Memorandum Opinion and Order* as required by the Paperwork Reduction Act of 1995, Pub. L. No. 104-13. Public and agency comments are due 60 days from date of publication of this *Third Memorandum Opinion and Order* in the Federal Register. Comments should address: (a) whether the new or modified collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. These comments should be submitted to Judy Boley, Federal Communications Commission, Room 234, 1919 M Street, N.W., Washington, D.C. 20554, or via the Internet to jboley@fcc.gov. Furthermore, a copy of any such comments should be submitted to Timothy Fain, OMB Desk Officer, 10236 NEOB, 725 - 17th Street, N.W., Washington, D.C. 20503 or via the Internet at fain_t@al.eop.gov.

C. Ordering Clauses

31. In view of the foregoing and pursuant to the authority contained in Sections 4(i), 303(r), and 405 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(r), and 405, and Section 1.429(i) of the Commission's Rules, 47 C.F.R. § 1.429(i), **IT IS ORDERED** that the Petitions for Reconsideration and related pleadings described herein **ARE GRANTED** in whole or in part and **DENIED** in part as discussed herein;

32. **IT IS FURTHER ORDERED** that pursuant to the authority contained in Sections 4(i) and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 4(i) and 303(r), Part 90 of the Commission's Rules **IS AMENDED** as set forth below effective **[60 days after publication in the Federal Register]**.

33. **IT IS FURTHER ORDERED** that the rulemaking portion of the First Report and Order and Further Notice of Proposed Rule Making **IS TERMINATED** as to matters rendered moot by the instant *Third Memorandum Opinion and Order* and previous orders in the instant proceeding.

34. **IT IS FURTHER ORDERED** that the Commission's Office of Public Affairs, Reference Operations Division, **SHALL SEND** a copy of this *Third Memorandum Opinion and Order* including the Supplemental Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business

Administration.

D. Contact for Information

35. For further information contact Michael Wilhelm of the Public Safety and Private Wireless Division of the Wireless Telecommunications Bureau at (202) 418-0680 or via e-mail to "mwilhelm@fcc.gov".

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

APPENDIX A

List of Petitioners and Commenters

Petitions for Reconsideration or Clarification:

UTC, The Telecommunications Association
Personal Communications Industry Association
Manufacturers Radio Frequency Advisory Committee, Inc.
American Mobile Telecommunications Association, Inc.
Small Business in Telecommunications
Kenwood Communications Corp.
Motorola
Industrial Telecommunications Association, Inc.
Ericsson, Inc.

Comments

INTEK Diversified Corp.
Affiliated American Railroads
Industrial Telecommunications Association, Inc.
Forest Industries Telecommunications
Personal Communications Industry Association
UTC, The Telecommunications Association

Reply Comments:

Kenwood Communications Corp.
Small Business in Telecommunications

Supplemental Comments:

Land Mobile Communications Council

APPENDIX B

Supplemental Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act (RFA), *see* 5 U.S.C. § 603, Initial Regulatory Flexibility Analyses (IRFA) were incorporated in the *Notice of Proposed Rule Making* and the *Further Notice of Proposed Rule Making* in PR Docket 92-235.[75] The Commission sought written public comment on the rulemaking proposals in the *Refarming Notice* and *Further Notice*, including on the respective IRFAs. This present Supplemental Regulatory Flexibility Analysis (Supplemental FRFA) in this *Third Memorandum Opinion and Order* (*Third MO&O*) conforms to the RFA.[76]

I. Need For, and Objectives of, the *Third MO&O*

2. Our objective is to increase spectrum efficiency and facilitate the introduction of spectrum-use efficiencies into the 150-174 MHz, 421-430 MHz, 450-470 MHz, and 470-512 MHz private land mobile radio (PLMR) bands by adopting and refining the Commission's rules that deal with the trunking of PLMR facilities. The *Report and Order* in this proceeding modified the Commission's rules to resolve many of the technical issues which inhibited the use of spectrally efficient technologies in these frequency bands. It also stated the Commission's intent to consolidate the twenty existing radio service pools. The *Further Notice* in this proceeding proposed several methods of introducing market based incentives into the PLMR bands, including exclusivity. In the *Second R&O*, the Commission consolidated the radio service frequency pools and addressed related issues such as frequency coordination, trunking, and low power frequencies. The *Second MO&O* addressed petitions for reconsideration and clarification received in response to the *Second R&O* except to the extent those pleadings addressed trunking and potential interference to biomedical telemetry from PLMR facilities. This *Third Memorandum and Order* addresses the trunking issues; biomedical telemetry issues will be addressed in a subsequent memorandum opinion and order.

3. The Commission finds that the potential benefits to the PLMR community from the promulgation of rules for this purpose exceed any negative effects that may result. Thus, the Commission concludes that the public interest is served by modifying our rules to increase the spectral efficiency of the PLMR bands through use of trunking techniques.

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[75] Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket 92-235, *Notice of Proposed Rule Making*, 7 FCC Rcd 8105, 8133 (1992) (*Refarming Notice*). Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them and Examination of Exclusivity and Frequency Assignments Policies of the Private Land Mobile Radio Services, PR Docket No. 92-235, *Report and Order and Further Notice of Proposed Rule Making*, 10 FCC Rcd 10076, 10177 (1995) (*Report and Order* or *Further Notice*). A Final Regulatory Flexibility Analysis was provided in the first *Memorandum Opinion and Order,* Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket 92-235, *Memorandum Opinion and Order*, 11 FCC Rcd. 17676, 17718 (1996). An additional Final Regulatory Flexibility Analysis was furnished in connection with the *Second Report and Order*, Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket 92-235, *Second Report and Order,* 12 FCC Rcd 14307, 14353 (1997).

[76] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. § 601 *et seq*., has been amended by the Contract With America Advancement Act of 1996, Pub. L. No. 104-121, 110 Stat. 847 (1996) (CWAAA). Title II of the CWAAA is The Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA).

II. Summary of Significant Issues Raised by the Public in Response to the Previous Final Regulatory Flexibility Analyses

4. No reconsideration petitions were submitted in direct response to the previous FRFAs. The Commission has, however, reviewed general comments that may impact small businesses. Much of the impact on small businesses arises from the central decision in this proceeding -- determining the number of frequency pools and the eligibility criteria for each pool. This affects small businesses in the following way. A smaller number of pools provides a greater number of frequencies available for small businesses that use PLMR systems to meet their coordination needs. Additionally, by creating fewer pools, frequency coordinators will now be subject to competition. Thus, small businesses that use PLMR systems can expect to pay lower prices for frequency coordination while receiving equivalent or better service. Finally, facilitating the use of trunking technologies in the PLMR services may assist small businesses in efficiently expanding the capacity of their communications systems, realizing economies thereby.

III. Description and Estimate of the Number of Small Entities Subject to Which the Rules Apply

5. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the rules adopted. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."[77] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[78] A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).[79] A small organization is

[77] *See* 5 U.S.C. § 601(6).

[78] 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

[79] Small Business Act, 5 U.S.C. § 632 (1996).

generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[80] Nationwide, as of 1992, there were approximately 275,801 small organizations.[81] "Small governmental jurisdiction" generally means "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than 50,000."[82] As of 1992, there were approximately 85,006 such jurisdictions in the United States.[83] This number includes 38,978 counties, cities and towns; of these, 37,566, or 96 percent, have populations of fewer than 50,000.[84] The Census Bureau estimates that this ratio is approximately accurate for all governmental entities. Thus, of the 85,006 governmental entities, the Commission estimates that 81,600 (91 percent) are small entities.

Estimates for PLMR Licensees

[80] 5 U.S.C. § 601(4).

[81] 1992 Economic Census, U.S. Bureau of the Census, Table 6 (special tabulation of data under contract to the Office of Advocacy of the Small Business Administration).

[82] 5 U.S.C. § 601(5).

[83] U.S. Dept. of Commerce, Bureau of the Census, "1992 Census of Governments."

[84] *Id.*

6. Private land mobile radio systems serve an essential role in a vast range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories. Because of the vast array of PLMR users, the Commission has not developed a definition of small entities that is specifically applicable. Therefore, we will utilize the definition of small entity under the Small Business Administration rules applicable to radiotelephone service providers. This definition provides that a small entity is any entity employing less than 1500 persons. See, 13 C.F.R. § 121.201, Standard Industrial Classification (SIC) Code 4812. According to the 1992 Census of Transportation, Communications, and Utilities, conducted by the Bureau of Census, only 12 radiotelephone firms out of a total of 1,178 such firms, which operated during 1992 had 1,000 or more employees. However, for the purpose of determining whether a PLMR licensee is a small business as defined by the Small Business Administration (SBA), each licensee would need to be evaluated within its own business area. The Commission's fiscal year 1994 annual report indicates that, at the end of fiscal year 1994, there were 1,101,711 licensees operating 12,882,623 transmitters in the PLMR bands below 512 MHz.[85] Further, because any entity engaged in a commercial activity is eligible to hold a PLMR license, these rules could potentially impact every small business in the U.S.[86]

IV. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements of the Rules

7. The rules adopted in this *Third MO&O* require that applicants requesting more than 10 trunked channels in an initial application for frequencies in the Public Safety Pool must submit a showing of need for the additional channels, which showing of need may require projected loading studies. The Commission estimates that few applicants for trunked Public Safety Pool frequencies will request more than 10 trunked channels; that the burden on an applicant will be highly variable and that it will take an average of 5 hours to prepare a showing of need.

V. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

8. The Commission, in this *Third MO&O*, has considered petitions for reconsideration and clarification regarding its *Second R&O* in PR Docket No. 92-235, which consolidated the PLMR radio services below 512 MHz and made provisions for the trunked operation of PLMR facilities. In doing so, the Commission has adopted proposals which minimize burdens placed on small entities. The most significant of these actions is the reduction in the number of written consents that must be obtained from other licensees when an existing licensee or new applicant proposes trunked operation of PLMR facilities.

Report to Congress: The Commission will send a copy of this *Third Memorandum Opinion and Order* including this Supplemental FRFA, in a report to be sent to Congress pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996, *see* 5 U.S.C. § 801(a)(1)(A). In addition, the Commission will send a copy of the *Third Memorandum Opinion and Order*, including Supplemental FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Third Memorandum Opinion and Order* and Supplemental FRFA (or summaries thereof) will also be published in the Federal Register. *See* 5 U.S.C. § 604(b).

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[85] *See* Federal Communications Commission, 60th Annual Report, Fiscal Year 1994 at 120-121.

[86] The Regulatory Flexibility Act amendments were not in effect until the record in this proceeding was closed, hence the Commission did not request the level of information currently mandated under the RFA.

APPENDIX C

Final Rules

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

PART 90 - PRIVATE LAND MOBILE RADIO SERVICES

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

AUTHORITY: 47 U.S.C. 154, 302, 303, and 332, unless otherwise noted.

2. Section 90.187 is amended by deleting paragraph (b)(2)(iii) and adding the following new paragraphs (b)(2)(iii), (b)(2)(iv) and (b)(2)(v) and new paragraphs (d), (e) and (f) to read as follows:

§ 90.187 Trunking in the Bands Between 150 MHz and 512 MHz.

* * * * *

(b) * * *

(2) Trunking will be permitted on frequencies where an applicant or licensee does not have an exclusive service area provided that all frequency coordination requirements are complied with and written consent is obtained from affected licensees using either the procedure set forth in (b)(2)(i), and b(2)(ii) of this section (mileage separation) or the procedure set forth in (b)(2)(iii)(A), (b)(2)(iii)(B) and (b)(2)(iii)(C) of this section (protected contours)

(i) * * *

(ii) * * *

(iii) In lieu of the mileage separation procedure set forth in (b)(2)(i) and (b)(2)(ii) of this section, applicants for trunked facilities may obtain consent only from stations that would be subjected to objectionable interference from the trunked facilities. Objectionable interference will be considered to exist when the interference contour (22 dBu for VHF stations, 19 dBu for UHF stations) of a proposed trunked station would intersect the service contour (39 dBu for VHF stations, 37 dBu for UHF stations) of an existing station. The existing stations that must be considered in a contour overlap analysis are a function of the channel bandwidth of the proposed trunked station, as follows:

(A) For trunked stations proposing 25 kHz channel bandwidth: Existing co-channel stations and existing stations that have an operating frequency 15 kHz or less from the proposed trunked station.

(B) For trunked stations proposing 12.5 kHz channel bandwidth: Existing co-channel stations and existing stations that have an operating frequency 7.5 kHz or less from the proposed trunked station.

(C) For trunked stations proposing 6.25 kHz channel bandwidth: Existing co-channel stations and existing stations that have an operating frequency 3.75 kHz or less from the proposed trunked station.

(iv) The calculation of service and interference contours referenced in paragraph (iii) above shall be done using generally accepted engineering practices and standards which, for purposes of this rule section, shall presumptively be the practices and standards agreed to by a consensus of all certified frequency coordinators.

(v) The written consent from the licensees specified in paragraphs (b)(2)(i) and (b)(2)(ii) or (b)(2)(iii)(A), (b)(2)(iii)(B) and (b)(2)(iii)C of this section, above, shall specifically state all terms agreed to by the parties and shall be signed by the parties. The written consent shall be maintained by the operator of the trunked station and be made available to the Commission upon request. The submission of a coordinated trunked application to the Commission shall include a certification from the applicant that written consent has been obtained from all licensees specified in paragraphs (b)(2)(i) and (b)(2)(ii) or (b)(2)(iii)(A), (b)(2)(iii)(B) and (b)(2)(iii)C, above; that the written consent documents encompass the complete understandings and agreements of the parties as to such consent; and that the terms and conditions thereof are consistent with the Commission's rules. Should a potential applicant disagree with a certified frequency coordinator's determination that objectionable interference exists with respect to a given channel or channels, that potential applicant may request the Commission to overturn the certified frequency coordinator's determination. In that event, the burden of proving by clear and convincing evidence that the certified frequency coordinator's determination is incorrect shall rest with the potential applicant. If a licensee has consented to the use of trunking, but later decides against the use of trunking, that licensee may request that the licensee(s) of the trunked system(s) cease the use of trunking. Should the trunked station(s) decline the licensee's request, the licensee may request a replacement channel from the Commission. A new applicant whose interference contour overlaps the service contour of a trunked licensee will be assigned the same channel as the trunked licensee only if the trunked licensee consents in writing and a copy of the written consent is submitted to the certified frequency coordinator responsible for coordination of the application.

(c) * * *

(d) Potential applicants proposing trunked operation may file written notice with any certified frequency coordinator for the pool (Public Safety or Industrial/Business) in which the applicant proposes to operate. The notice shall specify the channels on which the potential trunked applicant proposes to operate and the proposed effective radiated power, antenna pattern, height above ground, height above average terrain and proposed channel bandwidth. On receipt of such a notice, the certified frequency coordinator shall notify all other certified frequency coordinators in the relevant pool within one business day. For a period of sixty days thereafter, no application will be accepted for coordination which specifies parameters that would result in objectionable interference to the channels specified in the notice. Potential applicants shall not file another notice for the same channels within 10 km (6.2 miles) of the same location unless six months shall have elapsed since the filing of the last such notice. Certified frequency coordinators shall return without action, any coordination request which violates the terms of this paragraph (d).

(e) No more than 10 channels for trunked operation in the Industrial/Business Pool may be applied for in a single application. Subsequent applications, limited to an additional 10 channels or fewer, must be accompanied by a certification, submitted to the certified frequency coordinator coordinating the application, that all of the applicant's existing channels authorized for trunked operation have been constructed and placed in operation. Certified frequency coordinators are authorized to require documentation in support of the applicant's certification that existing channels have been constructed and placed in operation. Applicants in the Public Safety Pool may request more than 10 channels at a single location provided that any application for more than 10 Public Safety Pool channels must be accompanied by a showing of sufficient need. The requirement for such a showing may be satisfied by submission of loading studies demonstrating that requested channels in excess of 10 will be loaded with 50 mobiles per channel within a five year period commencing with grant of the application.

(f) If a licensee authorized for trunked operation discontinues trunked operation for a period of 30 consecutive days, the licensee, within 7 days of the expiration of said 30 day period, shall file a conforming application for modification of license with the Commission. Upon grant of that application,

new applicants may file for the same channel or channels notwithstanding the interference contour of the new applicant's proposed channel or channels overlaps the service contour of the station that was previously engaged in trunked operation.