APPENDIX IV: RULE PART ANALYSIS

PART 1 – PRACTICE AND PROCEDURE

PART 1, SUBPART F – WIRELESS TELECOMMUNICATIONS SERVICES APPLICATIONS AND PROCEDURES

Description

Part 1, subpart F sets forth procedural rules governing the filing of applications and the issuance of wireless licenses.[1] The rules cover all of the basic types of applications associated with wireless licensing, including initial applications, amendments and modifications, waiver requests, requests for special temporary authorization, assignment and transfer applications, and renewals. In addition, subpart F includes rules concerning public notices, petitions to deny, dismissal of applications, and termination of licenses.

The subpart F rules were adopted as part of the 1998 Biennial Regulatory Review in the *Universal Licensing* proceeding, WT Docket No. 98-20.[2] The Commission initiated this proceeding in connection with the implementation of the Universal Licensing System (ULS), an integrated, automated system for electronic filing and processing of wireless applications. In the *Universal Licensing* proceeding, the Commission consolidated and streamlined its procedural rules into subpart F, which replaced numerous service-specific rules that had previously applied to different wireless services. In addition, the Commission adopted new standardized application forms designed for use in ULS, and adopted rules requiring all wireless telecommunications carriers, as well as certain other classes of wireless licensees, to file applications electronically.[3] The Commission made minor changes to those rules in the 1999 reconsideration of the *ULS Report and Order*.[4]

Purpose

The purpose of subpart F is to: (1) establish uniform procedures for the licensing of all wireless services; (2) minimize filing requirements; and (3) ensure the collection of reliable information from applicants and licensees.

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1 47 C.F.R. Part 1, subpart F.

2 Amendment of Parts 0, 1, 13, 22, 24 26, 27, 80, 87, 90, 95, 97, and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Service, WT Docket No. 98-20, *Report and Order*, 13 FCC Rcd 21027 (1998) (*ULS Report and Order*).

3 47 C.F.R. §1.913.

4 Amendment of Parts 0, 1, 13, 22, 24 26, 27, 80, 87, 90, 95, 97, and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Service, *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd 11476 (1999).

Analysis

Status of Competition

As noted above, the Part 1, subpart F rules pertain to procedural requirements relating to the many wireless radio services regulated pursuant to other specific rule parts addressed in our rule part analysis. Accordingly, we do not address here the status of competition in specific wireless radio services, but instead will address this issue in the context of rule parts affecting particular services, discussed *infra.*

Advantages

Consolidating the wireless procedural rules into a single subpart provides greater clarity, consistency, and predictability to the licensing process than the prior array of sometimes inconsistent service-specific rules, forms, and procedures. This lessens the filing burden on applicants, and also facilitates more rapid and efficient processing by the Commission.

Disadvantages

The requirement of electronic filing for all wireless telecommunications carriers imposes certain technical burdens and costs. In addition, the general procedural rules contained in subpart F impose administrative burdens on wireless applicants and licensees that are inherent to the licensing process.

Recent Efforts

In 2001, the Wireless Telecommunications Bureau completed its multi-year conversion to the ULS of all wireless service application and licensing activity.[5] Conversion to ULS provides numerous benefits, including fast and easy electronic filing, improved data accuracy through automated checking of applications, and enhanced electronic access to licensing information for the public. The Commission continues to review its rules governing wireless licensing in this and other rule parts in order to consolidate the licensing rules to the extent appropriate and necessary in order to promote consistency among various wireless services.

The Commission also has recently issued a Notice of Proposed Rulemaking (NPRM) seeking comment on revising and streamlining its requirements for applications affecting Quiet Zones (*Quiet Zones NPRM*).[6] In that NPRM, the Commission proposed several changes to its Part 1 rules relating to Quiet Zones.

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[5] *See* "Wireless Telecommunications Bureau to Begin Use of Universal Licensing System for Licensing in Commercial Radio Operator Services on May 21, 2001; Deployment Means Conversion of All WTB Services to ULS is Now Complete," *Public Notice*, 16 FCC Rcd 9472 (2001).

[6] *See* In the Matter of Review of Quiet Zones Application Procedures, WT Docket No. 01-319, *Notice of Proposed Rulemaking*, 16 FCC Rcd 20690 (2001) (*Quiet Zones NPRM*).

Comments

Section 1.923 – Litigation disclosure requirements on Forms 601 and 603. CTIA and RCA request that information regarding "pending" and "non-FCC litigation" that applicants are required to file pursuant to Section 1.923, as part of their ULS Forms 601 and 603, should no longer be required.[7] CTIA asserts that the Commission has repeatedly stated that unless and until there is an adverse judgment, pending litigation is not material to a licensee's qualifications. CTIA further contends that this information is not necessary in a competitive market, and that applicants that include information on pending and/or non-FCC litigation have their applications "offlined," thus delaying swift Commission action on the filing.[8]

Section 1.923 – Foreign ownership disclosure requirements on Forms 601 and 603. CTIA also asserts that the data requirement on Forms 601 and 603 relating to foreign ownership is an unnecessary and burdensome reporting requirement, and that the forms should be revised to require merely that applicants answer a simple yes or no as to whether they comply with section 310(b).[9] CTIA contends that the foreign ownership question on these ULS forms has little, if any correlation to the FCC's section 310(b) analysis required prior to approval of such ownership. RCA similarly asserts that the Commission should eliminate the requirement for disclosure of an applicant's foreign ownership when the Commission has already approved compliance with the foreign ownership requirements.[10]

Section 1.924 – Quiet Zone requirements. CTIA seeks amendment of section 1.924(d), which requires a CMRS provider to obtain approval for wireless facilities within the FCC Quiet Zone Rules for Arecibo Observatory.[11] CTIA asserts that this requirement creates an unnecessary interval of FCC approval, particularly since the Observatory is willing to provide written approval for wireless modifications, as explained in the *Quiet Zones NPRM*. Similarly, RCA asserts that the Commission should not require approval of operation in a designated Quiet Zone if it has already been reviewed and found not to be harmful to protected operations, and that Section 1.924 should be modified accordingly.[12]

Section 1.929 – Certain frequency coordination requirements. API requests that the Commission modify section 1.929(c)(4)(v) and/or 1.929(k) so as to specify that the deletion of a site from a multi-site license in the PLMRS service is a "minor" change that requires neither frequency coordination (pursuant to a Form 601 filing) nor the

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7 CTIA Petition at 6; RCA Reply Comments at 2.

8 CTIA Petition at 6.

9 *Id.* at 6-7.

10 RCA Reply Comments at 3.

11 CTIA Petition at 7.

12 RCA Reply Comments at 3.

Commission's prior approval.[13] API recommends, instead, that such changes merely require a simple notification to the Commission through ULS. API asserts that requiring frequency coordination in this instance is unnecessarily burdensome on the Commission and licensees and is not necessary in the public interest. API claims that frequency coordinators will be able to access the FCC database to determine whether the site deletion makes new spectrum available to others that may want it. API also asserts that the rules applicable to microwave services (*i.e.*, section 1.929(d)) do not classify elimination or deletion of a site as a "major" change requiring engineering analysis or frequency coordination, and that the PLMRS service should be treated in the same manner. AMTA concurs with API and asks the Commission to modify section 1.929(c)(4)(i) to permit licensees to delete a frequency from an authorization without coordination.[14]

Section 1.935 – Requirements relating to withdrawal of certain applications and pleadings. CTIA and RCA also request elimination of section 1.935, which requires applicants to obtain Commission approval of agreements to withdraw applications, petitions, informal objections, or other pleadings against an application.[15] They argue that the approval process often causes lengthy delays and is unnecessary in a competitive CMRS market, particularly when the Commission has the authority to request documents in specific cases.

Recommendation

The Part 1, subpart F rules establish general procedural requirements applicable to our many different wireless services, and do not contain substantive rules affecting any particular service. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, pursuant to our Section 11 biennial review, we do not find that this rule subpart is "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that Part 1, subpart F rules remain necessary in the public interest, it also concludes that certain modifications of this rule subpart may be in the public interest for reasons other than those related to competitive developments that fall within the scope of Section 11 review. In this regard, we discuss the comments and our recommendations below.

Section 1.923 – Litigation disclosure requirements on Forms 601 and 603. Section 1.923 generally stipulates that applications contain all information required by the Commission's rules, including reference to docketed legal proceedings where required.[16]

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[13] API Comments at 13-14.

[14] AMTA Comments at 7-8.

[15] CTIA Petition at 7-8; RCA Reply Comments at 3.

[16] *See generally* 47 C.F.R. § 1.923(a).

Forms 601 and 603 specifically require that every applicant indicate whether it, or any party directly or indirectly controlling the applicant, is currently a party in "any pending matter" related to (a) a state or federal felony or (b) unlawful monopolization or unlawful attempt "to monopolize radio communication, directly or indirectly, through control of manufacture or sale of radio apparatus, exclusive tariff arrangement, or any other means or unfair methods of competition."[17] Similar filing requirements currently are placed on applicants with regard to satellite licenses.[18]

The staff concludes that this disclosure requirement, implemented pursuant to section 1.923, may no longer be necessary in the public interest, and accordingly recommends that the Commission institute a proceeding to determine whether this filing requirement should be revised or eliminated. While the current requirement focuses on matters that could affect an entity's qualifications to hold a license under Commission policy and provisions of the Act,[19] the requirements impose substantial burdens on many applicants. In addition, the Commission has stated in other proceedings that it generally will consider only adjudicated convictions when making certain licensing determinations, not mere allegations of misconduct.[20] Furthermore, the Commission has eliminated similar requirements for broadcast applicants.[21]

Section 1.923 – Foreign ownership disclosure requirements on Forms 601 and 603. Under section 1.923, the Commission requires that wireless applicants provide certifications on Forms 601 and 603 regarding foreign ownership, in order to facilitate the Commission's ability to enforce its statutory obligations set forth in sections 310(a) and (b) of the Communications Act. WTB staff does not believe that CTIA's and RCA's request for elimination of specific disclosure requirements on the forms is in the public interest, because it is beneficial to the application review process for applicants to provide specific information regarding the manner in they comply with the component elements of the statutory foreign ownership requirement. Nonetheless, the staff finds that some of the specific information sought on the forms may not be necessary to verify statutory compliance, and accordingly recommends that the Commission consider ways in which the disclosure requirements could be streamlined. Specifically, staff believes that the question that pertains to applicants with indirect foreign ownership in excess of the 25 percent benchmark contained in section 310(b)(4) of the Act should be simplified. We recommend that Forms 601 and 603 be revised to allow applicants to certify that they have received from the Commission a declaratory ruling that approves their indirect

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17 *See* Form 601 "Main Form" (question 48); Form 603 (question 77).

18 *See* Form 312 "Main Form" (question 39).

19 *See, e.g.,* 47 U.S.C. § 313 (Application of antitrust laws).

20 *See, e.g.,* Policy Regarding Character Qualifications in Broadcast Licensing, *Policy Statement and Order*, 5 FCC Rcd 3252 (1990).

21 *See* Policy Regarding Qualifications in Broadcast Licensing, *Memorandum Opinion and Order*, 7 FCC Rcd 6564, 6566-67 (1992) (eliminating requirement that broadcast applicants report "pending litigation" relating to certain potential character qualifications, while maintaining requirement that applicants report adverse findings on these issues).

foreign ownership under section 310(b)(4) for the particular service that is the subject of the application and that their indirect foreign ownership continues to comply with that ruling. This change in the forms would eliminate the perceived need for applicants to restate the particulars of their indirect foreign ownership and clarify the information required for the Commission to make its public interest findings under the Act.

Section 1.924 Quiet Zone requirements. As noted above, the Commission has issued the *Quiet Zones NPRM* regarding several rule changes affecting Quiet Zones.[22] The staff believes that the proposed rule changes to section 1.924 are within the scope of review contemplated in that proceeding. Based on the comments filed in this Biennial Review proceeding, staff believes that the rule in its current form may not be necessary in the public interest and recommends that the Commission consider revising the rule in its pending proceeding. The staff further recommends that the comments of CTIA and RCA regarding this rule be incorporated into the Commission's pending proceeding.

Section 1.929 – Certain frequency coordination requirements. Staff finds that section 1.929 in its current form may no longer be necessary in the public interest and recommends that the Commission consider modifying section 1.929(c)(4)(v) and/or 1.929(k) to specify that the deletion of a site from a multi-site license in the PLMRS service is a "minor" change that requires neither frequency coordination (pursuant to a Form 601 filing) nor the Commission's prior approval.

Section 1.935 – Requirements relating to withdrawal of certain applications and pleadings. The staff does not recommend elimination of the requirement, under section 1.935, that applicants obtain Commission approval of agreements to withdraw applications, petitions, informal objections, or other pleadings against an application. This requirement facilitates the Commission's enforcement of its "greenmail" rules and policies, which bar settlement payments in excess of legitimate and prudent expenses.[23] Accordingly, we conclude that these requirements implemented pursuant to section 1.935 remain necessary in the public interest, and recommend that repeal or modification is not warranted.

[22] *See generally Quiet Zones NPRM*, *supra*.

[23] *See generally* 47 C.F.R. § 1.935.

PART 1, SUBPART I – PROCEDURES IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT OF 1969

Description

Part 1, Subpart I of the Commission's rules[24] implements the requirements of the National Environmental Policy Act (NEPA)[25] as well as a series of other federal environmental laws, including the Endangered Species Act of 1973, as amended,[26] the National Historic Preservation Act of 1966 (NHPA),[27] the Wilderness Act of 1964, as amended,[28] statutory provisions relating to Indian religious sites,[29] and the Wildlife Refuge Laws.[30] In addition, the Commission's environmental rules implement Executive Orders regarding flood plains and wetlands regulation.[31] By statute and regulations of the Council on Environmental Quality (CEQ),[32] the Commission is responsible for ensuring compliance with these laws. The rules identify certain special issues for consideration, including the impact of high-intensity white lights on towers in residential neighborhoods[33] and the effect of radio frequency emissions on the human environment.[34]

Purpose

The purpose of the Commission's environmental rules is to implement NEPA, other federal environmental laws, and executive orders, and to identify those sensitive environmental issues which Commission licensees, applicants, and certain third parties must address. The Commission complies with NEPA by requiring its licensees to assess and, if found, report the potential environmental consequences of their proposed projects.

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[24] The Commission's environmental rules are codified at 47 C.F.R. §§ 1.1301-1.1319.

[25] 42 U.S.C. §§ 4321-4347.

[26] 16 U.S.C. §§ 1531-1543.

[27] 16 U.S.C. §§ 470 *et seq.*

[28] 16 U.S.C. §§ 1131-1136.

[29] 42 U.S.C. § 1996.

[30] 16 U.S.C. § 668dd.

[31] *See* Executive Order 11988, 42 Fed Reg. 26,951 (May 24, 1977), *reprinted as amended in* 42 U.S.C. § 4321 note (floodplains); Executive Order 11990, 42 Fed Reg. 26,961 (May 24, 1977), *reprinted as amended in* 42 U.S.C. § 4321 note (wetlands).

[32] 40 C.F.R. §§ 1500-1508.

[33] 47 C.F.R. § 1.1307(a)(8).

[34] 47 C.F.R. § 1.1307(b).

If certain actions, such as the construction of a tower, might affect the environment in one or more of the ways described in the rules, the licensee or applicant is required to consider the potential environmental effects of its project, describe those potential effects in an environmental assessment (EA), and file that document with the Commission.[35] The Commission has concluded that actions not identified in its rules are categorically excluded from environmental review.[36] The Commission's environmental rules explain what information is required in an EA,[37] the methods for the public to file objections to EAs,[38] and those situations in which a full environmental impact statement must be completed,[39] as required by NEPA.

Comments

CTIA and RCA filed comments[40] concerning the Commission's procedures under Part 1, Subpart I relating to the NHPA.[41] CTIA also requests that the Commission revisit its decision that the construction and registration of towers are federal undertakings.[42] Sprint comments that the Commission's rules which implement the NHPA are not necessary as they apply to tower siting for Commercial Mobile Radio Service (CMRS), and that they should be repealed.[43]

Analysis

The Part 1, subpart I rules are beyond the scope of the Biennial Review proceeding. These Commission rules implement NEPA,[44] as well as other federal environmental laws

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35 47 C.F.R. § 1.1307(a).

36 47 C.F.R. § 1.1306.

37 *See* 47 C.F.R. §§ 1.1308, 1.1311.

38 47 C.F.R. § 1.1313.

39 47 C.F.R. §§ 1.1314-1.1319.

40 CTIA Comments at 9-15; RCA Reply Comments at 4. *See also* Texas RSA 15B2 et al. *Ex Parte* Comments at 2-5 (supporting CTIA's proposal to streamline the NEPA compliance procedures). We note that Texas RSA 15B2 et al. did not file comments until November 27, 2002, after the comment period had closed. In light of the importance of this proceeding, we will, pursuant to Section 1.1206 of the Commission's rules, consider these late-filed comments as an *ex parte* submission.

41 The Commission's environmental rules require licensees and applicants to evaluate whether proposed facilities may affect properties that are "listed, or are eligible for listing, in the National Register of Historic Places." 47 C.F.R. § 1.1307(a)(4).

42 CTIA Comments at 15 n.33.

43 Sprint Reply Comments at 6-7.

44 *See* 47 C.F.R. § 1.1301 (stating that provisions of Part 1, Subpart I of the Commission's rules implement Subchapter I of NEPA).

and executive orders.[45] The rules were not promulgated under the Communications Act of 1934, as amended, and therefore are not part of the Biennial Review.[46]

[45] 47 C.F.R. § 1.1307(a).

[46] Section 11 of the Communications Act instructs the Commission to review "all regulations issued *under this Act* . . ." 47 U.S.C. § 161 (emphasis added).

PART 1, SUBPART Q – COMPETITIVE BIDDING PROCEEDINGS

Description

Subpart Q implements section 309(j) of the Communications Act of 1934, as added by the Omnibus Budget Reconciliation Act of 1993[47] and amended by the Balanced Budget Act of 1997.[48] Subpart Q sets forth rules governing the mechanisms and procedures for competitive bidding to assign spectrum licenses.

Purpose

The purpose of subpart Q is to establish a uniform set of competitive bidding rules and procedures for use in licensing of all services that are subject to licensing by auction. The rules in this subpart: (1) describe which services are subject to competitive bidding; (2) provide competitive bidding mechanisms and design options; (3) establish application, disclosure and certification procedures for short- and long-form applications; and (4) specify down payment, withdrawal and default mechanisms.

In addition, subpart Q contains rules by which the Commission determines eligibility for "designated entity" (*i.e.*, small business) status, and includes a schedule of bidding credits for which designated entities may qualify in those auctions in which special provisions are made for designated entities.[49] The purpose of these provisions is to implement section 309(j)(3)(B) of the Act, which states that an objective of designing and implementing the competitive bidding system is to "promot[e] economic opportunity and competition and ensur[e] that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration in licenses and disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women."[50]

Analysis

Status of Competition

As noted above, the Part 1, subpart Q rules pertain to procedural requirements relating to the many wireless radio services regulated pursuant to other specific rule parts addressed in our rule part analysis. Accordingly, we do not address here the status of competition in specific wireless radio services, but instead will address this issue in the context of rule parts affecting particular services, discussed *infra.*

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47 *See* Omnibus Budget Reconciliation Act of 1993, Pub. Law No. 103-66 (1993).

48 *See* Balanced Budget Act of 1997, Pub. Law No. 105-33, § 3002, 111 Stat. 251 (1997) (amending 47 U.S.C. § 309(j)).

49 In service-specific rule making proceedings, the Commission continues to establish the appropriate size standards for each auctionable service.

50 47 U.S.C. § 309(j)(3)(B).

Advantages

The subpart Q competitive bidding rules establish procedures for the efficient licensing of spectrum. Use of auction procedures allows for substantially faster licensing and lower costs than alternative licensing methods such as comparative hearings, and is more likely to result in award of licenses to those entities that value the spectrum the most and will use it most efficiently. Auction rules also enable the Commission to recover a portion of the value of the spectrum for the benefit of the public.

Subpart Q is the result of the Commission's consolidation of its auction rules in the Part 1 rulemaking proceeding, WT Docket No. 97-82. Prior to the Part 1 proceeding, the Commission implemented service-specific auction rules for each new auctioned service. Consolidating the auction rules in Part 1 has resulted in more consistency and predictability in the auctions process from service to service.

Disadvantages

The auction rules in this subpart impose certain transaction costs on auction participants (aside from the obligation on the winning bidder to pay the amount bid). These auction-related costs may be somewhat higher than the cost of filing a lottery application but significantly less than the cost of a comparative hearing.[51] In addition, certain aspects of the auctions process (*e.g.*, setting of minimum opening bid amounts, bid increments, and bidding credit levels) still require service-specific notice and comment prior to each individual auction.

Recent Efforts

The Commission has made several changes to the competitive bidding rules of subpart Q since the release of the 2000 Biennial Review.

In September 2001, the Commission released the *Part 1 Seventh Report and Order*, which amended and clarified section 1.2105(c) of the Commission's rules, the competitive bidding "anti-collusion rule."[52] Specifically, the Commission amended the rule so that its language clearly reflects the Commission's practice of prohibiting communications regarding bids or bidding strategies only between auction applicants that have applied to bid on licenses in any of the same geographic areas. In addition, the Commission amended the rule to (1) clarify that it prohibits an auction applicant from discussing any competing applicant's bids or bidding strategies with that or another competing applicant, even if the first applicant does not discuss its own bids or bidding strategies, and (2) require auction applicants that make or receive a prohibited

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[51] *See FCC Report to Congress on Spectrum Auctions*, WT Docket No. 97-150, *Report*, FCC 97-353, Section III, at 8 (rel. October 9, 1997) (citing studies estimating costs of $800 per application under the lottery system and $130,000 per application under the comparative hearing process).

[52] Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, *Seventh Report and Order*, 16 FCC Rcd 17546 (2001).

communication of bids or bidding strategies to report the communication immediately to the Commission in writing.

The Commission also released the *Part 1 Eighth Report and Order* in which it adopted two exceptions to its competitive bidding attribution rule that certain ownership interests be counted on a "fully diluted" basis. The Commission also clarified its rules regarding a third exception to its attribution rule.[53] In the *Part 1 Eighth Report and Order* the Commission also declined to adopt a total assets test in its ownership attribution rule for determining which entities are eligible for small business provisions in competitive bidding proceedings.

On April 11, 2002, the Wireless Telecommunications Bureau released the *Competitive Bidding Conforming Edits Order*[54] making conforming edits to service-specific competitive bidding rules and portions of the Part 1 general competitive bidding rules in accordance with the authority delegated by the Commission in the *Part 1 Fifth Report and Order*.[55] These conforming edits furthered the Bureau's continuing efforts to streamline its procedures in accordance with the Commission's biennial regulatory review obligations set forth at section 11(a) of the Communications Act of 1934, as amended, and the recommendations contained in the *2000 Biennial Staff Report*. In addition to making these conforming edits, the Bureau also exercised its delegated authority to make certain ministerial conforming amendments, including edits to correct competitive bidding provisions that were inadvertently altered or deleted by the *Part 1 Third Report and Order* and the *Competitive Bidding Sixth Report and Order*.[56] The Bureau also removed service-specific provisions that were redundant with the Bureau's delegated authority to conduct auctions. The effect of the action was to eliminate approximately 66 pages of redundant or unnecessary rules from the Code of Federal Regulations.

Pursuant to the Bureau's delegated authority, the *Competitive Bidding Conforming Edits Order* identified and removed service-specific competitive bidding rules that have been

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[53] Amendment of Part 1 of Commission's Rules – Competitive Bidding Procedures, *Eighth Report and Order*, 17 FCC Rcd 2962 (2002).

[54] Amendment of Parts 1, 21, 22, 24, 25, 26, 27, 73, 74, 80, 90, 95, 100 and 101 of Commission Rules -- Competitive Bidding, *Order*, 17 FCC Rcd 6534 (2002); *Erratum,* 17 FCC Rcd 11146 (2002) (*Competitive Bidding Conforming Edits Order*).

[55] Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures*, Order on Reconsideration of the Third Report and Order, Fifth Report and Order, and Fourth Further Notice of Proposed Rule Making*, 15 FCC Rcd 15293, 15330, ¶ 78, 15336, ¶ 101 (2000) (*Part 1 Recon Order of the Third Report & Order* and *Part 1 Fifth Report and Order*) ("We hereby instruct the Wireless Telecommunications Bureau to make conforming edits to the Code of Federal Regulations consistent with this decision."); 47 U.S.C. § 155(c); 47 C.F.R. §§ 0.131(d) and 0.331(d).

[56] Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 530-31 (1997) (*Part 1 Third Report and Order*); Section 309(j) of the Communications Act – Competitive Bidding, *Sixth Report and Order*, 11 FCC Rcd 136 (1996) (*Competitive Bidding Sixth Report and Order*).

superseded or made redundant by the Part 1 general competitive bidding rules.[57] The Bureau modified or removed service-specific competitive bidding rules in the following areas: (1) scope of service-specific competitive bidding rules; (2) competitive bidding design options; (3) competitive bidding mechanisms; (4) bidding application and certification procedures, and prohibition of collusion; (5) submission of upfront payments; (6) submission of down and full payments, and filing of long-form applications; (7) procedures for filing petitions to deny against long-form applications; (8) license grant, denial, default, and disqualification; (9) designated entities; (10) unjust enrichment in license assignment or transfer of control; (11) ownership disclosure requirements for short- and long-form applications; and (12) definitions. In those instances in which service-specific departures from the Part 1 general competitive bidding rules were tailored for a particular service, the Bureau retained such rules. In addition, pursuant to the Bureau's delegated authority to make ministerial conforming edits to Commission rules, we restored and revised certain rule sections that were inadvertently altered, deleted, or misstated.

The Bureau is currently addressing petitions for reconsideration submitted in response to the *Part 1 Order on Reconsideration of the Third Report and Order*, and *Part 1 Fifth Report and Order*. These petitions seek, *inter alia*, amendment or clarification of the controlling interest standard adopted as the competitive bidding ownership attribution rule.

Comments

Section 1.2105(a) – Filing of ownership information in short-form application. CTIA recommends that section 1.2105(a) of the Commission's rules be amended so that short-form applicants are not required to submit ownership information with their applications.[58] CTIA states that this information is required at the long-form stage for winning bidders and that short-form applicants should not be burdened by this requirement.[59] The Rural Cellular Association (RCA) submitted Reply Comments in support of CTIA's recommendation.[60]

Section 1.2110 – Designated Entity Status of rural telephone cooperatives. The National Telecommunications Cooperative Association (NTCA) suggests that the Commission revise section 1.2110 of its rules to exclude rural telephone cooperatives from the rule that defines officers and directors as controlling interests for purposes of determining designated entity status.[61]

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57 *See generally Competitive Bidding Conforming Edits Order, supra*.

58 CTIA Petition at 8.

59 *Id.*

60 RCA Reply Comments at 3.

61 NTCA Comments at 2.

Section 1.2111(a) – Filing of transaction documents for applications for transfers of control or assignment of licenses. CTIA also recommends, and RCA concurs, that the Commission eliminate the requirement that applicants for transfers of control or assignments of licenses obtained through competitive bidding file transaction documents with the Commission, as set forth in section 1.2111(a) of it rules.[62] CTIA believes that this requirement is duplicative because the Commission already has rules governing unjust enrichment (*e.g.*, 47 C.F.R. § 22.943(b)).[63] CTIA believes that the scope of the Part 1 rule is too broad because licensees must go through these procedures irrespective of their designated entity status.[64]

Recommendation

The subpart Q rules only pertain to general procedural requirements relating to competitive bidding in various different wireless services, and not to the substantive rules affecting any particular service. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that this rule subpart is "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that Part 1, subpart Q rules remain necessary in the public interest, it also concludes that certain modifications of this rule subpart may be in the public interest for reasons other than those related to competitive developments that fall within the scope of Section 11 review. In this regard, we discuss the comments and our recommendations below.

Section 1.2105(a) – Filing of ownership information in short-form application. With regard to CTIA's Comments and RCA's Reply Comments pertaining to section 1.2105(a), the Commission requires auction applicants to submit ownership information, including the name, address and citizenship of any party holding a 10% or higher interest in the applicant.[65] Under section 309(j)(5) of the Communications Act, no party may participate in an auction "unless such bidder submits such information and assurances as the Commission may require to demonstrate that such bidder's application is acceptable for filing." The legislative history of section 309(j) provides that the Commission require that bidders' applications contain all information and documentation sufficient to demonstrate that the application is not in violation of the Commission's rules, and applications not meeting those requirements may be dismissed prior to competitive bidding.[66]

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62 CTIA Petition at 8; RCA Reply Comments at 4.

63 CTIA Petition at 8.

64 *Id.*

65 47 C.F.R. § 1.2112(a).

66 *See* H.R. Rep. No. 111, 103d Cong., 1st Sess. 258 (1993) (H.R. Rep. No. 103-111).

Under the Commission's rules, the minimum requirement for participation in an auction is the submission of a short-form application together with an appropriate upfront payment determined by the Bureau. The short-form application must include, *inter alia*: identification and ownership information of the applicant; basic qualification certifications that indicate that the applicant is legally, technically, financially and otherwise qualified to hold a Commission license pursuant to section 308(b) of the Communications Act of 1934; and disclosure of certain bidding arrangements and other agreements. By submitting the short-form application, applicants declare, under penalty of perjury, that "all matters and things stated in [the] application and attachments, including exhibits, are true and correct."[67]

In the *Competitive Bidding Second Report and Order*, the Commission observed that "submission of a short-form application prior to the auction, would reduce the administrative burdens of the auction process, avoid unnecessary delay in the initiation of service, and encourage applicants to participate in the process."[68] In adopting this approach, the Commission balanced the importance of limiting participation in its auctions to those entities that are legally, technically and financially qualified to hold a Commission license with the need to conduct auctions expeditiously.[69] Filing ownership information in the short-form application prevents the administrative expense and delay the Commission would incur if it could not determine whether auction participants meet the threshold requirements to hold the license(s) they win until after the auction had concluded. Disclosure of ownership information also helps bidders by providing them with information about their auction competitors and identifying the entities that are subject to our anti-collusion rules, which are an integral part of section 1.2105.[70] Detailed ownership information is also necessary to ensure that applicants comply with applicable ownership limits.[71]

We find that there have been no intervening events that would cause us to reconsider our findings set forth in the *Competitive Bidding Second Report and Order*. Additionally, CTIA points to no intervening events that affect the utility of this rule. Accordingly, and for the reasons set forth in that order, the Bureau concludes that inclusion of ownership information in the short-form application remains necessary in the public interest and recommend that repeal or modification is not warranted.

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67 47 C.F.R. § 1.2105(a).

68 Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Second Report and Order*, 9 FCC Rcd 2348, 2375-2376 ¶¶ 161-162 (1994) (*Competitive Bidding Second Report and Order*).

69 *See* Auction of Licenses for VHF Public Coast and Location and Monitoring Service Spectrum, *Order*, DA 02-2631 (rel. October 11, 2002).

70 *See Part 1 Recon Order of the Third Report & Order* and *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15298 ¶ 9; *Part 1 Third Report and Order*, 13 FCC Rcd at 417 ¶ 73.

71 *Id. See also* 47 U.S.C. § 310 (foreign ownership restrictions).

Section 1.2110 – Designated entity status of rural telephone cooperatives. With regard to NTCA's Comments pertaining to section 1.2110, staff notes that this issue has been raised by other parties in petitions for reconsideration of the *Part 1 Fifth Report and Order* and in comments NTCA filed in response to such petitions for reconsideration, and thus is within the scope of the review contemplated in the reconsideration. Staff recommends that NTCA's comments regarding this rule be incorporated into the Commission's pending reconsideration proceeding.

Section 1.2111(a) – Filing of transaction documents for applications for transfers of control or assignment of licenses. Staff concludes that section 1.2111(a) in its current form may no longer be necessary in the public interest and accordingly recommends that the Commission adopt CTIA and RCA's recommendation this rule be revised to eliminate the requirement that applicants for transfers of control or assignments of licenses obtained through competitive bidding file transaction documents with the Commission. Under section 1.2111(a) of the Commission's rules, applicants are required to file, together with their applications, the associated contracts for sale, option agreements, management agreements, or other documents disclosing the total consideration, received in return for transfer of its license. Although this requirement is not necessarily duplicative of the Commission's unjust enrichment rules (which apply only to designated entities), as CTIA contends, staff believes that the rule is outdated and is not necessary for application of the Commission's unjust enrichment payment rules in sections 1.2111(b), (c), and (d).

The Commission adopted section 1.2111(a) at the outset of the auction program to accumulate the data necessary to evaluate our auction designs and judge whether winning bids were reflective of the true market value of the licenses.[72] Therefore, the Commission decided to collect data on license transfers and assignments for all auctioned licenses, not just licenses won by designated entities, within three years of the initial license grant. The Commission stated that this would put particular focus on licenses transferred before the licensee had begun commercial service, and help determine if there were any "unforeseen" problems with respect to unjust enrichment outside the designated entity context, *i.e.*, licenses being acquired at auction for less than true market value and then being transferred at a significant profit.[73]

Staff concludes that it may no longer be in the public interest to retain the section 1.2111(a) requirement that applicants for transfer of control or assignment of licenses acquired through competitive bidding submit financial documents regarding the transfer or assignment. Staff review suggests that this rule is no longer necessary for several reasons. First, in the eight years since the rule was adopted, the Commission has developed extensive experience with auctions and auction design, so that collection of this data no longer appears to be needed to monitor the effectiveness of our auction

[72] *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2385 ¶ 214 (citing H.R. Rep. No. 103-111 at 257).

[73] *Id*.

designs. Second, there is no evidence that in open bidding, winning bidders have paid less than the market price for their licenses, thus there is no evidence that unjust enrichment problems have in fact occurred with resale of non-designated entity licenses. Moreover, because the value of licenses changes with time and circumstances, fluctuations in secondary market values from the original auction price are not reliable indicators of whether licenses were sold for their "market value" at auction. Third, the rule is overinclusive because it requires parties to many routine transfers and assignments to provide documentation that is not needed for the Commission to conduct its public interest review of those transactions. Finally, the provision appears to be unnecessary to application of the Commission's designated entity unjust enrichment provisions. Section 1.2111(a) requires disclosure that focuses on the monetary or other consideration received for the transfer or assignment of licenses. However, determining whether unjust enrichment is owed with respect to bidding credits or installment payments is based on the eligibility of the transferee or assignee for the bidding credits or installment payments, which is a question of attribution of gross revenues based on principles of control rather than on the secondary market price of the license.

By its recommendation, staff does not intend to suggest a limitation on the Commission's authority under section 308(b) of the Act to require disclosure of specific transaction information, including contract documents and the transaction price, in any transfer or assignment proceeding in which the Commission needs such information to conduct its public interest review. Moreover, staff is not proposing any limitation on the Commission's ability to use section 308(b) of the Act or sections 1.2110(j) and 1.2112 of the Commission's rules to collect whatever information and documents are necessary to determining eligibility for designated entity provisions or applicability of unjust enrichment payments.

PART 17 – CONSTRUCTION, MARKING, AND LIGHTING OF ANTENNA STRUCTURES

Description

Part 17, which implements Section 303(q) of the Communications Act of 1934, as amended,[74] establishes the procedures by which the Commission registers and assigns painting and lighting requirements to those antenna structures that may pose a physical hazard to aircraft.[75] The rules require registration, evaluation, and approval by the Commission, in conjunction with the recommendations of the Federal Aviation Administration (FAA), of any proposed construction or modification of an antenna structure that is a potential hazard to aircraft. The rules also require tower owners to paint and light their antenna structures as necessary to protect air navigation.

The Antenna Structure Registration procedures set forth in Part 17 are distinct from the FCC's licensing functions. The registration of an antenna structure that affects air navigation is a pre-condition to FCC licensing of radio facilities at a particular site.[76]

Purpose

Part 17 rules ensure that tower owners do not construct structures that may pose a hazard to air navigation, and FCC licensees do not site facilities on such structures until the antenna structures comply with federal aviation safety requirements.

Analysis

Status of Competition

Because the rules in this Part address air navigation safety issues, general competitive developments in the services to which these rules apply do not affect the need for these rules.

Advantages

These rules are limited to those classes of antenna structures that may reasonably be expected to pose an air safety hazard (generally, antenna structures that are taller than 200 feet or that are in close proximity to airports). Antenna structure owners are responsible for compliance with the rules; thus there is a single point of contact for a particular antenna structure. This eliminates the need for each party on a multi-tenant structure to undertake the registration process.

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[74] 47 U.S.C. § 303(q).

[75] 47 C.F.R. Part 17.

[76] Section 17.5 exempts geographically licensed services from this requirement. 47 C.F.R. § 17.5.

Disadvantages

The Part 17 rules may delay the commencement of service when proposed facilities must be studied by the FAA and registered by the Commission prior to construction.

Recent Efforts

None.

Comments

CTIA believes that certain Part 17 rules are not synchronized with FAA regulations and requests that the Commission work with the FAA to streamline procedures in this area.[77] Specifically, CTIA contends that certain FAA Advisory Circulars, to which the Commission's rules require adherence, impose obligations with respect to notification of modifications that conflict with section 17.23 of the Commission's rules.[78]

Recommendation

Part 17 rules pertain to air navigation safety issues. As such, competitive developments have not affected the need for this rule part. Accordingly, we do not find that this rule part is "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally concludes that Part 17 rules remain necessary in the public interest, it nonetheless also concludes, as discussed below, that certain modifications may be in the public interest for reasons other than those related to competitive developments that fall within the scope of Section 11 review. Staff recommends that the Commission institute a proceeding to examine the Part 17 rules to modify or eliminate, without compromising public safety goals, any rules which create unnecessary administrative burdens or are apt to confuse owners and licensees who attempt to comply with our Part 17 rules.

[77] CTIA Petition at 18.

[78] CTIA also recommends that the Commission work with the FAA to insure consistent application of the registration exemption embodied in section 17.14 (b) of the Commission's rules. *Id.*

PART 20 – COMMERCIAL MOBILE RADIO SERVICES, SECTION 20.6 – CMRS SPECTRUM AGGREGATION LIMIT

Description

Section 20.6[79] limits the amount of broadband PCS, cellular, and commercial SMR spectrum that any entity can control or influence in a significant way in a common geographic area. The rule (commonly known as the "spectrum cap") further defines the types of ownership and other interests that are attributable under the cap.

On December 18, 2001, the Commission adopted a *Report and Order* that eliminated the spectrum cap effective January 1, 2003.[80] The Commission decided that it should move from the use of an inflexible spectrum aggregation limit to case-by-case review of spectrum aggregation involved in the acquisition of spectrum used for mobile telephony.[81] The Commission determined, however, that a sunset period was necessary in order to prepare for case-by-case review.[82] The Commission raised the spectrum cap to 55 MHz in all areas for the duration of the rule's existence to address carriers' concerns about near-term spectrum capacity constraints in the most constrained urban areas.[83]

Comments

No comments were filed with respect to this rule.

Analysis

Because the Commission has already decided to eliminate section 20.6 as of January 1, 2003, further review of the rule is not necessary as part of this Biennial Review.

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79 47 C.F.R. § 20.6.

80 *See* 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services, WT Docket No. 01-14, *Report and Order*, 16 FCC Rcd 22668 (2001) (*Spectrum Aggregation Limits Order*).

81 *See Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22670-71.

82 *See id.* at 22669.

83 *See id.* at 22669-70.

PART 20, SECTION 20.11 – INTERCONNECTION TO FACILITIES OF LOCAL EXCHANGE CARRIERS

Description

Section 20.11 codifies section 332(c)(1)(B) of the Act,[84] which was enacted by Congress as part of the Omnibus Budget Reconciliation Act of 1993.[85] Section 20.11[86] provides that local exchange carriers (LECs) must provide reasonable interconnection to commercial mobile radio service (CMRS) providers on request, and that LECs and CMRS providers must each reasonably compensate the other for terminating traffic that originates on their respective facilities.

In the Telecommunications Act of 1996, Congress added sections 251 and 252 to the Act. These statutory provisions establish interconnection rights among all telecommunications carriers, and set forth terms and conditions under which interconnection must be provided by one carrier to another.[87] While enacting sections 251 and 252, Congress also left section 332(c)(1)(B) of the Act intact. In the 1996 *First Local Competition Order*, the Commission codified new interconnection rules in Part 51 as part of its implementation of sections 251 and 252.[88] The Commission also concluded that, in light of Congress' retention of section 332(c)(1)(B), the Commission retained separate authority over LEC-CMRS interconnection pursuant to that section.[89] Because the Commission viewed sections 251, 252, and 332 of the Act as furthering a common goal with respect to interconnection, the Commission declined at that point to act further on or define the scope of its section 332 interconnection authority, but instead amended section 20.11 to require that LECs and CMRS providers comply with the interconnection rules in Part 51.[90]

Section 20.11 is organized into three lettered sub-parts: Subsection (a) requires LECs to provide the type of interconnection requested by mobile radio service providers, within reason. Subsection (b) requires LECs and CMRS providers to compensate each other reasonably for terminating traffic that originates on each other's facilities. Subsection (c) requires LECs and CMRS providers to comply with the Part 51 interconnection rules.

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84 47 U.S.C. § 332(c)(1)(B).

85 *See* 47 U.S.C. § 332.

86 47 C.F.R. § 20.11.

87 *See* 47 U.S.C. §§ 251, 252.

88 Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-68, Interconnection between Local Exchange Carriers and Commercial Mobile Radio Service Providers, *First Report and Order*, 11 FCC Rcd 15499, 16195 (1996) (*Local Competition First Report and Order*).

89 *Local Competition First Report and Order*, 11 FCC Rcd at 16005, ¶ 1023.

90 47 C.F.R. § 20.11(c). *See also Local Competition First Report and Order*, 11 FCC Rcd at 16195.

Purpose

The purpose of the LEC-CMRS interconnection rule is to promote competition in the telecommunications market by ensuring that all LECs and CMRS providers provide reasonable interconnection to one another subject to reasonable rates, terms, and conditions. The rule regulates the conduct of LECs with market power in their interconnection relationships with CMRS providers. Historically, some LECs denied or restricted interconnection options available to CMRS providers, or required CMRS providers to compensate the LEC for LEC-originated traffic that terminated on the CMRS provider's network. Congress enacted section 332(c)(1)(B), and the Commission adopted section 20.11 codifying this provision, in order to curtail such practices.

Analysis

Status of Competition

In the *Seventh CMRS Competition Report*, the Commission found that while firm data are difficult to come by, analysts estimate that 3 to 5 percent of wireless customers use their wireless phones as their only phone.[91] The Commission also found that there is growing evidence that consumers are substituting wireless service for traditional wireline communications, and that an increasing number of mobile wireless carriers offer service plans designed to compete directly with wireline local telephone service.[92]

Advantages

Section 20.11 sets forth basic requirements for reasonable and nondiscriminatory interconnection arrangements between LECs and CMRS providers, but does not impose detailed standards or technical requirements. It reduces the potential for anti-competitive behavior, while affording carriers reasonable flexibility with respect to the terms and conditions of interconnection so long as the basic requirements of the rule are adhered to.

Disadvantages

Section 20.11 imposes certain transaction costs on carriers to ensure that their interconnection arrangements comply with the rule, and may lead to disputes and litigation between carriers about what constitutes "reasonable" interconnection under the rule. In addition, the overlap between this rule and the Part 51 interconnection rules may cause some duplication of regulatory requirements.

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[91] *See* Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993; Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services, *Seventh Report*, 17 FCC Rcd 12985, 13017 (2002) (*Seventh CMRS Competition Report*).

[92] *See id.* at 13017-18.

Recent Efforts

The Commission has commenced a fundamental examination of all forms of intercarrier compensation.[93] The purpose of the rulemaking is to examine the existing patchwork of interconnection rules and to seek an approach that minimizes the need for regulatory intervention.

On September 30, 2002, the Commission sought comment on two petitions[94] that request rulings regarding the intercarrier compensation regime applicable to certain types of wireless traffic.[95] In the *T-Mobile Petition*, CMRS petitioners seek a declaratory ruling that the Commission "reaffirm that wireless termination tariffs are not a proper mechanism for establishing *reciprocal compensation* arrangements" between LECs and CMRS providers.[96] Petitioners contend that some rural LECs have filed state tariffs to collect reciprocal compensation for the termination of intra-MTA traffic originated by CMRS carriers. Petitioners assert that compensation for such traffic should be paid only when the LEC and CMRS carrier have entered into an interconnection agreement under section 251.

In the *US LEC Petition*, US LEC asks the Commission to "issue a ruling reaffirming that LECs are entitled to recover *access charges* from IXCs for the provision of access service on interexchange calls originating from, or terminating on, the networks of CMRS providers."[97] US LEC asserts that industry practice is for IXCs to pay access charges to LECs for this traffic, but that one IXC has recently declined to pay these charges.

The Commission has also sought comment on a petition for declaratory ruling filed by Sprint PCS (Sprint) that requests confirmation that: (1) an incumbent local exchange carrier (ILEC) may not refuse to load telephone numbering resources of an interconnecting carrier, and (2) an ILEC may not refuse to honor the routing and rating points designated by that interconnecting carrier.[98]

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93 In the Matter of Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Notice of Proposed Rulemaking*, 16 FCC Rcd 9610 (2001) ("*Intercarrier Compensation NPRM*").

94 T-Mobile USA, Inc., Western Wireless Corporation, Nextel Communications, Inc., and Nextel Partners, Inc. filed their petition on September 6, 2002, and US LEC filed its petition on September 18, 2002. See In the Matter of Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, Petition for Declaratory Ruling of T-Mobile USA, Inc., et al. (filed Sept. 6, 2002) (*T-Mobile Petition*); Petition of US LEC Corp. for Declaratory Ruling Regarding LEC Access Charges for CMRS Traffic (filed Sept. 18, 2002) (*US LEC Petition*).

95 Comments Sought on Petitions for Declaratory Ruling Regarding Intercarrier Compensation for Wireless Traffic, CC Docket No. 01-92, *Public Notice*, 17 FCC Rcd 19046 (2002).

96 In the Matter of Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Petition for Declaratory Ruling of T-Mobile USA, Inc., et al*. (filed Sept. 6, 2002).

97 *US LEC Petition*. The Commission placed the petition into the record of CC Docket No. 01-92.

98 In the Matter of Sprint Corp. Petition for Declaratory Ruling Regarding the Routing and Rating of Traffic by ILECs, CC Docket No. 01-92, *Petition of Sprint* (filed May 9, 2002) (*Sprint PCS Petition*).

All three petitions are part of the same docket as the *Intercarrier Compensation NPRM*, which was released on April 27, 2001.[99]

Comments

USTA recognizes that the Commission is considering intercarrier compensation issues in the Intercarrier Compensation rulemaking and states that it renews the comments it filed in the 2000 Biennial Review. Specifically, USTA indicates that the Commission should deny requests to expand the rules to require reciprocal compensation to CMRS providers for the traffic sensitive elements of their mobile networks.

In addition, USTA states that the Commission should incorporate any subsidiary intercarrier compensation issues, such as those raised in the *Sprint PCS Petition*, into the ongoing broader Intercarrier Compensation proceeding.[100] USTA states that this will allow for more efficient handling of all intercarrier compensation. Sprint argues that USTA's request does not address the possible repeal of any regulation and is outside the scope of the Biennial Review.[101]

Recommendation

USTA's argument regarding the incorporation of related issues into the broader proceeding is one of process that does not address whether any particular regulation is no longer necessary or in the public interest. Accordingly, staff concludes that these arguments fall outside of the scope of this Biennial Review.

However, staff notes that the issues raised with regard to section 20.11 are within the scope of review of the rulemaking pending before the Commission with regard to its *Intercarrier Compensation NPRM*. Staff recommends that the comments of USTA regarding section 20.11 be incorporated into the Commission's pending rulemaking proceeding.

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[99] *See* In the Matter of Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Notice of Proposed Rulemaking*, 16 FCC Rcd 9610 (2001).

[100] USTA Comments at 6.

[101] Sprint Reply Comments at 3.

PART 20, SECTION 20.12 – RESALE

Description

Section 20.12(b)[102] provides that any carrier of Broadband PCS (except those C, D, E, and F block PCS licensees that do not own and control and are not owned and controlled by firms also holding cellular, A or B block licenses), Cellular Radio Telephone Service, or Specialized Mobile Radio (SMR) Services that offers real-time, two-way interconnected voice service with switching capability ("covered CMRS provider") must permit resale of its services.

The resale provision sunset on November 24, 2002.

Comments

No comments were filed with respect to this rule.

Analysis

Because this rule is no longer in effect, no review is required as part of this Biennial Review. Staff recommends that this rule be deleted from the Code of Federal Regulations.

[102] 47 C.F.R. § 20.12(b).

PART 20, SECTION 20.12 – ROAMING

Description

Roaming occurs when the subscriber of one CMRS provider utilizes the facilities of another CMRS provider with which the subscriber has no direct, pre-existing service or financial relationship to place an outgoing call, to receive an incoming call, or to continue an in-progress call. Roaming can be done "manually," in which a subscriber establishes a relationship with the host carrier usually by providing a credit card number, or "automatically," in which the subscriber does nothing more than turn on her telephone. Automatic roaming requires a pre-existing contractual agreement between the host and home carriers.

Section 20.12(c)[103] provides that any "covered CMRS" carrier must provide mobile radio service upon request to any subscriber in good standing, including roamers, while the subscriber is within any portion of the licensee's licensed service area, assuming that the subscriber is using technically compatible mobile equipment. The rule only mandates that carriers offer manual roaming, and does not require provision of automatic roaming. The manual roaming rule was adopted in 1996.[104]

Purpose

The purposes of the roaming provision are to ensure seamless service to wireless customers who roam out of their home service areas, and to prevent carriers from restricting competition and consumer choice through refusal to provide service to roamers.

Analysis

Status of Competition

Market forces are working to make roaming services, in particular automatic roaming, widely available and increasingly less expensive. Competition in the provision of roaming services has become increasingly competitive over time.[105] All the major nationwide carriers as well as many regional and small carriers offer nationwide or nearly nationwide plans and wide-area, single-rate calling plans that include roaming service to their subscribers at no additional charge. Buildout is widespread and continuously expanding. Most cellular carriers have reached automatic roaming agreements among themselves, even though section 20.12 only mandates manual roaming. However, some local and regional carriers have alleged that they have been unable to enter into roaming

[103] 47 C.F.R. § 20.12(c).

[104] *See* Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, *Second Report and Order and Third Notice of Proposed Rulemaking*, 11 FCC Rcd 9462 (1996).

[105] *See generally Seventh CMRS Competition Report*, 17 FCC Rcd at 13001.

agreements with competing carriers. Consumers' ability to roam may also be limited because they can only roam on networks that use the same technical standard (CDMA, TDMA, GSM, iDEN) as the home carrier.

Advantages

The manual roaming rule provides a clear standard and is minimally intrusive because it does not require CMRS carriers to reconfigure their systems to support technically incompatible roaming.

Disadvantages

For carriers, manual roaming obligations impose some administrative and technical burdens associated with caller verification, billing, and similar issues. For consumers, manual roaming imposes considerably higher fees than automatic roaming and has become an option of last resort due to its cumbersome registration process and difficulty of use.

Recent Efforts

At the time that it adopted the manual roaming rule, the Commission also issued a *Third Notice of Proposed Rulemaking* in CC Docket 94-54 asking (1) whether to sunset the manual roaming rule, and (2) whether to mandate automatic roaming for any carriers.[106] On August 28, 2000, the Commission released a *Third Report and Order and Memorandum Opinion and Order on Reconsideration*, in which it affirmed the existing manual roaming rule, with some modification and clarification.[107] On October 4, 2000, the Commission initiated a new rulemaking proceeding in WT Docket 00-193 to consider the impact of technological advances and the rapid expansion of the CMRS market since the *1996 Roaming Order* on issues relating to both automatic and manual roaming.[108] In its *Roaming Notice*, the Commission requested comment on whether it should adopt an automatic roaming provision for any CMRS system and whether it should retain, eliminate, or sunset the existing manual roaming requirement. This proceeding remains pending.

Comments

No comments were filed with respect to this rule.

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[106] Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, *Second Report and Order and Third Notice of Proposed Rulemaking*, 11 FCC Rcd 9462 (1996).

[107] Interconnection and Resale Obligations Pertaining to Commercial Mobile Radio Services, *Third Report and Order and Memorandum Opinion and Order on Reconsideration*, 15 FCC Rcd 15975 (2000).

[108] Automatic and Manual Roaming Obligations Pertaining to Commercial Mobile Radio Service*, Notice of Proposed Rulemaking*, 15 FCC Rcd 21628 (2000) (*Roaming Notice*).

Recommendation

Staff notes that the Commission has an open proceeding, WT Docket 00-193, in which it is considering the continued necessity of the manual roaming rule in light of competitive and other developments. Although staff received no comments in the Biennial Review proceeding on section 20.12 relating to roaming issues, staff believes that the competitive developments discussed above warrant consideration of whether the rule remains necessary in the public interest as a result of meaningful competition between service providers. Accordingly, the staff recommends consideration of this issue in the pending proceeding.

PART 20, SECTION 20.18 – 911 SERVICE

Description

Section 20.18[109] requires certain broadband CMRS providers (delineated in subpart (a) of this rule) to comply with guidelines set by the Commission for the implementation of Enhanced 911 services (E911) for all of their customers, including those customers requiring TTY devices.

The rule provides for implementation of E911 in two phases. In Phase I, CMRS carriers must implement E911 capability in their networks to provide 911 dispatchers with a callback number and the location of the cell site that received the call. In Phase II, carriers must provide Automatic Location Identification (ALI) capability for all 911 calls placed by wireless telephone users, so that the caller's location can be more accurately determined.

The rule provides for implementation of Phase I by April 1, 1998, or within six months of a request by a Public Safety Answering Point (PSAP). In Phase II, licensees who employ network-based solutions must provide service to at least 50 percent of their coverage area or their population by October 1, 2001, and licensees employing handset-based technologies must ensure that at least 50 percent of all new handsets activated are location-capable by October 1, 2001.[110] Section 20.18 further describes who must comply with E911 requirements, the basic E911 service that CMRS carriers must provide, as well as the accuracy percentage and timeframe in which these services must be deployed. Finally, the rule provides alternative requirements for carriers who choose to employ an intermediary dispatcher rather than routing their customers' 911 calls directly to a PSAP.

Purpose

The purpose of section 20.18 is to enhance public safety and facilitate effective and efficient law enforcement. Unlike a wireline 911 call, a dispatcher receiving a wireless 911 call can only obtain information regarding the caller's location and callback number if the caller can provide it. Section 20.18 rule attempts to provide the same reliable and ubiquitous aid to wireless 911 callers that is available to wireline callers.

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[109] 47 C.F.R. § 20.18.

[110] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Fourth Memorandum Opinion and Order*, 15 FCC Rcd 17422 (2000), *recon. petition pending;* Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Third Report and Order*, 14 FCC Rcd 17388, 17436 (1999) (*Third Report and Order*).

Analysis

Status of Competition

Because the purpose of section 20.18 is to enhance public safety and facilitate effective and efficient law enforcement, general competitive developments in the services to which the rule applies do not affect the need for this rule.

Advantages

The E911 rule sets national standards and deadlines to ensure that all CMRS carriers throughout the United States will provide E911 services in a timely manner. At the same time, the rule is technologically and competitively neutral because it allows carriers and equipment manufacturers to determine the best method to implement E911 capability. Allowing manufacturers and carriers to adopt the technology of their choice encourages the parties to arrive at a solution that is both effective and cost-efficient. Finally, Section 20.18 allows the Commission to determine easily which carriers have failed to comply with the mandate and are providing insufficient E911 services.

Disadvantages

The E911 rule imposes administrative, technical, and economic costs on carriers who must reconfigure their networks to comply with the rule.

Recent Efforts

The Commission continues to promote its goal of ensuring that wireless E911 service is deployed as rapidly as possible. In a set of Orders adopted in September 2000 and October 2001, the Commission granted waivers to six major national wireless carriers from certain of the initial Phase II deadlines, while adopting revised, specific, and enforceable Phase II deployment schedules.[111] In addition, the Commission has taken steps to identify technical and operational barriers to E911 deployment. In the fall of 2001, the Commission selected an independent telecommunications expert, Dale N. Hatfield, to conduct an inquiry on E911 technical issues, in order to help identify technical and operational problems in wireless E911 deployment. A *Report on Technical and Operational Issues Impacting the Provision of Wireless Enhanced 911 Services* (Hatfield Report) was filed on October 15, 2002. The Commission will use the information in the Hatfield Report and related public comments to assess the status of E911 deployment.

[111] *See, e.g.,* Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Order Addressing Request for Waiver by Cingular Wireless LLC*, 16 FCC Rcd 18305 (2001); Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Fourth Memorandum Opinion and Order,* 15 FCC Rcd 17422 (2000), *recon. petition pending*. All six waiver orders are posted at www.fcc.gov/911/enhanced/.

In addition, the Commission has recognized that non-nationwide CMRS providers have much less ability than nationwide carriers to obtain the specific vendor commitments necessary to deploy E911 immediately. On July 11, 2002, the Commission adopted an order granting non-nationwide (small and mid-sized) CMRS carriers temporary, limited relief from the E911 Phase II implementation rules. While good cause exists to stay the rules temporarily for these specific carriers, a modification or elimination of the Phase II rules would have a detrimental affect on the overall deployment of wireless E911. Finally, the Commission has recently adopted rules clarifying what constitutes a valid Public Safety Answering Point (PSAP) request so as to trigger a wireless carrier's obligation to provide E911 service to that PSAP within six months.[112]

Comments

CTIA, RCA, NENA/APCO/NASNA, and Sprint all indicate that the Commission should clarify and/or modify certain aspects of the Commission's E911 Phase II rules. CTIA states that the Commission should modify the rules to permit carriers and PSAPs to negotiate a mutually agreed upon implementation period, and the six-month implementation period should be tolled while a PSAP assembles documentation or during a readiness dispute.[113] RCA and NENA/APCO/NASNA agree with a negotiated implementation period.[114] NENA/APCO/NANSNA, however, notes that negotiations are not inconsistent with a fixed rule, and disagrees with CTIA's tolling suggestion as written.[115] RCA also contends that the Commission should resolve a discrepancy between the terms of the *Order to Stay*[116] and Section 20.18(f), which concerns phase-in requirements for network-based E911 location-information technologies.[117]

In addition, CTIA and RCA contend that the Commission's E911 rules should be clarified to permit any CMRS provider to opt into the requirements of any FCC order that provides E911 waiver relief to other CMRS licensees.[118] Further, CTIA contends that the Commission should amend its E911 rules to account for the widespread use of non-

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[112] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Order*, 16 FCC Rcd 18982 (2001).

[113] CTIA Petition at 18-19.

[114] RCA Reply Comments at 4; NENA/APCO/NASNA Comments at 2. *See also* Texas RSA 15B2 et al. *Ex Parte* Comments at 6 (supporting CTIA's proposal to permit carriers to negotiate a mutually agreeable implementation schedule with the appropriate PSAP and to toll the six month implementation period while a PSAP prepares documentation or during a readiness dispute).

[115] NENA/APCO/NASNA Comments at 2.

[116] In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Order to Stay*, 17 FCC Rcd 14841 (2002).

[117] RCA Reply Comments at 5. *See also* Texas RSA 15B2 et al. *Ex Parte* Comments at 8-9 (asserting that the language in the *Order to Stay* is clearly in error and that the Commission should issue an Erratum to correct the discrepancy with the text of section 20.18(f)).

[118] CTIA Petition at 20; RCA Reply Comments at 4-5.

subscribed phones.[119] NENA/APCO/NASNA states that it is not persuaded that clarifying the rules will be helpful or necessary, and indicates that it intends to take related issues up anew in the current wireless E911docket.[120] However, NENA/APCO/NASNA argues that the Commission should clarify that rule 20.18(b), which states that all 911 calls must be delivered to a PSAP, does not preclude efforts to arrive at standards for "congestion control."[121] Sprint agrees that the "forward all calls" requirement should be examined.[122] Sprint states that while some modifications of the E911 rules would be appropriate, they should be addressed in the E911 proceeding.[123]

Recommendation

As stated above, the purpose of section 20.18 is to enhance public safety and facilitate effective and efficient law enforcement. As such, the need for and purposes for this section are not affected by competitive developments that guide our Section 11 analysis. We accordingly do not find that the rule is "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, upon review of the comments submitted in this proceeding, staff concludes that modification or repeal of section 20.18 is also not warranted for reasons other than those related to competitive developments that fall within the scope of section 11 review. First, the Commission recently modified its rules to provide additional clarification on the issue of PSAP readiness, and addressed the issue of tolling the six-month period.[124] Second, the Commission's E911 rules do take non-subscriber phones into account. Section 20.18 takes into account the fact that some phones may not be location capable by only requiring 95% penetration of location-capable handsets among a carrier's subscribers by 2005. Further, CTIA has not argued that carriers with network-based solutions will not be capable of complying with Phase II requirements.

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[119] CTIA Petition at 19.

[120] NENA/APCO/NASNA Comments at 3.

[121] NENA/APCO/NASNA Comments at 4. *See also* Texas RSA 15B2 et al. *Ex Parte* Comments at 7 (opposes NENA/APCO/NASNA's suggestion that the carrier obligation to forward all 911 calls to the designated PSAP does not extend to "repeated abusive or harassing 911 calls").

[122] Sprint Reply Comments at 8.

[123] Texas RSA 15B2 et al. also asserts that the Commission should amend the 911 rules to reinstate the provision conditioning a carrier's obligation to provide 911 services on the availability of a cost recovery mechanism for the carrier's costs. Texas RSA 15B2 et al. *Ex Parte* Comments at 7-8. Because Texas RSA 15B2 et al.'s proposal is more appropriate for a petition for rulemaking than a review to modify or eliminate existing rules, staff concludes that their request is beyond the scope of this Biennial Review proceeding.

[124] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Order on Reconsideration*, FCC 02-318 (rel. Nov. 26, 2002).

Third, we view waiver applicability, rule interpretation, and the other E911-related issues raised by commenters as beyond the scope of the Biennial Review. The Commission addresses waivers on a case-by-case basis to determine whether the public interest is better served by a waiver of a rule than by compliance with the rule. CTIA's and RCA's "opt in" suggestion does not request the streamlining or elimination of a rule or set of rules but instead contemplates a wholesale revisitation of the Commission's administrative procedures, and it is therefore beyond the scope of the Biennial Review. Similarly, we agree with Sprint that issues surrounding the "forward all calls" rule should be addressed in the Commission's existing E911 docket. Further, we find that RCA's comment alleging a discrepancy between the *Order to Stay* and Section 20.18(f) is outside the scope of the Biennial Review. RCA has not requested that the Commission modify or eliminate this rule. Rather, RCA alleges that the order is inconsistent with the rules. As such, this request is beyond the scope of the Biennial Review. Finally, we will treat NENA/APCO/NASNA's request regarding congestion control as a petition for a rulemaking.

PART 20, SECTION 20.20 – CONDITIONS APPLICABLE TO

PROVISION OF CMRS SERVICE BY INCUMBENT LOCAL EXCHANGE CARRIERS

Description

Section 20.20[125] required incumbent LECs (ILECs) providing in-region broadband CMRS to provide such services through a separate affiliate. The rule imposed restrictions on the separate affiliate, including: (1) maintaining separate books of account; (2) not jointly owning transmission or switching facilities with the affiliated ILEC that the ILEC uses for the provision of local exchange services in the same market; and (3) acquiring any services from the affiliated ILEC on a compensatory arm's length basis pursuant to our affiliate transaction rules.[126]

This separate affiliation rule sunset on January 1, 2002.

Comments

No comments were filed with respect to this rule.

Analysis

Because this rule is no longer in effect, no review is required as part of this Biennial Review. Staff recommends that this rule be deleted from the Code of Federal Regulations.

[125] 47 C.F.R. § 20.20.

[126] 47 C.F.R. § 20.20(a).

PART 21 – DOMESTIC PUBLIC FIXED RADIO SERVICES

Description

Statutory authority for Part 21 of the Commission's rules is found in Titles I through III of the Communications Act of 1934, as amended. The purpose of the rules and regulations in Part 21 is to prescribe the manner in which portions of the radio spectrum may be made available for domestic communication common carrier and multipoint distribution service non-common carrier operations which require transmitting facilities on land or in specified offshore coastal areas within the continental shelf.

Part 21 is organized into seven lettered sub-parts:

A – General
B – Applications and Licenses
C – Technical Standards
D – Technical Operation
E – Miscellaneous
F – Developmental Authorizations
K – Multipoint Distribution Service[127]

Purpose

Part 21 is intended to ensure that licensees are financially and technically qualified to provide service in a manner that will not create interference with authorized transmissions. The procedures prescribed in Part 21 are designed to provide the Commission and the public with adequate information regarding licensees, prospective licensees, facilities, and proposed changes in facilities or in the ownership or control of licensees. Finally, the rules are intended to promote efficient use of the radio spectrum and to encourage innovation in communication services, equipment, and techniques.

Analysis

Status of Competition

As a result of the Commission's decision in its *Two-Way Order*,[128] Part 21 licensees may now offer two-way broadband transmission services in competition with numerous

[127] On March 25, 2002, the Bureau assumed the regulatory duties associated with the Multipoint Distribution Service (MDS) and the Instructional Television Fixed Service (ITFS). *See* Radio Services Are Transferred From Mass Media Bureau to Wireless Telecommunications Bureau, *Public Notice*, 17 FCC Rcd 5077 (2002). The Commission regulates ITFS pursuant to Part 74 of its rules, 47 C.F.R. §§ 74.1 *et seq*. The Bureau does not, however, consider ITFS to be a telecommunications service and therefore examination of this service falls outside of the scope of this Biennial Review.

[128] Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97-217, *Report and Order*, 13 FCC Rcd 19112 (1998), *recon.,* 14 FCC Rcd 12764 (1999), *further recon*., 15 FCC Rcd 14566 (2000) (*Two-Way Order*).

wireline and wireless service providers.[129] Part 21 licensees also provide video programming in competition with cable television systems, broadcast television stations, direct broadcast satellite systems, and other multichannel video programming distributors.[130]

Advantages

Part 21 licenses are awarded through a competitive bidding process, which creates an incentive for rapid deployment of services and, thus, promotes efficient use of the radio spectrum. The technical standards in Part 21 ensure interference protection and promote effective use of proposed and authorized facilities. The Part 21 rules further benefit the public by affording access to information regarding licensees, prospective licensees, facilities, and proposed changes in facilities or in the ownership or control of licensees. Such access also reduces the cost of enforcing Commission rules by facilitating analysis by interested parties, thereby supplementing Commission review and enforcement efforts. Finally, Part 21 promotes innovation through the availability of developmental authorizations for technical experimentation.

Disadvantages

Part 21 contains language and requirements that have been superseded by recent Commission rulemakings.

Recent Efforts

In 1998, the Commission adopted rule changes allowing MDS and ITFS licensees to construct digital two-way systems capable of providing high-speed, high-capacity broadband service, including two-way Internet service via cellularized communication systems.[131] In 2001, it took the further step of permitting MDS and ITFS licensees to provide mobile services.[132] However, in neither case did it provide any additional mechanisms for curtailing the interference that two-way or mobile systems receive from traditional high-powered MDS or ITFS video operations, the effects of which extend far beyond their effective service areas.[133]

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[129] *See Inquiry Concerning the Deployment of Advanced Telecommunications Capability*, 15 FCC Rcd 20913 (2000).

[130] *See Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming*, 17 FCC Rcd 1244 (2002).

[131] *See generally Two Way Order*, 15 FCC Rcd at 14566

[132] Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, *First Report and Order and Memorandum Opinion and Order*, 16 FCC Rcd 17222 (2001).

[133] *See* FCC Spectrum Study of the 2500-2690 MHz Band: Final Report, March 30, 2001, at 31 (ITFS/MDS and third-generation wireless systems must be separated by distances exceeding 100 miles to ensure that ITFS/MDS transmitters will not cause harmful interference to 3G receivers).

On October 7, 2002, the Wireless Communications Association International, Inc., the National ITFS Association, and the Catholic Television Network filed "A Proposal for Revising the MDS and ITFS Regulatory Regime." The Wireless Telecommunications Bureau has issued a public notice seeking comment on the paper.[134] The proposal states that further rule changes are needed to facilitate provision of two-way fixed and mobile services, while allowing others to continue to provide one-way video services. The stated goals of the proposal are:

- Eliminate site-by-site licensing requirements for Multichannel Multipoint Distribution Service (MMDS) and ITFS licensees;
- modify interference protection rules to facilitate deployment of two-way cellular wireless services;
- segregate high-power and low-power operations into separate band segments to avoid mutual interference;
- consolidate licensed channels into contiguous blocks, replacing the existing interleaved licensing approach; and
- remove regulatory underbrush and conform the MMDS/ITFS rules to those applicable to other services administered by the Bureau, particularly geographically licensed flexible use services.

The proposal suggests a variety of changes to the service rules applicable to MMDS and ITFS licensees, urges the Commission to suspend build-out requirements for all MMDS and ITFS licensees, and offers suggestions for disposing of mutually-exclusive ITFS applications.

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated certain Part 21 rules pertaining to competitive bidding to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[135]

Comments

No comments were filed with respect to this rule part.

Recommendation

The Part 21 rules are procedural, operational, and technical in nature, and ensure interference protection, promote efficient use of facilities, and set forth licensing requirements and application procedures. As such, the need and purposes for these rules are not affected by competitive developments that guide our Section 11 analysis.

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[134] Wireless Telecommunications Bureau Seeks Comment on Proposal to Revise Multichannel Multipoint Distribution Service and the Instructional Television Fixed Service Rules, *Public Notice*, DA 02-2732 (rel. Oct. 17, 2002).

[135] *See Competitive Bidding Conforming Edits Order, supra* (modifying or eliminating sections 21.950-21.953 and 21.955-21.960).

Accordingly, we do not find that these Part 21 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, staff notes that the Commission is engaged in the ongoing rulemaking embodied in the review of the aforementioned proposal.

PART 22 – PUBLIC MOBILE SERVICES

Description

Part 22[136] contains licensing, technical, and operational rules for five CMRS services collectively referred to as Public Mobile Services. These services are the Paging and Radiotelephone Service, the Cellular Radiotelephone Service, the Rural Radiotelephone Service, the Air-Ground Radiotelephone Service, and the Offshore Radiotelephone Service. In general, the rules in this part: (1) specify the frequency bands allocated to each service; (2) provide methods for determining the protected service area of stations in each service; (3) establish minimum construction or coverage requirements for licensees; and (4) define technical limits on operation (*e.g.*, transmitter power) to reduce the likelihood of interference.

Part 22 comprises 10 subparts:

Subpart A - Scope and Authority
Subpart B - Licensing Requirements and Procedures
Subpart C - Operational and Technical Requirements
Subpart D - Developmental Authorizations
Subpart E - Paging and Radiotelephone Service
Subpart F - Rural Radiotelephone Service
Subpart G - Air-Ground Radiotelephone Service
Subpart H - Cellular Radiotelephone Service
Subpart I - Offshore Radiotelephone Service
Subpart J - Required New Capabilities Pursuant to the Communications Assistance for Law Enforcement Act (CALEA)

Subparts A, B, and C apply generally to all Part 22 licensees. Subpart D provides for the licensing on a developmental basis of stations that are to be used for testing new technologies or services. Each of the next five subparts (subparts E through I) contains rules applicable to one of the five specific Part 22 services. Finally, subpart J implements the provisions of the Communications Assistance for Law Enforcement Act (CALEA) as they apply to Part 22 services.

Purpose

Part 22 of the Commission's rules comprises a minimal regulatory framework that facilitates the rapid, efficient provision of commercial wireless telecommunications services to the general public at reasonable rates, by: (1) utilizing a competitive bidding process to issue exclusive licenses to the service provider applicants who value them most; (2) preserving and enhancing competition among these service providers once licensed; (3) ensuring that available spectrum allocations are used efficiently; and (4) reducing the likelihood of harmful interference between licensed stations.

[136] 47 C.F.R. Part 22.

Analysis

Status of Competition

As detailed in the *Seventh CMRS Competition Report*, CMRS providers, including those licensed under Part 22, operate in an environment that is marked by increased competition, innovation, lower prices for consumers, and increased diversity of service offerings.[137] Mobile telephony operators experienced strong growth and competitive development and continued to build out their footprints, deploy their networks in an increasing number of markets, expand their digital networks, and develop innovative pricing plans. Competition within the mobile data industry is developing successfully, as evidenced by the multitude of dynamic services, service packages, and pricing plans.

Advantages

Overall, the Part 22 rules provide a clear, predictable structure for the assignment and use of spectrum. In Part 22, provision for accepting competing mutually exclusive applications and selecting the licensee by means of competitive bidding results in licenses being issued to the entities that value them the most. Geographic area licensing minimizes the amount of paperwork involved in obtaining a license and thus speeds the authorization of new competitive services to the public. Minimal and flexible technical standards facilitate the introduction of new technologies.

Disadvantages

The Part 22 rules impose administrative burdens inherent to the licensing process and necessary for compliance with technical and operational rules. The technical standards in most Part 22 services place the burden of coordination on the licensees themselves.

Recent Efforts

In the 2000 Biennial Review, staff found that Part 22 contained a number of relatively old rules that were adopted when wireless technology and competitive conditions were very different.[138] Accordingly, staff recommended that the Commission (1) initiate a rulemaking to review the Part 22 cellular rules to consider which of these rules are obsolete because of competitive or technological developments, and (2) review rules regulating Part 22 non-cellular services on the same basis.[139] The Commission accepted these recommendations in the *2000 Biennial Review Order*.[140]

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[137] *See Seventh CMRS Competition Report*, 17 FCC Rcd at 12988.

[138] *See* Federal Communications Commission Biennial Regulatory Review 2000, CC Docket No. 00-175, *Updated Staff Report*, Appendix IV at 56, 59-60, 62, 64, 67-68 (rel. Jan. 17, 2001) (*2000 Biennial Review Staff Report*).

[139] *Id*.

[140] In the Matter of the 2000 Biennial Regulatory Review, CC Docket No. 00-175, *Report*, 16 FCC Rcd 1207, 1230-31 ¶ 67 (2001) (*2000 Biennial Review Order*).

In May 2001, pursuant to the recommendation in the 2000 Biennial Review, the Commission initiated a rulemaking proceeding to review the Commission's cellular rules, as well as certain other Part 22 rules affecting CMRS providers.[141] In September 2002, the Commission released two orders in this proceeding that modified or eliminated various cellular and other Part 22 rules that had become outdated due to technological change, increased competition in the CMRS, or supervening rules.[142] With respect to the 2000 Biennial Review recommendation to review rules regulating Part 22 non-cellular services, staff is currently reviewing these services – including the Paging and Radiotelephone Service, Rural Radio Service, Air-Ground Telephone Service, and Offshore Radiotelephone Service – in order to streamline these rules, and revise or eliminate them wherever appropriate.

As noted in the Part 1, subpart Q section, in the *Competitive Bidding Conforming Edits Order* the Wireless Telecommunications Bureau modified or eliminated certain Part 22 rules pertaining to competitive bidding to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[143]

Comments

CTIA urges the Commission to adhere to a policy of regulatory parity and eliminate unnecessary regulatory burdens imposed upon cellular service providers. CTIA cites sections 22.303 (requiring cellular providers to mark every transmitting facility with a station call sign) and 22.367 (imposing a vertical polarization requirement on cellular licensees) as examples of obligations that are imposed on cellular licensees but not on other CMRS providers.[144] RCA also urges the Commission to eliminate the section 22.303 requirement that cellular carriers post the station call sign at every fixed transmitting facility of the station.[145] Radiosoft asks the Commission to standardize the

[141] Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Notice of Proposed Rulemaking*, 16 FCC Rcd 11169 (2001).

[142] Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Report and Order*, 17 FCC Rcd 18401 (2002); Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Second Report and Order*, 17 FCC Rcd 18485 (2002); Year 2000 Biennial Regulatory Review – Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and other Commercial Mobile Radio Services, WT Docket No. 01-108, *Erratum*, DA 02-2969 (rel. Nov. 4, 2002) (*Cellular Biennial Review First Report and Order* and *Cellular Biennial Review Second Report and Order*, respectively; collectively *Cellular Biennial Review Orders*).

[143] *See Competitive Bidding Conforming Edits Order*, *supra* (modified or eliminated sections 22.201, 22.203, 22.205, 22.207, 22.209, 22.211, 22.213, 22.215, 22.217, 22.223, 22.225, 22.227-22.228, 22.960-22.961, and 22.967).

[144] CTIA Petition at 20-22.

[145] RCA Reply Comments at 5.

Commission's rules in terms of references to the Height Above Average Terrain (HAAT) standard, including references in Part 22.[146]

AMTA contends that the Part 22 rules governing permissible uses of the spectrum should be clarified or modified. Specifically, AMTA proposes that the section 22.7 definition of Part 22 licensees as "common carriers" be modified to reflect more current regulatory delineations, thereby making the spectrum available for a broader range of carriers. AMTA recommends modifying section 22.7 to specify "telecommunications carriers" rather than "common carriers" as the criterion for eligible entities.[147]

Comments on other Part 22 subparts will be addressed in the detailed analysis of those subparts.

Recommendation

First, staff notes that the 2000 Biennial Review proceeding relating to Cellular Service amended section 22.367 to eliminate the requirement for cellular carriers that electromagnetic waves radiated by transmitters be vertically polarized.[148] The rule changes requested by CTIA, RCA, AMTA, and Radiosoft concern licensing and technical rules. In particular, these rules are concerned with operational and interference-related issues (e.g., protection against interference) among Part 22 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

We conclude, however, that modification or elimination of these rules may be in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. We therefore recommend that the Commission institute a proceeding to determine whether to revise or eliminate these rules. Other potential modifications to streamline the rules in other specific subparts are noted below in the detailed analysis of those Part 22 subparts.

[146] Radiosoft Comments at 1.

[147] AMTA Reply Comments at 8-9.

[148] *Cellular Biennial Review First Report and Order,* 17 FCC Rcd at 18401.

PART 22, SUBPART E – PAGING AND RADIOTELEPHONE SERVICE

Description

Part 22, subpart E contains licensing, technical, and operational rules for the Paging and Radiotelephone Service (PARS).[149] Most of the application filing rules were moved from this subpart to Part 1 in connection with implementation of electronic filing procedures and the Universal Licensing System.[150] This service was originally titled the "Domestic Public Land Mobile Radio Service" (DPLMRS). The allocations covered by subpart E are primarily used for tone, voice, numeric, and alphanumeric paging services. In general, the rules in this subpart: (1) specify the frequency bands allocated to PARS; (2) provide methods for determining the reliable service area and interfering contour of individual stations; (3) establish construction and commencement of operation requirements for licensees; and (4) define technical limits on operation (*e.g.*, transmitter power) to reduce the likelihood of interference.

The PARS rules have evolved over the years. The PARS rules currently focus primarily upon paging. There are also rules pertaining to the operation of internal point-to-point and point-to-multipoint fixed links that are essential for local and regional paging systems.

Part 22, subpart E is organized into six groups of rules. The first group of rules applies to all PARS stations.[151] Each of the subsequent five groups contains technical and operational rules pertaining only to a particular type of operation on specified channels. The types of operation are paging, one- and two-way mobile, point-to-point, point-to-multipoint, and trunked mobile operation. Some of the PARS 454-459 MHz channels are shared with basic exchange telephone radio systems (providing Rural Radiotelephone Service) and potentially with non-geostationary low earth orbit ("Little LEO") satellite downlinks.

Purpose

The purpose of subpart E is to facilitate the provision of commercial one-way and two-way wireless telecommunications services, in particular, one-way paging, to the general public at reasonable rates by: (1) utilizing a competitive bidding process to issue exclusive licenses to the service provider applicants who value them most; (2) preserving and enhancing competition between these service providers once licensed; (3) ensuring that available spectrum allocations are used efficiently; and (4) reducing the likelihood of harmful interference among licensed stations.

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[149] 47 C.F.R Part 22, subpart E.

[150] *See ULS Report and Order*, 13 FCC Rcd 21027.

[151] 47 C.F.R. §§ 22.501-22.529.

Analysis

Status of Competition

PARS stations governed by subpart E compete directly with Part 90 commercial paging services and with Part 24 narrowband PCS, and they compete indirectly with other CMRS. The *Seventh CMRS Competition Report* notes that paging carriers have been experiencing financial difficulties as a result of the continuing decline in demand for traditional one-way paging services, which have long constituted the bulk of these carriers' revenue, as well as intense competition from other mobile data providers in the market for more advanced mobile data services.[152] Paging carriers have sought to compete with each other and with other mobile data providers by offering advanced, two-way mobile data services and by upgrading their networks to allow for these services.[153]

Advantages

The PARS rules provide a clear, predictable regulatory structure for the assignment and use of the spectrum allocated to PARS service. Provision for accepting competing mutually exclusive applications and selecting the licensee by means of competitive bidding results in licenses being issued to the entities that value them the most. Geographic area licensing minimizes the administrative burden involved in obtaining a license. The technical rules allow transition to narrowband technology capable of providing wireless data services.

Disadvantages

The PARS rules impose some burdens related to compliance with technical and operational rules. Although the Commission converted the authorization of the PARS from the original site-by-site procedure to a geographic area licensing process, several detailed technical rules related to the site-by-site procedure have been retained in order to protect the investment of grandfathered incumbent licensees in areas where the geographic licensee is a different entity.

Recent Efforts

The Commission completed Auction 40 in December, 2001, and 182 bidders won 5323 licenses in the lower paging bands and upper paging bands. See Part 22 – Public Mobile Services "Recent Efforts" discussion, *supra*.

Comments

Westel recommends that the Commission eliminate traffic loading studies required pursuant to rule section 22.655 for trunked mobile systems operating on 470-512 MHz. In its Reply Comments, APCO questions Westel's proposal to eliminate the requirements

[152] *See Seventh CMRS Competition Report*, 17 FCC Rcd at 13049-51.

[153] *See id.* at 13050.

that Part 22 licensees report channel usage in the 470-512 MHz band, and states that the reports are necessary to determine where spectrum in the band is underutilized and could be made available for other uses (*e.g.* through waivers granted to public safety entities).

In Reply Comments, AMTA requests that the Commission modify or eliminate section 22.577, which governs operation of dispatch services in the PARS. AMTA indicates that the rule serves no purpose given the Commission's trend toward permitting flexible service offerings. Also, AMTA seeks a clarification regarding rule section 22.569, which limits entities to no more than two channels in a given area for two-way mobile operation. AMTA indicates that the Commission did not apply this restriction to Auction 40 applicants and requests that the Commission clarify that section 22.569 does not apply to auction bidders seeking to bid on more than two channels in a geographic area.

Recommendation

The various Part 22, subpart E rules commented upon by parties in this proceeding concern licensing, technical, and operational rules relating to channel usage and operational or interference-related issues among Part 22 paging licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 22, subpart E rules generally remain necessary in the public interest, it also concludes that certain modifications of these rules may be in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. In particular, staff believes that the specific rules commented upon may no longer be necessary in the public interest in their current forms. Accordingly, staff recommends that the Commission institute a proceeding to review these rules as well as other rules in this subpart to consider revising or eliminating them.

PART 22, SUBPART F – RURAL RADIOTELEPHONE SERVICE

Description

Part 22, subpart F[154] contains licensing, technical, and operational rules for the Rural Radiotelephone (Rural Radio) Service. The rules contain provisions governing eligibility, assignment of channels, and management of interference.

The Rural Radio service is the only service regulated under Part 22 that is a fixed service. Rural Radio service makes basic telephone service available to persons who live in remote rural locations where it is not feasible, because of cost, environmental factors, or other practical concerns, to provide such service by wire. The rules provide that Rural Radio interoffice stations can also be used to link central offices where wireline links are similarly infeasible.

Two types of facilities are authorized in the Rural Radio service – conventional Rural Radio stations and basic exchange telephone radio systems (BETRS). Conventional Rural Radio stations may be licensed to any existing or proposed common carrier. These stations operate on exclusively assigned paired channels and are considered for regulatory purposes to be interconnected to, but not a part of, the local loop. Consequently, conventional Rural Radio stations do not have to meet state requirements affecting the local loop (*e.g.*, call blocking, transmission quality).

BETRS facilities may only be licensed to entities that have been state certified to provide local exchange service in the geographic area in question (*e.g.*, LECs and CLECs). BETRS also operate on exclusively assigned paired channels, but they are considered, for regulatory purposes, to be a part of the local loop, and therefore must meet state standards applicable to the local loop.

Purpose

The purpose of the Rural Radio rules is to facilitate provision of telephone service to persons who live in remote rural locations where it is infeasible to provide service by wire.

Analysis

Status of Competition

The Rural Radio service is generally used only as a last resort in the most remote rural areas where wireline telephone service is infeasible or not cost-effective. While historically, Rural Radio customers have had few if any competitive alternatives for provision of telephony due to their geographic isolation, other wireless services, such as

[154] 47 C.F.R. Part 22, subpart F.

cellular and PCS, have begun to expand into areas served by Rural Radio, and availability of competitive alternatives is likely to increase in the future.

Advantages

The rules in Part 22, subpart F provide a clear, predictable structure for the assignment and use of the spectrum co-allocated to the Rural Radio service to provide basic telephone service to persons who live in remote rural locations.

Disadvantages

Certain of the rules concerning Rural Radio appear to have become outdated as a result of technological developments since the rules were adopted.

Recent Efforts

See Part 22 – Public Mobile Services "Recent Efforts" discussion, *supra.*

Comments

No comments were filed with respect to this rule subpart.

Recommendation

The Part 22, subpart F rules are licensing, technical, and operational in nature. These rules are concerned with licensing procedures, set technical and operational standards, and protect against interference among Part 22 rural radio service licensees as well licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

Although the Bureau received no comments on these rules, WTB staff believes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. Accordingly, staff recommends that the Commission initiate a proceeding to review these rules to determine whether any of them should be modified or eliminated.

PART 22, SUBPART G – AIR-GROUND RADIOTELEPHONE SERVICE

Description

Part 22, subpart G[155] contains licensing, technical, and operational rules for the Air-Ground Radiotelephone Service (AGS). AGS provides commercial telephone service to persons in airborne aircraft, using telephone instruments that are permanently mounted in the aircraft.

AGS consists of two separate parts: General Aviation air-ground stations and Commercial Aviation air-ground systems. General Aviation air-ground stations serve only "general aviation" aircraft (aircraft owned by individuals or businesses for their own use that do not carry passengers for hire). These stations operate independently rather than as a system. Consequently, when an aircraft flies out of range of a ground station, any call in progress disconnects, and the user must then redial through another ground station.

Commercial Aviation air-ground systems are permitted to serve any type of aircraft, but primarily serve passengers aboard commercial airlines. Commercial Aviation systems use seat-back and bulkhead-mounted telephones often seen on commercial flights. Commercial aviation air-ground systems are all nationwide systems and calls in progress handoff from one ground station to another uninterrupted as the aircraft flies across the country.

In general, the subpart G rules: (1) specify the frequency bands allocated to the General Aviation and Commercial Aviation air-ground services; (2) provide separation distance criteria for determining where new ground stations may be established; (3) establish minimum construction or coverage requirements for licensees; and (4) set forth certain technical limits on operation (*e.g.*, transmitter power).

Purpose

Subpart G facilitates the provision of commercial telephone service to persons aboard airborne aircraft.

Analysis

Status of Competition

Although the Commission dedicated specific spectrum to commercial air-ground service and contemplated the presence of six competing licensees, only one licensee currently has any plans to provide service on more than a short-term basis.[156] At the same time, the

[155] 47 C.F.R. Part 22, subpart G.

[156] Although there currently are two nationwide commercial air-ground radiotelephone licensees, only one (Verizon Airfone) intends to continue to provide commercial air-ground service.

Commission has seen increased interest from a number of airlines in the possible liberalization of the Commission's rules in this area.

A potential source of competition in the air-ground sector may be provided by AirCell, Inc. AirCell does not operate on AGS frequencies, but was granted a waiver in 1998 to provide air-ground service using specialized equipment that operates on cellular frequencies.[157]

Advantages

The AGS rules provide a clear, predictable structure for the assignment and use of the air-ground spectrum allocation.

Disadvantages

The AGS rules include highly specific requirements for the technical configuration of air-ground systems and the use of air-ground channels that may inhibit licensee flexibility and technical innovation.

Recent Efforts

See Part 22 – Public Mobile Services "Recent Efforts" discussion, *supra.*

Comments

No comments were filed with respect to this rule subpart.

Recommendation

The Part 22, subpart G rules govern the licensing and operation of air-ground radiotelephone stations and systems. In particular, these rules are concerned with license application procedures, set technical and operational standards, and protect against interference among Part 22 air-ground radio service licensees. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

Although the Bureau received no comments on these rules, WTB staff believes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. Accordingly, staff recommends that the Commission initiate a proceeding to review these rules to determine whether any of them should be modified or eliminated.

[157] In the Matter of AirCell, Inc., Petition Pursuant to Section 7 of the Act, for a Waiver of the Airborne Cellular Rule, or, in the Alternative for a Declaratory Ruling, *Order*, 14 FCC Rcd 806 (WTB 1998) (*AirCell Order*), *affirmed, Memorandum Opinion and Order,* 15 FCC Rcd 9622 (2000).

PART 22, SUBPART H – CELLULAR RADIOTELEPHONE SERVICE

Description

Part 22, subpart H[158] contains licensing, technical, and operational rules for the Cellular Radiotelephone Service (cellular service).

The spectrum allocated to the cellular service is divided into two channel blocks, A and B. This was done to provide for two competing, facilities-based providers in each licensing area. Initially, the cellular license for the B channel block in each licensing area was issued to the wireline telephone company in that area and the license for the A channel block was issued to a company other than that wireline telephone company. There were multiple A block applicants in most markets, and the initial licensee was selected by comparative hearings for the first (largest) 30 markets. Random selection (lottery) was used in the remaining markets. After Congress authorized the Commission to select among mutually exclusive applications using competitive bidding (auctions), the Commission began using auctions instead of lotteries to award licenses in the cellular service.

In general, the rules in Part 22, subpart H: (1) specify the frequency bands allocated to the cellular service; (2) provide methods for determining the Cellular Geographic Service Area (protected service area) of each system; (3) establish minimum construction and coverage requirements for cellular licensees; and (4) set forth certain technical limits on operation (*e.g.*, transmitter power).

Purpose

Subpart H facilitates the provision of commercial cellular services to the general public at reasonable rates, by: (1) utilizing a competitive bidding process to issue exclusive licenses to the service provider applicants who value them most; (2) preserving and enhancing competition between these service providers once licensed; (3) ensuring that available spectrum allocations are used efficiently; and (4) requiring coordination procedures to prevent harmful interference among cellular systems.

Analysis

Status of Competition

As detailed in the *Seventh CMRS Competition Report*, CMRS providers operate in an environment that is marked by significant and increasing competition in mobile telephony, paging/messaging, and mobile data.[159] As several of the largest providers of mobile telephony in the country have combined cellular service and PCS into single networks, it is no longer accurate to view cellular telephone service as separate and distinct from service provided using PCS licenses. Mobile telephony service providers

[158] 47 C.F.R. Part 22, subpart H.

[159] *See Seventh CMRS Competition Report*, 17 FCC Rcd at 12993-13028, 13051-68.

compete with each other on the basis of pricing plans, geographic coverage, and operational features. As detailed in the *Spectrum Aggregation Limits Order*, the Commission has found that there is meaningful economic competition in urban markets generally and that cellular carriers no longer enjoy significant advantages in these areas. The Commission, however, stated that rural markets are much less competitive than urban markets and that cellular incumbents generally continue to dominate in rural areas.[160]

Advantages

The rules provide a clear, predictable structure for the assignment and use of cellular spectrum. The rules provide for accepting competing, mutually exclusive applications for unserved areas and selecting the licensee by means of competitive bidding; in this manner, licenses are issued to the entities that value them the most. In addition, the rules contain minimal and flexible technical standards for alternative cellular technologies that facilitate the introduction of digital service and new features. Further, the rules seek to preserve competitive choices for consumers.

Disadvantages

The cellular rules impose some administrative burdens inherent in the cellular licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

The Commission recently released its *Cellular Biennial Review Orders*, which eliminated a number of cellular technical and administrative rules that have become outdated as a result of increased competition that caused technology to evolve at a rapid pace.[161] Part 22 cellular rules modified or eliminated included the rules requiring cellular systems to operate in conformance with AMPS compatibility specifications,[162] and various other technical rules that became obsolete due to the rapid evolution of technology.

As part of the 2000 Biennial Review of the Commission's telecommunications regulations, the Commission initiated a reexamination of section 22.942, the cellular cross-interest rule.[163] The cellular cross-interest rule limits the ability of parties to have equity or other interests in cellular carriers on different channel blocks in a single geographic area.[164] The Commission decided to eliminate the cellular cross-interest rule in Metropolitan Statistical Areas (MSAs) in recognition that the cellular carriers in these

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160 *Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22669-70 ¶ 2, 22670 ¶ 5.

161 *See Cellular Biennial Review First Report and Order,* 17 FCC Rcd 18401; *Cellular Biennial Review Second Report and Order,* 17 FCC Rcd 18485.

162 47 C.F.R. §§ 22.901, 22.933.

163 *Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22675-76 ¶ 17.

164 *Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22674-75 ¶ 15.

areas no longer enjoy significant first-mover advantages. The Commission decided to retain the cellular cross-interest rule in Rural Service Areas (RSAs), where the cellular incumbents generally continue to dominate. The Commission stated that it would reassess the continued need for the cellular cross-interest rule in RSAs during the 2002 biennial review. Petitions for Reconsideration were filed challenging the Commission's retention of the cellular cross-interest rule in RSAs and remain pending.

Comments

Section 22.911(b) – Alternative CGSA determinations. Commnet argues that we should remove as obsolete section 22.911(b) from the Commission's rules,[165] which allows carriers to provide either drive tests or alternative calculation methodology in order to show that a particular cell's 32 dBu contour is different from that calculated by the standard service area boundary (SAB) formula found in section 22.911(a). Commnet argues that the rule permits carriers to claim a larger CGSA than is actually being served. Commnet argues that there may have been a legitimate reason to allow an alternative CGSA calculation method when the rule was first put into place, perhaps because, at the time the rule went into effect, the Commission would soon be lifting the freeze upon unserved area applications, and there would not have been sufficient time for carriers to engage in drive tests prior to the first waves of Phase I unserved area applications.[166]

Commnet argues that there is now no longer a reason to permit alternative CGSA showings other than in cases of actual drive test data because the Phase I unserved area process is now largely inapplicable. Commnet asserts that it has identified over a dozen large rural areas that are completely unserved by any reliable signal from the licensee, and that these areas could be served by another carrier but for the licensee's use of alternative CGSA showings. Commnet states that it conducted a drive test in an area in Wyoming for which the incumbent carrier had submitted an alternative CGSA calculation. Commnet asserts that, if granted, the alternative showing would have permitted the incumbent carrier to warehouse spectrum over a large area, even though the drive test indicated that there was no reliable signal beyond the area calculated by the standard formula.[167]

RCA opposes Commnet's proposal to limit alternative CGSA determinations to those derived pursuant to actual drive tests. RCA argues that drive testing is so costly and time consuming that Commnet's proposal, even if limited to a complete one-time drive test, would effectively remove the use of alternative CGSA determinations. RCA states that the newest modeling software is greatly improved, and argues that rather than eliminate the use of predictive studies, consideration should be given to the accuracy of the newest modeling methods, so that they are credited accordingly.[168]

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[165] 47 C.F.R. § 22.911(b).

[166] Commnet Comments at 4.

[167] *Id.* at 4-5.

[168] RCA Reply Comments at 6.

Section 22.911(d) – digital control/pilot channels. Commnet asserts that carriers with digital cellular facilities are setting their control/pilot channels at an unacceptably high effective radiated power (ERP), which causes a digital-capable handset to "lock" onto the involved control/pilot channel even if that digital carrier does not have a voice channel with the adequate signal strength to process the call. Commnet argues that the offending carrier blocks traffic, because virtually all dual-mode handsets lock onto a digital control/pilot signal if one is detected, without regard to the existence of a more powerful analog control/pilot signal, even where the digital base station is too far away to process the call. Commnet asserts that, in the case of one of its managed sites, a person using a dual-mode CDMA/analog handset will be unable to access the Commnet affiliate's system due to the CDMA control/pilot channel coming from the neighboring carrier's cell site. Because the neighboring carrier's voice channels are too weak to handle the calls, Commnet asserts that the area has become a dead spot for those using dual-mode CDMA/analog phones.[169]

Commnet argues that such incidences pose public safety problems. Commnet argues that the presence of an offending digital control/pilot channel will cause handsets to lock onto the digital control/pilot channel rather than onto a stronger analog signal, thereby preventing an emergency call from going through. Accordingly, Commnet requests that the Commission clarify that a carrier operating in a digital format must regulate the strength of its control/pilot signals, including, if necessary, turning the control/pilot signal to a lower power than the voice channels.[170]

Sections 22.919 and 22.941. CTIA argues that section 22.919[171] should be clarified to allow carriers to use alternatives to Electronic Serial Numbers (ESNs), or, in the alternative, eliminate the provision as there is no equivalent requirement for broadband PCS.[172] CTIA requests that the Commission transfer the management of cellular system identification numbers (SIDs) and amend section 22.941[173] accordingly. These rule sections, which were the subject of CTIA's petition for rulemaking, were eliminated in the *Cellular Biennial Review First Report and Order*.[174]

Sections 22.917(b) and 24.934(b) – Emission masks. After reviewing the Commission's Year 2000 *Cellular Biennial Review Orders*, Lucent believes that further modifications to the Commission's rules regarding emissions limits are necessary.[175] Lucent states that the

[169] Commnet Comments at 6 and n.7.

[170] *Id.* at 7.

[171] 47 C.F.R. § 22.919.

[172] CTIA Petition at 21.

[173] 47 C.F.R. § 22.941.

[174] *See Cellular Biennial Review First Report and Order,* 17 FCC Rcd 18401.

[175] *See generally* Lucent Comments.

evolution to third generation systems will enhance the growth of spread spectrum technology through the continued deployment of CDMA2000 and the planned use of Universal Mobile Telecommunications Systems (UMTS). Lucent believes that emissions from either CDMA2000 or UMTS spread spectrum systems into the 1 MHz band immediately outside and adjacent to the frequency block will be similar, and that the emission limitations should not discriminate between these spectrum technologies. Lucent argues that the measurement procedures for emissions in sections 22.917(b) and 24.238(b), as modified in the Year 2000 Biennial Review, will subject carriers that employ UMTS to more stringent requirements than carriers that deploy CDMA2000.[176]

Lucent states that, consistent with the requirement that the power of any emission outside of authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P), a CDMA2000 system would be allowed emissions of -13 dBm in a 12.5 KHz band (one percent of the CDMA2000 carrier band width of 1.25 MHz) within the 1 MHz band immediately adjacent to the frequency block, but a UMTS system would be required to meet the -13 dBm objective in 50 KHz (one percent of the UMTS carrier band width of 5 MHz). Lucent asserts that this reflects a requirement that is approximately 6dB more stringent for UMTS emissions. Lucent argues that, because the two systems present similar types of interference to any victim system in the immediately adjacent 1 MHz, the emissions requirement should be the same. Lucent further argues that because a resolution bandwidth of 12.5 kHz is currently allowed and is appropriate for the 1.25 MHz CDMA system, it should also be appropriate for the wider bandwidth UMTS system as well.[177]

Lucent proposes that section 22.917(b) and section 24.238(b), respectively, should read:

> § 22.917 (b) – "*Measurement procedure.* Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. **However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of either 12.5 KHz or one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.** A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 100 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. which all emissions are attenuated at least 26 dB below the transmitter power." (Emphasis added.)
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> § 24.938(b) – "*Measurement procedure.* Compliance with these provisions is based on the use of measurement instrumentation employing a resolution

[176] *Id.* at 1-2.

[177] *Id.* at 2-3.

> bandwidth of 1 MHz or greater. **However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of either 12.5 KHz or one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.** A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.* 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power." (Emphasis added.)

Lucent states that the proposed change will not affect narrow band systems such as TDMA and GSM. Lucent states that in the case of TDMA, one percent of the transmit carrier bandwidth would be 300 Hz, and, for GSM, one percent of the transmit carrier bandwidth would be 2 KHz.[178]

Section 22.942 – Cellular cross-interest. Dobson et. al request that the cellular cross-interest rule should be eliminated as applied to cellular licenses in RSAs. The carriers argue that the rationale for applying the cellular cross-interest rule in RSAs, but not MSAs, did not accurately reflect the state of competition at the time of the Commission's decision or the impact of the rule in specific geographic areas.[179] The carriers attach a copy of their pending Petition for Reconsideration challenging the decision in the *Spectrum Aggregation Limits Order*.

CTIA requests that the Commission eliminate the cellular cross-interest rule for RSAs as it has done for MSAs. CTIA argues that a separate rural cross-interest rule is unnecessary, since the case-by-case competitive analysis applied to all other CMRS transfers will protect the public interest.[180]

Section 22.953 – Content and form of application. Although CTIA applauds Commission efforts in streamlining the licensing process for wireless carriers and establishing the Universal Licensing System (ULS), CTIA argues that the Commission has overlooked certain regulations such as section 22.953,[181] which requires carriers to file both full-sized maps and reduced maps with minor modifications, that are inconsistent with the policies of ULS implementation.[182]

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178 *Id.* at 3.

179 Dobson et al. Comments at 2.

180 CTIA Petition at 22-23; CTIA Further Comments at 6.

181 47 C.F.R. § 22.935.

182 CTIA Petition at 22.

Recommendation

With regard specifically to section 22.942, staff notes that the issues raised concerning the cellular cross-interest rule are within the scope of review of the reconsideration pending before the Commission with regard to its *Spectrum Aggregation Limits Order*. Staff recommends that the comments of Dobson et al. and CTIA regarding section 22.942 be incorporated into the Commission's pending reconsideration proceeding.

The remaining Part 22 rules commented upon by parties in this proceeding govern licensing in the cellular service and are technical and operational in nature. Specifically, these rules are concerned with licensing procedures, set technical and operational standards, and protect against interference among Part 22 cellular licensees as well licensees in adjacent services. As such, the need and purposes for these rules are not affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 22, subpart H rules remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. In this regard, we discuss the comments and our recommendations below.

Section 22.911(b) – Alternative CGSA determinations. The Commission adopted the existing formula for determining the CGSAs of cellular systems in 1992.[183] In that proceeding, commenters asked the Commission to allow alternative coverage showings to provide for certain situations in which terrain and other unique circumstances would cause the formula to calculate a CGSA that differed significantly from the area of actual service. In adopting the alternative CGSA determinations, however, the Commission noted that it did not envision routinely determining the boundaries of CGSAs on the basis of alternative showings, and stated that it would permit alternative CGSA showings only when the change to the CGSA is substantial (plus or minus 20%) and justified by unique or unusual circumstances, or where the standard formula is clearly inapplicable.

In light of the Commission's careful review of each alternate CGSA filing, the staff does not agree with Commnet's argument that substantial areas being claimed as being with carriers' CGSAs are actually not being served. Moreover, Commnet attacks the permissible methodology of determining an alternative CGSA; it is not arguing under section 11 that the rule provision allowing alternative CGSA determinations is no longer necessary in the public interest. Accordingly, the staff concludes that section 22.911(b)

[183] In the Matter of Amendment of Part 22 of the Commission's Rules to Provide for Filing and Processing of Applications for Unserved Areas in the Cellular Service and to Modify Other Cellular Rules, CC Docket No. 90-6, *Second Report and Order*, 7 FCC Rcd 2449 (1992).

in its current form remains necessary in the public interest and recommends that modification or repeal is not warranted.

Section 22.911(d) – Digital control/pilot channels. Commnet's request that the Commission add a provision to section 22.911 that digital operators must regulate the signal strength of control/pilot channels is outside the scope of a Section 11 review. Here, Commnet does not seek the removal of an outdated rule; it instead requests additional regulation.

Sections 22.917(b) and 24.934(b) – Emission masks. In the *Cellular Biennial Review First Report and Order*, the Commission amended sections 22.917 and 24.934, which prescribe emission masks limiting both in-band and out-of-band radio frequency emissions. In that proceeding, the Commission noted that, in the Wireless Communications Service (WCS), licensees are permitted the flexibility to operate transmitters on frequencies closer to the edge of their authorized spectrum than full compliance with the Commission's out-of-band emission limits would normally permit if the carriers determine that different limits are appropriate. Because the Commission seeks to ensure regulatory uniformity where possible, sections 22.917 and 24.934 were amended in order to give cellular and PCS licensees the same flexibility as WCS operators regarding emissions limits.

In its comments, Lucent asserts that sections 22.917 and 24.934 as modified result in a stricter limit to one type of spread spectrum technology as opposed to another. The staff concludes that this request is outside of the scope of a section 11 review. Lucent does not argue that the underlying purpose of the rules (to provide an adequate measure of interference protection to other licensees) no longer exists or is not necessary in the public interest as a result of competitive developments. Instead, Lucent seeks to gain more technical flexibility for a specific technology.

Further, the staff notes that the issues raised by Lucent with regard to these rules is within the scope of review of a reconsideration of the *Cellular Biennial Review First Report and Order*. Staff recommends that Lucent's comments regarding sections 22.917 and 24.934 be treated as a petition for reconsideration in that proceeding.

Section 22.953 – Content and form of application. Section 22.953 requires that cellular unserved area applicants provide a full-size map and a reduced map in their initial applications as well as in modifications in which the applicant is seeking a change to existing CGSA boundaries. CTIA argues that requiring both full-size maps and reduced maps is inconsistent with the policies of ULS implementation. It is not entirely clear what CTIA is arguing. It may be that CTIA objects to the requirement to file the full-size maps (which cannot be uploaded into ULS and must be paper-filed) in addition to reduced maps (which can be uploaded), or that it objects to requiring the filing of maps at all for minor modifications. In either case, however, the staff concludes that these requirements generally remain necessary. Due to the site-based nature of cellular service, maps are necessary to determine the location of the CGSA the applicant is serving or is

proposing to serve. Although in most cases the Commission can process applications using only reduced maps, in certain situations, full-size maps are the only accurate means to determine where cellular systems are situated in relation to each other.

To the extent, however, that the filing of a full-size map in every unserved area application may be overly burdensome for cellular carriers/applicants, the staff concludes that section 22.953 in its current form may no longer be necessary in the public interest and recommends that the Commission institute a proceeding that would either: (1) amend the rule to require the filing of full-size maps only upon Commission request; or (2) modify the requirement to enable applicants to provide the requisite information through a more efficient/less costly method.

PART 22, SUBPART I – OFFSHORE RADIOTELEPHONE SERVICE

Description

Part 22, subpart I[184] governs the licensing and operation of offshore radiotelephone stations. The Offshore Radiotelephone Service allows CMRS providers to use conventional duplex analog technology to provide telephone service to subscribers located on (or in helicopters en route to) oil exploration and production platforms in the Gulf of Mexico.

Purpose

The purpose of the subpart I rules is to establish basic rules and procedures for the licensing and operation of offshore radiotelephone stations.

Analysis

Status of Competition

There are several competitive alternatives to Offshore Radiotelephone service in the Gulf. Two cellular companies currently operate in the Gulf of Mexico Service Area (GMSA), and some SMR service providers also operate there on a site-by-site basis. The Commission is also considering licensing in the Gulf in several other spectrum bands, including PCS and the 700 MHz band.[185]

Advantages

The subpart I rules provide a clear, predictable structure for the assignment and use of Offshore Radio spectrum.

Disadvantages

The subpart I rules impose limited administrative and technical burdens that are inherent in the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

See Part 22 – Public Mobile Services "Recent Efforts" discussion, *supra.*

Comments

No comments were filed with respect to this rule part.

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[184] 47 C.F.R. Part 22, subpart I.

[185] Service is provided by other services as well: *e.g.*, WCS, satellite, VHF maritime, private radio (formerly petroleum radio service), private (offshore), and microwave.

Recommendation

The Part 22, subpart I rules are procedural, technical, and operational in nature. These rules are concerned with licensing procedures, set technical and operational standards, and protect against interference among Part 22 offshore radiotelephone licensees as well licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

Although the Bureau received no comments on these rules, staff believes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall outside the scope of section 11 review. Accordingly, staff recommends that the Commission initiate a proceeding to review these rules to determine whether any of them should be modified or eliminated.

PART 22, SUBPART J – REQUIRED NEW CAPABILITIES PURSUANT TO THE COMMUNICATIONS ASSISTANCE FOR LAW ENFORCEMENT ACT (CALEA)

Description

The Communications Assistance for Law Enforcement Act (CALEA) was enacted by Congress to establish procedures for law enforcement to obtain authorized access to wireless and wireline communications or call-identifying information where such information is needed for law enforcement purposes.[186] Part 22, subpart J[187] contains technical standards and capabilities for cellular carriers to ensure that communications and call-identifying information will be accessible to law enforcement, as required by section 103 of CALEA.[188] These rules were adopted in 1999.[189] The Commission has adopted parallel requirements and standards for broadband PCS licensees in Part 24, subpart J[190] and for wireline telecommunications carriers in Part 64, subpart W.[191]

Purpose

The purpose of the CALEA rules is to ensure that law enforcement, pursuant to court order or other lawful authorization, will have reasonable access to wireless and wireline communications or call-identifying information where such information is needed for law enforcement purposes.

Comments

No comments were filed with respect to this rule subpart.

Analysis

While CALEA is a communications-specific statute codified in Title 47, it does not fall within the Communications Act of 1934 as amended. As such, the CALEA rules are not part of the Commission's section 11 biennial review.[192]

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[186] 47 U.S.C. § 1002.

[187] 47 C.F.R. Part 22, subpart J.

[188] *Id.*

[189] *See* Communications Assistance for Law Enforcement Act*, Third Report and Order*, 14 FCC Rcd 16794 (1999).

[190] 47 C.F.R. Part 24, subpart J.

[191] 64 C.F.R. Part 64, subpart W.

[192] Section 11 of the Communications Act instructs the Commission to review "all regulations issued *under this Act* . . ." 47 U.S.C. § 161 (emphasis added).

PART 24 – PERSONAL COMMUNICATIONS SERVICES (PCS)

Description

Part 24 contains licensing, technical, operational, and auction rules for broadband and narrowband Personal Communications Services (PCS).[193] The rules in this part: (1) define permissible communications, terms, and definitions relating to PCS licenses; (2) specify application and licensing requirements, including eligibility, term of license, and renewal procedures; (3) establish the frequencies available to PCS licensees; (4) establish operational parameters, including technical standards and limits on operation (*e.g.*, antenna height, transmitter power) to prevent harmful interference; (5) set forth rules for narrowband and broadband PCS licensees, including minimum coverage requirements; and (6) set forth application procedures and competitive bidding rules for the auction and award of PCS licenses.

In addition, Part 24 contains requirements applicable to PCS under the Communications Assistance for Law Enforcement Act (CALEA).[194] Specifically, these rules set forth certain capability standards applicable to broadband PCS telecommunications carriers in order to ensure that, when properly authorized, law enforcement has access to communications or call-identifying information.

Part 24 is organized into ten subparts:

A. General Information
B. Applications and Licenses
C. Technical Standards
D. Narrowband PCS
E. Broadband PCS
F. Competitive Bidding Procedures for Narrowband PCS
G. Interim Application, Licensing and Processing Rules for Narrowband PCS
H. Competitive Bidding Procedures for Broadband PCS
I. Interim Application, Licensing and Processing Rules for Broadband PCS
J. Required New Capabilities Pursuant to the Communications Assistance for Law Enforcement Act (CALEA)

The Part 24 rules were initially adopted in 1993,[195] and were modified on reconsideration in 1994.[196] In 2000, the Commission issued an order further revising certain aspects of the Part 24 narrowband PCS rules.[197] The CALEA rules were adopted in a separate proceeding.[198] In the *Competitive Bidding Conforming Edits Order*, the Commission significantly modified the narrowband and broadband PCS competitive bidding rules and

[193] 47 C.F.R. Part 24. Narrowband PCS operates in the 901-902, 930-931, and 940-941 MHz bands. Broadband PCS operates in the 1850-1910 and 1930-1990 MHz bands.

[194] *See* Communications Assistance for Law Enforcement Act (CALEA), Pub. Law No. 103-414, 108 Stat. 4279 (1994). We discuss these rules, *supra*, when discussing Part 22, Subpart J.

eliminated several of those rules in order to bring them into conformance with the Commission's Part 1 rules.[199]

Purpose

The purposes of the Part 24 rules are to establish basic ground rules for assignment of PCS spectrum, ensure efficient spectrum use by PCS licensees, and prevent interference. In addition, Part 24 contains rules that define eligibility for the PCS entrepreneurs' blocks and for "designated entity" (*i.e.*, small business) status within these blocks. The purpose of these provisions is to implement the objectives of section 309(j)(3) of the Communications Act[200] to ensure that the distribution of PCS licenses is not excessively concentrated, and that small businesses, rural telephone companies, and businesses owned by women and minorities have opportunities to become PCS licensees.

Analysis

Status of Competition

Narrowband PCS providers primarily offer traditional one-way paging services as well as two-way advanced messaging services. The Commission estimates there were 18 million paging units in service as of mid-2001.[201] They compete with a rapidly proliferating array of other messaging and mobile data services, including e-mail access and wireless Internet services.[202] During 2001, paging carriers endured financial difficulties as a result

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[195] *See* Amendment of the Commission's Rules to Establish New Personal Communications Services, *Second Report and Order*, 8 FCC Rcd 7700 (1993); Amendment of the Commission's Rules to Establish New Personal Communications Services, *Third Report and Order*, 9 FCC Rcd 1337 (1994).

[196] *See* Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, Fifth Report and Order*, 9 FCC Rcd 5532 (1994); Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Fourth Memorandum Opinion and Order*, 9 FCC Rcd 6858 (1994); Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Fifth Memorandum Opinion and Order*, 10 FCC Rcd 403 (1994).

[197] *See* Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order,* 15 FCC Rcd 10456 (2000).

[198] *See* Communications Assistance for Law Enforcement Act, CC Docket No. 97-213, *Third Report and Order*, 14 FCC Rcd 16794 (1999), *aff'd in part, rev'd in part, United States Telecom Ass'n v. FCC,* D.C. Circuit No. 99-1442 (Aug. 15, 2000).

[199] *See Competitive Bidding Conforming Edits Order*, *supra*. As discussed in the analysis of Part 1 Subpart Q, above, in the *Competitive Bidding Conforming Edits Order* the Wireless Telecommunications Bureau modified or eliminated the following narrowband and broadband PCS rules pertaining to competitive bidding to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules: 24.301, 24.321, 24.701-24.702, 24.704, 24.706, 24.708-24.709, 24.711-24.712, 24.714, 24.716-24.717, and 24.720.

[200] 47 U.S.C. § 309(j)(3).

[201] *See Seventh CMRS Competition Report*, 17 FCC Rcd at 13049.

[202] *See id.* at 13067.

of the continuing decline in demand for traditional one-way paging services, which has long constituted the bulk of these carriers' revenue, as well as intense competition from other providers of more advanced mobile data services.[203] Paging carriers have continued to compete, however, by upgrading their networks and by offering a variety of advanced two-way messaging services.[204]

Broadband PCS providers offer mobile telephony service in competition with cellular and some SMR services. As described in the *Seventh CMRS Competition Report*, broadband PCS providers have contributed to a significant increase in competition in the mobile telephony market since the first broadband PCS providers were licensed seven years ago.[205] In addition, in the last couple of years there have been significant developments on the road to deploying 3G data networks on broadband PCS (along with similar developments on cellular and some SMR networks).[206] However, the mobile telephony or data networks on broadband PCS have not yet achieved the same level of geographic coverage or subscribership as cellular, particularly in smaller markets.[207]

Advantages

The Part 24 rules provide the basic regulatory structure necessary for the orderly assignment and use of PCS spectrum, while otherwise affording licensees substantial flexibility to determine what technology, type of service, and business strategy they will use. The Part 24 competitive bidding rules promote efficient licensing of PCS spectrum to those entities that value it the most.

Disadvantages

The Part 24 rules impose limited administrative and technical burdens that are inherent in the licensing process and necessary for compliance with technical and operational rules. Certain of the licensing and technical rules differ somewhat from those for other similar CMRS services, such that there may be opportunity for further harmonization in the interest of creating additional flexibility and regulatory symmetry.

Recent Efforts

As part of its 2000 Biennial Review, the Commission recently amended the out-of-band emission limit rules in Part 24 (section 24.238), along with the corresponding rules for cellular services in Part 22 (section 22.917), in order to harmonize them with the greater flexibility afforded in the emission limit rules set forth in Part 27 and applicable to

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203 *See id.* at 13049-50.

204 *See id.* at 13067.

205 *See id.* at 13007-09.

206 *See id.* at 13038-10, 13012-14.

207 *See id.* at 13008.

Wireless Communications Service (WCS).[208] This action standardized the requirements for minimum resolution bandwidth of the measuring instrument as well as various procedures related to emission limits, thus producing a more level playing field that allows affected services to compete with each other on more equal terms. It also allows licensees flexibility to use alternative limits when all affected parties agree to the alternative.

Comments

General Part 24 licensing issues and technical rules. CTIA and Sprint request that section 24.16 of Subpart B, which covers renewal procedures for PCS licenses, be modified to be more consistent with other renewal processes, including the two-step process for resolving renewal challenges that is set forth in the Part 22 rules pertaining to cellular licenses.[209]

RadioSoft requests that, to the extent possible, the Commission standardize its technical rules across the various services – including the Part 24 services – to ensure that technical algorithms in the rules conform to those employed in the software that the Commission uses to process applications.[210] RadioSoft asserts that the rules specifying how average terrain is to be calculated vary slightly among the different services – both wireless and those broadcast services within the regulatory purview of the Media Bureau – that the Commission regulates.[211]

Section 24.103(b) – Construction requirements for narrowband PCS. Weblink proposes modifications to the construction requirements for regional narrowband PCS licensees. Specifically, it proposes that section 24.103(b) be amended to provide regional narrowband PCS licensees the option of satisfying the construction requirement for nationwide narrowband PCS licensees in the event that a regional licensee holds each of the five contiguous regional authorizations on the same frequency.[212] Weblink argues that a carrier holding each of the regional authorizations on the same channel in effect has a *de facto* "nationwide" authorization and that requiring compliance with a stricter set of construction benchmarks established for regional licensees would be inefficient.[213]

Section 24.203(b) – Construction requirements for broadband PCS. Commnet seeks revision of the provisions relating to the construction requirements for 10 MHz and 15

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208 *See Cellular Biennial Review First Report and Order*, 17 FCC Rcd at 18424-26 ¶¶ 44-46.

209 CTIA Petition at 22-23; Sprint Reply Comments at 8-10.

210 RadioSoft Comments at 1-3.

211 *Id.* A significant portion of RadioSoft's comments specifically request harmonizing and streamlining of several of the broadcast rules within the purview of the Media Bureau and regulated pursuant to Part 73 of the Commission's regulations. *Id.*

212 Weblink Comments at 3.

213 *Id.* at 3-4.

MHz licensees, as set forth in section 24.203(b) of the rules. In particular, Commnet requests that the rule simply state that each licensee must make a showing of "substantial service," and that service to at least one quarter of the market's population or one quarter of the market's land area would satisfy a "safe harbor" for meeting this showing.[214]

Section 24.232(a) – Power limitations. Powerwave requests that the Commission review and revise what it asserts to be overly restrictive power limitations set forth in section 24.232(a). Specifically, Powerwave asserts that the current rule unfairly penalizes the use of multi-carrier power amplifiers because it limits power on a transmitter-by-transmitter basis, rather than a signal-by-signal basis. Consequently, according to Powerwave, a multicarrier power amplifier, which is a transmitter that may amplify as many as two dozen individual signals (sometimes called "carriers"), is limited to the same maximum power as a single-carrier amplifier.[215]

Section 24.238 – Emission limits. Finally, Lucent contends that the Commission should further revise and clarify the emission limitations set forth in section 24.238. In particular, Lucent seeks further relaxation of the out-of-band emission limits for wideband CDMA emission types.[216]

Recommendation

The Part 24 rules commented upon by parties in this proceeding concern licensing rules and technical and operational rules, such as interference-related issues among Part 24 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 24 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 24 rules remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be in the public interest for reasons other than those related to competitive developments that fall within the scope of Section 11 review. In this regard, we discuss the comments and our recommendations below.

General Part 24 licensing rules and technical requirements. WTB staff concludes section 24.16 in its current form may no longer be necessary in the public interest, and recommends that the Commission institute a proceeding to consider modifying the rule as proposed by CTIA and Sprint. Staff also concludes that the HAAT rules (including section 24.53) and other similar rules (*e.g.,* section 22.159) are not always consistent throughout the wireless radio regulations and that these rules in their current forms may no longer be necessary in the public interest. Accordingly, staff recommends that the

[214] Commnet Comments at 7-8.

[215] *See generally* Powerwave Comments.

[216] *See generally* Lucent Comments.

Commission institute a proceeding to consider RadioSoft's comments and determine whether to revise these rules.

Section 24.103(b) – Construction requirements for narrowband PCS. Staff does not agree with Weblink's suggestion that the construction requirements for regional narrowband licensees, set forth in section 24.103(b), should be modified at this time. Weblink does not contend that the need for these requirements has been altered by competitive developments, but instead seeks reconsideration of the service rules adopted for narrowband PCS licensees. The present allocation scheme for narrowband PCS licenses – providing for licensing on regional, MTA, and nationwide bases – promotes the public interest by accommodating the spectrum needs and business plans of a wide variety of service providers, including small service providers, thereby leading to the rapid provision of services to the public.[217] By licensing spectrum in different market sizes and by establishing varying construction requirements, the Commission ensures that narrowband PCS construction occurs on all these levels. Accordingly, staff believes that section 24.103(b) in its current form remains necessary in the public interest, and recommends that modification of the rule is not warranted.

Section 24.203(b) – Construction requirements for broadband PCS. The staff concludes that modification of section 24.203(b) along the lines proposed by Commnet is not necessary. Commnet does not contend that this rule in its current form has become outmoded or obsolete because of competitive developments. Moreover, the change to the rule proposed by Commnet would not change the substantive effect of the rule in any way; under either formulation, licensees have the same alternatives for meeting their build-out requirements. Accordingly, staff believes that section 24.203(b) in its current form remains necessary in the public interest, and recommends that modification of the rule is not warranted.

Section 24.232(a) – Power limitations. As for Powerwave's request that the Commission revise section 24.232(a), the staff concludes that the rule should be modified in order to regulate PCS base station transmissions in a technologically-neutral manner. Specifically, by limiting PCS base station power "per transmitter," the current rule may hinder the development and deployment of technologies (*e.g.*, the multi-carrier amplifiers described by Powerwave) that combine signals in innovative ways yet do not increase the potential for harmful interference to neighboring systems. A technologically-neutral approach would provide for the efficient and effective deployment of advanced telecommunications services, regardless of how signals are combined at a PCS base station. Accordingly, staff believes that section 24.232(a) in its current form may no longer be necessary in the public interest, and recommends that the Commission institute a proceeding to consider revising the rule.

[217] *See* Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, *Third Report and Order and Order on Reconsideration*, 16 FCC Rcd 9713, 9719-20 (2001); Amendment of the Commission's Rules To Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order*, 15 FCC Rcd 10456, 10462 (2000).

Section 24.238 – Emission limits. Finally, with regard to Lucent's request for further revisions and clarifications regarding the emission limit rules set forth in section 24.238, as we noted above the Commission recently amended the out-of-band emission limit rule in section 24.238 as part of its 2000 Biennial Review proceeding for cellular services.[218] Staff notes that the issues raised by Lucent with regard to this rule is within the scope of review of a reconsideration of the *Cellular Biennial Review First Report and Order*.[219] Accordingly, staff recommends that Lucent's comments regarding sections 24.238 be submitted as part of a petition for reconsideration in that proceeding.

[218] *See Cellular Biennial Review First Report and Order*, 17 FCC Rcd at 18424-26 ¶¶ 44-46.

[219] The petition for reconsideration period ends on January 17, 2003.

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

Description

Part 27[220] contains licensing, technical, and operational rules for the "miscellaneous wireless communications services" (WCS). The rules in this part: (1) define WCS license areas; (2) specify the spectrum bands available to WCS licensees; (3) permit flexible use for all services within a given spectrum band's allocation;[221] (4) establish license terms and other general licensing requirements; (5) establish minimum technical standards and limits on operation (*e.g.,* antenna height, power limits) to prevent interference; and (6) set forth application procedures and competitive bidding rules for the auction and award of WCS licenses.

Part 27 is divided into seven sub-parts:

A – General Information
B – Applications and Licenses
C – Technical Standards
D – Competitive Bidding Procedures for the 2305-2320 MHz and 2345-2360 MHz Bands
E – Application, Licensing and Processing Rules for WCS
F – Competitive Bidding Procedures for the 746-764 MHz and 776-794 MHz Bands
G – Guard Band Managers

Purpose

The purposes of the Part 27 rules are to establish initial definitions to assign licenses at auction, ensure efficient spectrum use by licensees, and prevent interference. Part 27 establishes a general framework of rules to set forth an optimal initial scope of licenses for spectrum allocated to flexible use. The Part 27 service rule framework is designed to promote the efficient use of spectrum and permit service providers to select the technologies and services that the market may demand.

Part 27 also contains rules that define eligibility for small business status within the spectrum bands available to WCS licensees. These provisions implement the objectives of section 309(j)(3) of the Act that the distribution of licenses not be excessively concentrated, and that small businesses, rural telephone companies, and businesses owned by women and minorities have opportunities to participate in the provision of WCS and other wireless services.

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[220] 47 C.F.R. Part 27.

[221] Section 303(y)(2) authorizes the Commission to allocate spectrum to provide flexibility of use upon making certain findings. *See* 47 U.S.C. § 303(y)(2). The Commission must make affirmative findings that such flexibility: (1) is consistent with international agreements, (2) would be in the public interest, (3) would not deter investment in communications services and systems, or technology development, and (4) would not result in harmful interference among users. *See id.*

Analysis

Status of Competition

Competition within the miscellaneous WCS is beginning to develop as Part 27 services are licensed. Because there is considerable range in the frequency bands allocated for flexible use and licensing under Part 27, the status of competition varies depending on the frequencies and their feasibility of use to offer services within a particular market. Accordingly, WCS licensees may not necessarily compete with one another in the same market and will more than likely use their flexibility to offer services that compete with existing fixed, mobile, and/or broadcast services depending on market demand at any particular point in time.

To date, the Commission has only held auctions and issued licenses for spectrum in the 2.3 GHz frequency band and guard band portions of the Upper 700 MHz Band. The providers of WCS in 2.3 GHz frequency bands have mainly focused on the offering of fixed wireless voice and data services in conjunction or competition with fixed wireless uses in several spectrum bands, including Multipoint Distribution Service (MDS),[222] unlicensed spectrum bands, 24 GHz, Local Multipoint Distribution Service (LMDS), and 39 GHz. Based on recent annual reports from 700 MHz guard band managers, there has not yet been significant leasing or use of the guard band frequencies in the Upper 700 MHz Band.

Advantages

The Part 27 rules provide a clearly defined umbrella structure for the assignment of spectrum to various services with maximum practicable flexibility. The service rules rely on a market-based approach that affords flexibility to licensees to decide on development and deployment of new services and products to consumers. This framework ensures that licensees are not constrained to a single regulatory status nor use of this spectrum and, therefore, can offer a mix of services and technologies to their customers.

Disadvantages

The Part 27 rules impose administrative burdens inherent to the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

On November 7, 2002, the Commission allocated 90 megahertz of spectrum that can be used to provide advanced wireless services (AWS), including services commonly referred to as "Third Generation" or "IMT-2000." In a companion *Notice of Proposed Rulemaking* in WT Docket No. 02-353, the Commission proposed Part 27 licensing and

[222] What is commonly referred to as MDS or wireless cable spectrum includes 33 different 6 megahertz channels in the 2.1-2.2 GHz and 2.5-2.7 GHz spectrum bands. These channels include MDS, MMDS, and ITFS channels. MDS operators generally use the MMDS and MDS channels and lease excess capacity from ITFS operators.

service rules that would permit these bands to be used for any service consistent with the bands' fixed and mobile allocations, including the provision of AWS. The Commission sought comment on Part 27 licensing, technical, and operational rules to provide a flexible regulatory framework that includes basic licensing requirements and sets out certain technical requirements to prevent interference.

In February 2002, the Commission adopted a *Second Report and Order and Further Notice of Proposed Rulemaking* in WT Docket No. 00-32, allocating 50 megahertz of spectrum in the 4940-4990 MHz band (4.9 GHz band) for fixed and mobile services (except aeronautical mobile service) and designating the band for use in support of public safety.[223] The Commission sought comment *inter alia* on the possibility of regulating all uses of the band pursuant to Part 27 of the Commission's Rules.

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated certain Part 27 rules pertaining to competitive bidding in the WCS to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[224] The Bureau also modified or eliminated rules pertaining to competitive bidding in the 700 MHz band to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[225] In May 2002, the Commission adopted service and competitive bidding rules to govern the licensing of 27 MHz of electromagnetic spectrum, including the 1390-1395 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz bands which were recently reallocated for non-Government use.[226]

Comments

No comments were filed with respect to this rule part.

Recommendation

The Part 27 rules are concerned with licensing procedures and technical and operational standards, which protect against interference among Part 27 licensees as well licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments in the services that guide our Section 11 analysis. Accordingly, we do not find that these Part 27 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

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[223] The 4.9GH Band Transferred From Federal Government Use, WT Docket No. 00-32, *Second Report and Further Notice of Proposed Rulemaking*, 17 FCC Rcd 3955 (2002).

[224] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 27.201-27.206, 27.208, and 27.210).

[225] *Id.* (modifying or eliminating sections 27.501-27.502, and 27.701).

[226] Amendments to Parts 1, 2, 27 and 90 of Commission's Rules to License Services in 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-4135 MHz, 1670-1675 MHz and 2385-2390 MHz Government Transfer Bands, *Report and Order*, 17 FCC Rcd 9980 (2002).

PART 80, SUBPARTS J AND Y – PUBLIC COAST STATIONS AND COMPETITIVE BIDDING PROCEDURES

Description

Part 80 contains licensing, technical, and operational rules for radio stations in the maritime services, which provide for the distress, operational, and personal communications needs of vessels at sea and on inland waterways.[227] Maritime frequencies are allocated internationally by geographic region and type of communication in order to facilitate interoperable radio communications among vessels of all nations and stations on land worldwide. Land stations in the maritime services are the links between vessels at sea and activities on shore. They are spread throughout the coastal and inland areas of the United States to carry radio signals and messages to and from ships.

Staff's review of Part 80 in this report focuses on the rules affecting public coast stations (subparts J and Y), which are unique in the Maritime Services in that they are used for commercial applications, are licensed on a geographic, exclusive-use basis, and are subject to licensing by the Commission's competitive bidding procedures. Public coast stations are CMRS providers that allow ships to send and receive messages and to interconnect with the public switched telephone network. The remainder of the Part 80 rules do not apply to telecommunications carriers.

Purpose

The Part 80 rules establish the mechanism for allocating licenses and ensure spectrum use that provides public coast licensees with maximum flexibility while concurrently respecting the unique nature of maritime spectrum and preventing interference.

Analysis

Status of Competition

While competition in the CMRS industry as a whole has increased, competition is generally less robust in the public coast services. This is due in part to the unique nature of maritime communications and to the predominant safety-of-life communications responsibilities required of licensees. Other CMRS services (*e.g.* cellular and PCS) can serve as substitutes for commercial ship-to-shore communications, particularly for vessels operating near the coast and on inland waterways. A single large-scale public coast operator (MariTel) is the predominant VHF Band Public Coast Stations (VPC) licensee, as many small and independent licensees have left the business. Competition is stronger in Automated Maritime Telecommunications System Stations (AMTS) than on the high seas bands.

[227] 47 C.F.R. Part 80.

Advantages

The subpart J rules promote the safety of life and property at sea, while concurrently allowing licensees to compete as CMRS providers. The rules allow partitioning and disaggregation, and permit VPC licensees to use capacity that is not needed for maritime service to provide other types of services. Subpart J consists of three distinct radio services: VPC, AMTS, and High Seas Public Coast (which operates on Low Frequency (.100-.160 MHz band), Middle Frequency (.405-.525 MHz and 2 MHz bands), High Frequency (4, 6, 8, 12, 16, 18/19, 22, and 25/26 MHz bands)).

The subpart Y competitive bidding rules allow the efficient licensing of spectrum and are likely to result in award of licenses to those entities that value the spectrum the most and will use it most efficiently. These rules also enable the Commission to recover a portion of the value of the spectrum for the benefit of the public.

Disadvantages

Because of the unique characteristics of the maritime services, public coast station licensees are subject to responsibilities that other CMRS providers do not face. The international allocation of maritime frequencies and the associated statutes, treaties, and agreements limit the flexibility of use of maritime frequencies. There are additional administrative burdens associated with the competitive bidding of public coast station licenses, including filing and reporting requirements, as well as the cost of maintaining staff and electronic resources to participate in auctions.

Recent Efforts

In the 2002 *Maritime Second Memorandum Opinion and Order and Fifth Report and Order*, the Commission converted AMTS to geographic licensing.[228] In a separate docket, the Commission has proposed to consolidate, revise, and streamline the Part 80 rules to address new international maritime requirements, improve the operational ability of all users of marine radios, and remove unnecessary or duplicative requirements.[229] The Commission expects to address the additional issues raised in the Further Notice of Proposed Rulemaking.

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated certain Part 80 rules pertaining to competitive bidding in the maritime communications services to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[230]

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[228] Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket 92-257, *Second Memorandum Opinion and Order and Fifth Report and Order*, 17 FCC Rcd 6685 (2002).

[229] Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, WT Docket No. 00-48, *Report and Order and Further Notice of Proposed Rulemaking*, 17 FCC Rcd 6741, 5943 (2002).

[230] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 80.1251 and 80.1252).

Comments

API recommends that the Commission expand section 80.13(c) to VHF marine radio operations on or in the vicinity of offshore platforms.[231] This provision exempts individual licensing requirements for ship stations that: (1) do not travel to foreign ports; (2) do not engage in international communications; and (3) are not required to carry a radio by any statute, treaty, or agreement to which the United States is signatory.[232] API also recommends that the Commission amend its rules to allow marine radio operators engaged in activities on offshore platforms, currently limited to the frequencies set forth in section 80.373(f), to utilize the frequencies available to ship radio stations pursuant to section 80.871(d).[233] API adds that, if the Commission adopts its recommendation, the Commission should not make marine radio stations engaged in activities on or around offshore platforms subject to additional regulatory burdens such as the watch requirements set forth under section 80.1123.[234]

LMS Wireless recommends that the Commission replace AMTS with a new Part 90 service for use in an "Advanced-Technology Land Infrastructure and Safety Service (ATLIS)."[235] It also recommends that the Commission remove all VPC restrictions relating to maritime traffic and clarify the rules on what inland VPC licenses (and non-inland VPC licenses, when used solely to serve land areas) are permitted to do.[236]

Globe Wireless recommends several revisions regarding the Part 80 rules: elimination of sections 80.141(c)(1) and (2), 80.203(b)(3), 80.355, 80.357, and 80.802, modifications to sections 80.203(l), 80.205(a), 80.207(d), 80.363(a), 80.363(a)(1) and (2), 80.371(a) and (b), 80.375 and 80.836, and reevaluation of section 80.373.[237]

Recommendation

The Part 80 rules commented upon by parties in this proceeding concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among Part 80 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by

[231] API Comments at 16.

[232] 47 C.F.R. § 80.13(c).

[233] API Comments at 16-17, *citing* 47 C.F.R. §§ 80.373(f), 80.871(d).

[234] API Comments at 17, *citing* 47 C.F.R. § 80.1123.

[235] LMS Wireless Reply Comments at 10.

[236] *Id.* at 10-11.

[237] *See* Globe Wireless *Ex Parte* Comments. We note that Globe did not file these comments until November 8, 2002, after the comment period had closed. In light of the importance of this proceeding, we will, pursuant to Section 1.1206 of the Commission's rules, consider these late-filed comments as an *ex parte* submission.

competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 80 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 80 rules generally remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be in the public interest for reasons other than those related to competitive developments, that fall within the scope of section 11 review. In this regard, we discuss the comments and our recommendations below. Staff believes that the specific rules commented upon by API remain necessary in the public interest in their current forms, and accordingly recommends that modification or repeal is not warranted. Staff does not believe that adoption of API's recommendations is advisable due to the inherent difference between offshore platforms and ship stations. Staff notes that offshore platforms are fixed in location and would require both domestic and international coordination, while ship stations do not operate from a fixed location.

Because LMS Wireless' comments raise reallocation questions and other issues involving the creation of new rules that are more in the nature of a petition for rulemaking or waiver request than a review to modify or eliminate existing rules, staff concludes that these comments are beyond the scope of this Biennial Review proceeding and recommends that they be considered in the various dockets as appropriate.

As regards Globe's *Ex Parte* comments, staff notes that the Commission has issued a Notice of Proposed Rule Making regarding Part 80 rules in WT Docket No. 00-48 and believes that rule changes proposed by Globe are within the scope of the review contemplated by that Notice.[238] WTB staff believes that several of these rules in their current form may not be necessary in the public interest and recommends that the Commission consider revising these rules in its pending proceeding. The staff also recommends that the Biennial Review *Ex Parte* comments of Globe regarding Part 80 rules be incorporated into the Commission's pending proceeding.

[238] Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, WT Docket No. 00-48, *Report and Order and Further Notice of Proposed Rulemaking*, 17 FCC Rcd 6741 (2002).

PART 90 – PRIVATE LAND MOBILE RADIO SERVICES

Description

Part 90 contains licensing, technical, and operational rules for the group of mobile services historically described as "private land mobile radio services" (PLMRS).[239] Services regulated under this rule part include commercial services such as Specialized Mobile Radio (SMR) and private carrier paging (PCP), non-commercial services such as public safety, and services that are used by utilities, transportation companies, and other businesses for both commercial and private internal purposes.

With the passage of the Omnibus Budget Reconciliation Act of 1993 (OBRA),[240] Congress reclassified some PLMRS (*e.g.*, 800 MHz and 900 MHz SMR, PCP, and some 220 MHz and Business Radio services) as CMRS and required providers in these services to be regulated as common carriers.[241] The regulatory status of non-CMRS Part 90 services were unaffected by OBRA, and these services continue to be classified as private services.

Part 90 contains 22 subparts. Some of these subparts apply generally to all Part 90 licensees, while others establish rules for specific services.[242] In general, the rules in this part: (1) specify the frequency bands in which each service operates; (2) define the service area of licenses in each frequency band; (3) establish minimum construction or coverage requirements for licensees; and (4) define technical limits on operation (*e.g.*, antenna height, transmitter power) to prevent interference. For certain CMRS services, Part 90 also contains subparts dealing with the auction and award of licenses,[243] although the Commission eliminated many of the service-specific licensing rules in Part 90 as part of its consolidation, in 1998, of all wireless licensing rules into Part 1 in the *Universal Licensing* proceeding.[244]

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[239] 47 C.F.R. Part 90.

[240] Omnibus Budget Reconciliation Act of 1993, Pub. Law No. 103-66, 107 Stat. 312 (largely codified at 47 U.S.C. § 332 *et seq.*) (1993 Budget Act or OBRA).

[241] Implementation of Sections 3(n) and 332 of the Communications Act Regulatory Treatment of Mobile Services, *Second Report and Order*, 9 FCC Rcd 1411 (1994) (*CMRS Second Report and Order*).

[242] *See*, *e.g.*, Part 90, subpart L (Authorization and Use of Frequencies in the 470-512 MHz Band).

[243] *See*, *e.g.*, Part 90, subpart U (Competitive Bidding Procedures for the 900 MHz Specialized Mobile Radio Service).

[244] Biennial Regulatory Review – Amendment of Parts 0, 1, 13, 22, 24, 26, 27, 80, 87, 90, 95, 97, and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services*, Report and Order*, 13 FCC Rcd 21027 (1998); *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd 11145 (1998).

The analysis of Part 90 in this report focuses on those subparts that affect CMRS providers:

Subpart C – Industrial/Business Pool
Subpart G – Applications and Authorizations
Subpart H – Policies Governing Assignment of Frequencies
Subpart I - General Technical Standards
Subpart L - Authorizations in 470-512 MHz Band
Subparts M, X - Intelligent Transportation Systems Radio Service/Auction Rules
Subpart N – Operating Requirements
Subpart P - Paging Operations
Subpart R – Regulations Governing the Licensing and Use of Frequencies in the 764-776 and 794-806 MHz Bands
Subparts S, U, V - 800/900 MHz SMR Service/Auction Rules
Subparts T, W - 220 MHz Service/Auction Rules

Purpose

The purposes of the Part 90 rules are to establish basic ground rules for assignment of spectrum in Part 90 services, to ensure efficient spectrum use by licensees, and to prevent interference.

Analysis

Status of Competition

As detailed in the *Seventh CMRS Competition Report*, Part 90 CMRS providers operate in an environment that is marked by significant and increasing competition in mobile telephony, paging/messaging, and mobile data, which has resulted in innovation, lower prices for customers, and increased diversity of service offerings.[245]

Advantages

The Part 90 rules provide a clear, predictable structure for the assignment and use of spectrum. In the Part 90 frequency bands that are licensed exclusively to CMRS providers (*e.g.*, SMR), auction rules promote efficient licensing of spectrum to those entities that value it the most. In other bands, site-specific licensing and frequency coordination are used to promote efficient spectrum use.

Disadvantages

The Part 90 rules impose limited administrative and technical burdens that are inherent to the licensing process and necessary for compliance with technical and operational rules.

[245] *Seventh CMRS Competition Report*, 17 FCC Rcd at 12988-13024.

Recent Efforts

The Commission has made numerous changes to Part 90 rules in the recently adopted *Report and Order* in the Part 90 Biennial Regulatory Review proceeding.[246] Also, in March, 2002, the Commission issued a *Notice of Proposed Rulemaking* seeking comment on and proposals for how best to remedy interference to 800 MHz public safety systems, including addressing various possible means of reconfiguring the 800 MHz band to eliminate or reduce interference.[247]

In the *Competitive Bidding Conforming Edits Order,* the Wireless Telecommunications Bureau modified or eliminated certain Part 90 rules pertaining to competitive bidding in the 220-222 MHz SMR service, 800 MHz SMR service, 900 MHz SMR service, 220 MHz Radio service, and Location and Monitoring service to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[248]

In May 2002, the Commission adopted service and competitive bidding rules to govern the licensing of 27 MHz of electromagnetic spectrum, including Part 90 bands (216-220 MHz, 1427-1429.5 MHz, and 1429.5-1432 MHz) which were recently reallocated for non-Government use.[249]

Comments

Comments filed regarding Part 90 rules are addressed in specific Part 90 subparts.

Recommendation

Staff recommendations with respect to Part 90 rule sections are set forth in the discussions of specific Part 90 subparts.

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[246] 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 - Private Land Mobile Radio Services, WT Docket No. 98-182, *Memorandum Opinion and Order and Second Report and Order*, 17 FCC Rcd 9830 (2002) (*PLMRS MO&O and Second R&*O). *See also* 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 - Private Land Mobile Radio Services, WT Docket No. 98-182, *Report and Order and Further Notice of Proposed Rule Making*, 15 FCC Rcd 16673 (2000).

[247] In the Matter of Improving Public Safety in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rulemaking,* 17 FCC Rcd 4873, *modified by erratum*, 17 FCC Rcd 7169 (2002).

[248] *See Competitive Bidding Conforming Edits Order, supra* (modifying or eliminating sections 90.705 (220-222 MHz SMR service); 90.901-90.903, 90.905-90.910, and 90.912-90.913 (800 MHz SMR); 90.801-90.803, 90.805-90.807, 90.809-90.810, 90.812-90.815 (900 MHz SMR); 90.1001, 90.1003, 90.1005, 90.1007, 90.1009, 90.1011, 90.1013, 90.1015, 90.1017, 90.1021, 90.1023, and 90.1025 (220 MHz Radio Service); and 90.1101 and 90.1103 (Location and Monitoring Service)).

[249] Amendments to Parts 1, 2, 27 and 90 of Commission's Rules to License Services in 216-220 MHz, 1390-1395 MHz, 1427-1429 MHz, 1429-1432 MHz, 1432-1435 MHz, 1670-1675 MHz and 2385-2390 MHz Government Transfer Bands, *Report and Order*, 17 FCC Rcd 9980 (2002).

PART 90, SUBPART C – INDUSTRIAL/BUSINESS RADIO POOL

Description

Part 90, subpart C[250] sets forth the regulations governing the licensing and operations of the radio communications of entities engaged in certain commercial activities, engaged in clergy activities, operating educational, philanthropic, or ecclesiastical institutions, or operating hospitals, clinics, or medical associations.

Purpose

The purpose of the subpart C rules is to establish the rules governing eligibility, frequency availability, licensing, permissible communications, and system requirements for licensees in the industrial/business radio pool.

Analysis

Status of Competition

See Part 90 – Private Land Mobile Radio Services "Status of Competition" discussion, *supra*.

Advantages

The subpart C rules provide a clear structure for the assignment and use of spectrum to assist eligible entities in the operation of their day-to-day activities.

Disadvantages

The subpart C rules impose limited administrative and technical burdens inherent to the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

In 2001, the Commission initiated WT Docket No. 01-146 (Amendment of Part 90 of the Commission's Rules and Policies for Applications and Licensing of Low Operations in the Private Land Mobile 450-470 Band) and sought comment on revisions to the Commission's rules and policies governing low-power operations in the 450-470 MHz band.[251]

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[250] 47 C.F.R. Part 90, subpart R.

[251] Amendment of Part 90 of the Commission's Rules and Policies for Applications and Licensing of Low Operations in the Private Land Mobile 450-470 Band, WT Docket No. 01-146, *Notice of Proposed Rulemaking*, 16 FCC Rcd 14949 (2001).

Comments

API asks the Commission to consider amending 90.35(b)(3) to dedicate a portion of channels in the 460-470 MHz band for data-primary use.[252] PCIA asserts that, because transmitters on data systems typically do not have "push to talk" modes, the Commission must develop rules delineating sharing standards or whether to establish data exclusive bands.[253]

Recommendation

The Part 90, subpart C rules commented upon by parties in this proceeding concern frequencies that are limited to communications designed to aid in the pursuit of the eligible entities' primary line of business, and not in the provision of commercial service to consumers. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 90, subpart C rules remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be in the public interest for reasons other than those related to competitive developments that fall within the scope of Section 11 review. In this regard, we discuss the comments and our recommendations below.

Staff notes that the Commission has issued a Notice of Proposed Rule Making in WT Docket No. 01-146 regarding Part 90 rules affecting channels in the 460-470 MHz band and believes that the rule changes proposed by API and PCIA are within the scope of the review contemplated by that Notice. Based on the comments filed in this Biennial Review proceeding, the staff believes that the rule in its current form may not be necessary in the public interest and recommends that the Commission consider revising the rule in its pending proceeding. The staff also recommends that the Biennial Review comments of API and PCIA regarding these rules be incorporated into the Commission's pending proceeding.

[252] API Comments at 14-15.

[253] PCIA Reply Comments at 2-3.

PART 90, SUBPART G – APPLICATIONS AND AUTHORIZATIONS

Description

Part 90, subpart G[254] supplements subpart F of Part 1 of the Commission's Rules which establishes the requirements and conditions under which commercial and private radio stations may be licensed and used in the Wireless Telecommunications Services.

In general, the rules in subpart G: (1) establish application requirements; (2) define the license term; (3) establish licensing procedures; and (4) define certain permissible preauthorization activities (*e.g*, conditional authorization, and construction prior to grant of an application.)

Purpose

The purposes of the subpart G rules are to establish basic rules for the preparation, submission, and evaluation of applications to operate in the Wireless Telecommunications Services.

Analysis

Status of Competition

See Part 90 – Private Land Mobile Radio Services "Status of Competition" discussion, *supra*.

Advantages

The subpart G rules provide a clear, predictable structure for the preparation, submission and evaluation of applications.

Disadvantages

The subpart G rules impose limited administrative and technical burdens that are inherent to the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

See Part 90 – Private Land Mobile Radio Services "Recent Efforts" discussion, *supra*.

Comments

AMTA recommends that the Commission amend section 90.159 to extend conditional temporary licensing authority (CTA) to coordinated systems in the 470-512 MHz band.[255]

[254] 47 C.F.R. Part 90, subpart G.

[255] AMTA Reply Comments at 3.

In 1989, the Commission amended section 90.159 to allow applicants for new land mobile stations in the shared frequency bands below 470 MHz to commence operations under a CTA upon completing the applicable frequency coordination process and filing their application with the Commission.[256] In making this determination, the Commission specifically excluded the 470-512 MHz band, which is licensed on an exclusive basis, from eligibility for CTAs.[257]

Recommendation

The Part 90, subpart G rules commented upon by parties in this proceeding concern procedural rules. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, staff determines generally that the Part 90, subpart G rules remain necessary in the public interest, and recommends that modification or repeal of these rules is not warranted. Staff does not recommend that the Commission consider adopting AMTA's proposal.

The Commission allows CTAs on shared PLMR frequencies because CTAs are intended to allow operation on a conditional basis in situations in which application for proposed radio stations raise no special issues and are routinely granted.[258] AMTA argues that the Commission has continued to allow the use of CTAs in the frequencies below 470 MHz, even after making substantive changes to the operational rules to the band which increased the complexity of the licensing process. However, the staff believes that the Commission should continue to be conservative in implementing conditional licensing in bands licensed on an exclusive use basis to minimize the likelihood of interference to incumbent licensees on these bands.[259] Accordingly, staff believes that section 90.159 is necessary in the public interest and recommends that modification or repeal is not warranted.

[256] *See* Amendment of Part 90 of the Commission's Rules to Implement a Conditional Authorization Procedure for Proposed Private Land Mobile Radio Service Stations, *Report and Order*, 4 FCC Rcd 8280 (1989).

[257] *Id.* at 8283 ¶ 25.

[258] *Id.*

[259] *Id*.

PART 90, SUBPART H – POLICIES GOVERNING ASSIGNMENT OF FREQUENCIES

Description

Part 90, subpart H provides detailed information concerning the polices under which the Commission assigns frequencies for the use of Part 90 licensees, frequency coordination requirements and procedures, and certain procedures under which licensees may cooperatively share radio facilities.[260]

Purpose

The purposes of the subpart H rules are to establish basic ground rules for assignment of spectrum in Part 90, including requirements regarding frequency coordination and cooperative sharing of spectrum by various licensees. Frequency coordination is performed by a private-sector entity or organization certified to recommend the most appropriate frequency for use by applicants and licensees in the private land mobile radio services (PLMRS). This helps to ensure that the Commission maximizes the efficient use of available spectrum, which is generally shared spectrum, for the benefit of all members of the public while mitigating the demand for Commission resources posed by the increasingly complex and growing numbers of applications for PLMRS frequencies.

Analysis

Status of Competition

See Part 90 – Private Land Mobile Radio Services "Recent Efforts" discussion, *supra*.

Advantages

The subpart H rules provide a clear, predictable structure for the assignment and use of spectrum. Site-specific licensing and frequency coordination are used to promote efficient spectrum use.

Disadvantages

The subpart H rules impose limited administrative burdens, for example, frequency coordination, that are inherent to the licensing process and necessary to ensure efficient spectrum allocation and use, as well as compliance with technical and operational rules.

[260] 47 C.F.R. Part 90, subpart H.

Recent Efforts

In a recent *Notice of Proposed Rulemaking*,[261] the Commission sought comment on whether to modify the existing frequency coordination procedures for the Public Safety Pool below 470 MHz by expanding competitive frequency coordination.

Comments

Section 90.175 – General Category channels. CTIA seeks revision or elimination of certain Commission rules, including rule section 90.175 set forth in subpart H. CTIA requests that the Commission exempt applications filed with respect to 800 MHz General Category frequencies listed in section 90.615 from the 90.175 frequency coordination requirements.[262]

Section 90.175 – Transmitter site and/or frequency deletions. CTIA also requests that the Commission clarify section 90.175(i) not to require frequency coordination for applications requesting only the deletion of a frequency.[263] AMTA supports not applying the frequency coordination requirement to frequency deletion, noting that the coordinator was not actually performing a frequency coordination function.[264]

Section 90.175 – Shared 929 MHz Private Carrier Paging channels. AAPC requests that the Commission eliminate the requirement that licensees of shared Private Carrier Paging (PCP) channels under Part 90 of the rules obtain prior frequency coordination of their applications from a recognized frequency coordinator.[265] APCO disagrees with AAPC's position that the prior frequency coordination be dispensed with for PCP carriers filing shared channel applications.[266] APCO notes that the purpose of the rule is to ensure that potential licensees do not cause harmful interference to co-channel or adjacent channel licensees in the same area, which is of particular concern to Part 90 public safety operations, and that frequency coordination is necessary in shared channel environments.

Section 90.187 – Frequency coordination for certain trunked services. API asks the Commission to simplify frequency coordination requirements by amending section 90.187(b)(2)(i) to ensure that a contour analysis is required whenever a proposed system would overlap any part of a bandwidth being employed by an existing system.[267] API

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[261] In the Matter of Amendment of Sections 90.20 and 90.175 of the Commission's Rules for Frequency Coordination of Public Safety Frequencies in the Private Land Mobile Radio Below 470 MHz Band, *Notice of Proposed Rulemaking*, 17 FCC Rcd 17534 (2002).

[262] CTIA Petition at 26-27.

[263] CTIA Petition at 27.

[264] AMTA Reply Comments at 7.

[265] AAPC Comments at 2-3.

[266] APCO Reply Comments at 2.

[267] API Comments at 13.

notes that section 90.35(b)(2)(iii) requires applicants for frequencies shared by the former Power, Petroleum, Railroad, Manufacturers, Forest Products, Telephone Maintenance, Motor Carrier, and/or Automobile Emergency Radio Services whose proposed service contours overlap the service contour of an existing station on one of these frequencies to obtain either written concurrence of the industry specific coordinator or the licensee of the existing station.[268] API further notes that the Commission approved a frequency coordinator consensus methodology for adjacent channel service/interference values in these legacy radio service frequencies.[269] API contends that frequency coordinators are interpreting section 90.187(b)(2)(i) in a manner inconsistent with section 90.35(b)(2)(iii) and asks the Commission to harmonize the two provisions.

PCIA argues that if the Commission modifies this rule it should grandfather all systems coordinated under the previous interpretation of this rule.[270]

Recommendation

The Part 90, subpart H rules commented upon by parties in this proceeding concern land mobile use of the Part 90 frequencies requiring frequency coordination that primarily involves shared frequencies for primarily shared frequencies for private internal communications uses by commercial businesses, industrial and public safety entities. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 90, subpart H rules remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. In this regard, we discuss the comments and our recommendations below.

Section 90.175 – General Category channels. Staff finds that the frequency coordination requirements of section 90.175 provisions may no longer be necessary in the public interest for certain 800 MHz General Category frequencies, and accordingly recommends that the Commission initiate a proceeding to consider modifying the rule. Specifically, staff recommends that the Commission consider whether to eliminate the frequency coordination requirement for auctioned licenses and for new facilities that do not expand the applicable interference contour. Staff notes, however, that the possible conversion of existing site-by-site licensed general category frequencies to a different mode of operation (*e.g.*, from conventional to trunked use), and the potential shared use

[268] API Comments at 12.

[269] *See* Wireless Telecommunications Bureau Accepts and Approves Consensus Analytical Method for Determining Additional Frequency Coordination Requirements for Certain Private Land Mobile 150-470-MHz Applications, *Public Notice*, 17 FCC Rcd 10628 (2002).

[270] PCIA Reply Comments at 2.

environment of the frequencies, makes elimination of the coordination requirement a concern. Frequency coordination remains beneficial in a shared use environment to ensure efficient use and prevent interference.

Section 90.175 – Transmitter site and/or frequency deletions. Staff also believes that the section 90.175 frequency coordination provisions that pertain to transmitter site and/or frequency deletions may no longer be necessary in the public interest, and recommends that the Commission consider modifying section 90.175 to exclude applications seeking to delete either a transmitter site, a frequency, or both, from the frequency coordination requirement. This would reduce the processing burden on both applicants and frequency coordinators in cases in which the frequency coordination function is unnecessary. However, to ensure that frequency coordinators have access to updated information concerning such site and/or frequency deletions, we recommend that, if the rule is modified as proposed above, applicants should be required to notify the applicable frequency coordinator of the deletion.

Section 90.175 – Shared 929 MHz private carrier paging channels. Staff finds that the section 90.175 provisions pertaining to shared 929 MHz private carrier paging channels remain necessary in the public interest in their current form, and recommends that their modification or elimination is not warranted. Because the specified frequencies are shared and potentially subject to overcrowding, the specific knowledge of the frequency coordinator regarding the applicants and actual use of the paging channels in a given market, and the paging industry as a whole, facilitates recommendations to the Commission of the best frequencies available. This helps eliminate interference among licensees in a shared channel environment, including possible interference to public safety operations, and promotes efficient channel usage.

Section 90.187 – Frequency coordination for certain trunked services. Staff believes that section 90.187 in its current form remains necessary in the public interest, and recommends that modification or repeal is not warranted. Specifically, staff does not recommend that the Commission consider adopting API's recommendation. Staff notes that while coordinators are not required to use the consensus methodology to satisfy section 90.187, if a coordinator uses another method it has the burden to show that the method conforms to generally accepted engineering practice. Moreover, staff notes that, if it receives complaints that a given frequency coordination is not in accordance with section 90.187 the Bureau has the ability to take appropriate action including orders of modification.

PART 90, SUBPART I –GENERAL TECHNICAL STANDARDS

Description

Part 90, subpart I establishes the general technical requirements for the use of frequencies and equipment in the Part 90 radio services.[271] In general, the rules in subpart I: (1) establish equipment certification procedures; and (2) set standards for frequency tolerance, modulation, emissions, power, and bandwidths.

Purpose

The purpose of the subpart I rules is to establish basic technical rules governing operation of radio stations in the Wireless Telecommunications Services.

Analysis

Status of Competition

See Part 90 – Private Land Mobile Radio Services "Recent Efforts" discussion, *supra*.

Advantages

The subpart I rules provide a clear structure for technical operations in the part 90 frequencies.

Disadvantages

The subpart I rules impose limited technical burdens intended to ensure compliance with operational rules and necessary for compliance with technical and operational rules.

Recent Efforts

None.

Comments

Section 90.205 – "Safe harbor" table. AMTA asks the Commission to eliminate or amend the "Safe Harbor" table contained in section 90.205 which defines the permissible power and antenna heights for systems in the bands below 470 MHz in order to accommodate superior approaches to increased spectrum efficiency. AMTA claims the table unnecessarily restricts the operations of newer systems without producing a demonstrable improvement in channel reuse or spectrum efficiency.[272]

[271] 47 C.F.R. Part 90, subpart G.

[272] AMTA Reply Comments at 6-7.

Section 90.210 – Emission mask "G". Motorola seeks revision of rule section 90.210, which describes several emission masks for land mobile radio transmitters authorized to operate in the Private Land Mobile Radio services. Emission masks are emission-limit specifications which are schedules of attenuation as a function of displacement frequency. Specifically, Motorola seeks a loosening of emission mask "G," as described in section 90.210. Motorola notes that emission mask "G" described in this rule section was originally developed for digitally modulated FM Transmitters not equipped with low-pass filters, used for paging and encrypted voice services in a 25 kHz channel. Motorola asserts that, because the emission mask was designed with a specific application in mind, it is more restrictive than other emission masks in the land mobile services.[273]

Recommendation

The Part 90, subpart I rules commented upon by parties in this proceeding concern technical and procedural rules, such as interference-related issues among Part 90 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 90, subpart I rules remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. In this regard, we discuss the comments and our recommendations below.

Section 90.205 – "Safe harbor" table. Staff believes that section 90.205 remains necessary in the public interest, and recommends that modification or repeal is not warranted. Specifically, staff does not recommend adopting AMTA's proposal. The Commission developed the "Safe Harbor" table to maximize channel reuse by limiting transmitter power and antenna heights.[274] Staff believes that the "Safe Harbor" table is an improvement over the prior system because it encourages system engineers to maintain signal throughout the required service area.

Section 90.210 – Emission mask "G". Staff believes that the emission mask "G" provision of section 90.210 in its current form may no longer be necessary in the public interest, and recommends that the Commission consider adopting Motorola's request, which could potentially enhance design flexibility without diminishing interference protection.

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[273] Motorola Comments at 1-2.

[274] *See* Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, *Report and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 10076, 10113 ¶ 71 (1995).

PART 90, SUBPART L – REGULATIONS FOR AUTHORIZATION AND USE OF FREQUENCIES IN THE 470-512 MHZ BAND

Description

Part 90, subpart L governs the authorization and use of the 470-512 MHz band by both commercial and private land mobile stations.[275] This band is shared with television channels 14-20 and certain Part 22 radio services.[276] In the *Second Report and Order* in the Refarming proceeding, the Commission authorized centralized trunking in the 470-512 MHz band if a licensee has an exclusive service area or obtains consent from all co-channel and adjacent channel licensees and frequency coordination is obtained.[277] In 1997, the Commission created a General Access Pool to permit greater flexibility and foster more effective and efficient use of the 470-512 MHz band. Under current rules, all unassigned channels, including those that subsequently become unassigned, are considered to be in the General Access Pool and are available to all eligible licensees on a first-come, first-served basis. If a channel is assigned in an urbanized area, however, subsequent authorizations on that channel will only be granted to users from the same category.[278]

In general, the rules in subpart L: (1) specify the frequencies available for assignment in the 470-512 MHz band; (2) define the location of stations and service area of licenses in each frequency block; (3) establish maximum loading requirements for licensees; and (4) define technical limits on operation (*e.g.*, antenna height, transmitter power) to prevent interference. In accordance with these rules, new applicants may apply for only one channel at a time.[279] Licensees are required to show that any assigned channels in this band in a particular urbanized area are at full capacity before they can be assigned additional 470-512 MHz channels in that area.[280]

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[275] 47 C.F.R. Part 90, subpart L.

[276] *See* 47 C.F.R. §§ 22.621 and 22.651.

[277] *See* Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Report and Order,* 10 FCC Rcd 10076 (1995); *Memorandum Opinion and Order*, 11 FCC Rcd 17676 (1996); Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Second Report and Order*, 12 FCC Rcd 14307 (1997). *See* 47 C.F.R. § 90.187(b). The FCC has recognized two types of trunking: centralized and decentralized. A centralized trunked system uses one or more control channels to transmit channel assignment information to the mobile radios. In a decentralized trunked system, the mobile radios scan the available channels and find one that is clear.

[278] The seven categories of eligible users are: (1) Public safety; (2) Power and telephone maintenance licensees; (3) Special industrial licensees; (4) Business licensees; (5) Petroleum, forest products, and manufacturers licensees; (6) Railroad, motor carrier, and automobile emergency licensees; and (7) Taxicab licensees. 47 C.F.R. § 90.311.

[279] 47 C.F.R. § 90.311.

[280] *Id*.

The rules in this subpart also specify the minimum allowable distance between co-channel stations.[281] For purposes of loading requirements, licensees in the 470-512 MHz band are divided into two groups: the Public Safety Pool and the Industrial/Business Pool.[282] After loading a channel to full capacity, a licensee may apply for another channel.[283] Current licensees may use existing loading to satisfy this requirement and apply for more than one channel at one time. Licensees that are operating above full capacity may use those units to qualify for additional channels.

Purpose

The purposes of the subpart L rules are to establish basic ground rules for assignment of spectrum in the 470-512 MHz service, to ensure efficient spectrum use by licensees, and to prevent interference with television channels 14-20.

Analysis

Status of Competition

Because land mobile use of the 470-512 MHz band is limited by the sharing of the band with broadcast channels 14-20 and certain Part 22 services, service in the band has been narrowly geared to industrial and public safety use in a limited number of urban locations. Demand for these channels to provide commercial services to consumers has been small.

Advantages

The subpart L rules provide a clear, predictable structure for the assignment and use of spectrum. Site-specific licensing and frequency coordination are used to promote efficient spectrum use.

Disadvantages

The subpart L rules impose limited administrative and technical burdens that are inherent to the licensing process and necessary for compliance with technical and operational rules. Because the band is shared with television broadcast stations, the technical burden imposed on licensees to prevent interference with co-channel operations is somewhat greater than in other bands allocated exclusively to wireless services.

[281] 47 C.F.R. § 90.307.

[282] 47 C.F.R. § 90.313(a).

[283] 47 C.F.R. § 90.313(c).

Recent Efforts

This band has been affected by a number of broadly applicable rulemaking actions, such as the ULS proceeding that was initiated in conjunction with the 1998 Biennial Regulatory Review.

Comments

AMTA recommends that the Commission amend section 90.159 to extend conditional temporary licensing authority (CTA) to coordinated systems in the 470-512 MHz band.[284]

Recommendation

See the recommendation in Part 90, subpart G, *supra*.

[284] AMTA Reply Comments at 3.

PART 90, SUBPART M – INTELLIGENT TRANSPORTATION SYSTEMS RADIO SERVICE (ITS)

Description

Part 90, subpart M contains licensing, technical, and operational rules for the Intelligent Transportation Systems (ITS) radio service. ITS radio service consists of two sub-categories: the Location and Monitoring Service (LMS) and the Dedicated Short Range Communications Service (DSRCS).[285]

In 1995, the Commission adopted service rules to provide for the establishment of a new LMS to encompass the old Automatic Vehicle Monitoring Service that was initiated in 1974. The Commission adopted rules for the licensing of LMS, primarily in the 902-928 MHz Band. In addition, the Commission determined that the definition of LMS would also include certain operations below 512 MHz. Unlike other LMS operations, however, LMS systems below 512 MHz may neither offer service to the public nor provide service on a commercial basis.[286]

LMS systems are used for such functions as vehicle tracking and location, automated toll collection, and other communications functions related to vehicles. In general, the subpart M rules: (1) specify the frequency bands in which LMS licensees operate; (2) define the service area of LMS licenses in each frequency band; (3) establish minimum construction or coverage requirements for LMS licensees; and (4) define technical limits on operation (*e.g.*, antenna height, transmitter power) to prevent interference.[287] The rules also establish limitations on LMS systems' interconnection with the public switched network and set forth a number of technical requirements intended to ensure successful coexistence of all the services authorized to operate in the band.

In June 1998, the Transportation Equity Act for the 21st Century[288] required the Commission to consider the spectrum needs of intelligent transportation systems, in particular for dedicated, short-range communications. In October 1999, the Commission allocated seventy-five megahertz of spectrum for use by DSRCS systems operating in the ITS Radio Service.[289] The Commission amended subpart M by adding technical rules establishing power, emission, and frequency stability limits for DSRCS operations but

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[285] 47 C.F.R. Part 90, subpart M.

[286] *See* Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Report and Order*, 10 FCC Rcd 4695, 4738 ¶ 86 (1995) (*LMS Report and Order*).

[287] The definition of LMS also includes existing Automatic Vehicle Monitoring operations below 512 MHz. Unlike other LMS operations, LMS systems below 512 MHz may neither offer service to the public nor provide service on a commercial basis. *See LMS Report and Order*, 10 FCC Rcd at 4738 ¶ 86.

[288] Transportation Equity Act for the 21st Century, Pub. L. 105-178, 112 Stat. 107 (1998).

[289] Amendment of Parts 2 and 90 of the Commission's Rules to Allocate the 5.850-5.925 GHz Band to the Mobile Service for Dedicated Short Range Communications of Intelligent Transportation Services, *Report and Order*, 13 FCC Rcd 14321 (1999).

deferred consideration of DSRCS licensing and service rules and spectrum channelization plans to a later proceeding because the standards addressing those matters were still being developed by the U.S. Department of Transportation (DOT). In July 2002, the Intelligent Transportation Society of America (ITS America), the Federal Advisory Committee to DOT, submitted recommendations to the Commission concerning the development of the licensing and service rules. On November 15, 2002, the Commission released its *DSRCS Notice of Proposed Rulemaking* seeking comment on a variety of issues concerning the development of the licensing and service rules, including the recommendations of ITS America.[290]

Purpose

The purpose of Part 90, subpart M is to integrate radio-based technologies into the nation's transportation infrastructure. In developing the nation's intelligent transportation systems, these rules provide a regulatory framework that allows entities to deploy radio-based devices and systems effectively to enhance safety of life and protection of property on the nation's highways, railways and other transportation corridors, without causing harmful interference to other radio services.

Analysis

Status of Competition

Although the number of LMS licensees has increased since the Commission completed its auction of multilateration LMS licenses in March 1999, there has not been significant deployment of these services in the 902-928 MHz band. The services originally envisioned for LMS, such as vehicular tracking, tend to be niche services, and competition within LMS is more limited than in other types of wireless services. The level of competition from LMS-type service providers in other bands has increased since 1995, when there were few providers of location service. Today, consumers and businesses alike have an array of service providers from which to obtain location service, including satellite-based service providers Qualcomm (OmniTracs service) and ORBCOMM ("Little LEO" service). General Motors, moreover, offers its OnStar location service as an option in many of its new automobile models and now has more than 2 million U.S. customers.[291]

The DSRCS service is not yet operational.

[290] Amendment of the Commission's Rules Regarding Dedicated Short-Range Communication Services in the 5.850-5.925 GHz Band (5.9 GHz Band), WT Docket No. 01-90, *Notice of Proposed Rulemaking and Order*, FCC 00-302 (rel. Nov. 15, 2002) (*DSRCS NPRM*).

[291] Because LMS systems below 512 MHz may neither offer service to the public nor provide service on a commercial basis, the status of competition is not relevant to this analysis.

Advantages

The Part 90, subpart M rules on LMS provide users with a well-defined structure for the assignment and use of this spectrum. The existing technical standards and restrictions help ensure that any LMS systems are utilized primarily to meet the Commission's stated purpose of advancing ITS as a location service and not as a general messaging or interconnected voice or data service. Many of these rules minimize the potential for harmful interference to other important users of the 902-928 MHz band. (The Commission has not yet adopted licensing and service rules for the DSRCS service.)

Disadvantages

The subpart M rules impose limited administrative and technical burdens that are inherent to the LMS licensing process and necessary for compliance with technical and operational rules. (As noted above, the Commission has not yet adopted licensing and service rules for the DSRCS service.)

Recent Efforts

The Wireless Telecommunications Bureau recently released a Public Notice seeking comment on a Petition for Rulemaking filed by Progeny LMS, LLC (Progeny) on March 5, 2002 regarding certain provisions of Part 90, subpart M's rules on multilateration LMS.[292] On November 15, 2002, the Commission released its *DSCRS Notice of Proposed Rulemaking* seeking comment on the licensing and service rules for the DSRCS radio service.[293]

Comments

LMS Wireless submitted reply comments regarding, *inter alia,* use of the 902-928 MHz Band to support a new multiband Advanced-Technology Land Infrastructure and Safety Service (ATLIS). LMS Wireless (or affiliated parties) previously submitted comments in response to both the Public Notice[294] and the *DSRCS Notice of Proposed Rulemaking*[295] relating to the DSRCS service; those comments also supported a nationwide multi-band service. The specific proposals rely on a White Paper that was previously submitted to the Commission in various dockets, including the recent docket involving the Commission's Spectrum Policy Task Force.

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[292] On April 10, 2002, the Wireless Telecommunications Bureau issued a public notice seeking comment on Progeny's Petition. *See* "Wireless Telecommunications Bureau Seeks Comment On Petition For Rulemaking Regarding Location And Monitoring Service Rules," *Public Notice,* 17 FCC Rcd 6438 (2002).

[293] *See DSRCS NPRM and Order,* FCC 00-302.

[294] "Wireless Telecommunications Bureau Seeks Comment Regarding Intelligent Transportation System Applications Using Dedicated Short Range Communications," WT Docket 01-90, *Public Notice*, 16 FCC Rcd 5558, 16 FCC Rcd 6764, 16 FCC Rcd 7985 (2001).

[295] *See DSRCS NPRM and Order,* FCC 00-302.

Recommendation

Because LMS Wireless' comments raise reallocation questions and other issues involving the creation of new rules that are more in the nature of a petition for rulemaking or waiver request than a review to modify or eliminate existing rules, staff concludes that these comments are beyond the scope of this Biennial Review proceeding and recommends that they be considered in the various dockets as appropriate.

In addition, the Part 90, subpart M rules concern procedural, technical, and operational rules, such as licensing procedures and interference-related issues among Part 90 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

Staff notes that the Commission is currently in the process of examining the LMS service rules in the context of Progeny's Petition for Rulemaking, and is currently evaluating issues relating to the licensing and service rules for the DSRCS service in the context of the *DSRCS Notice of Proposed Rulemaking* released on November 15, 2002.

PART 90, SUBPART N – OPERATING REQUIREMENTS

Description

Part 90, subpart N sets forth general operating requirements for stations operating Part 90 regulated radio stations.[296]

Purpose

The purpose of the subpart N rules is to establish general rules governing station operating procedures, points of communication, permissible communications, methods of station identification, control requirements, and station record keeping requirements for Part 90 radio stations.

Analysis

Status of Competition

See Part 90 – Private Land Mobile Radio Services "Recent Efforts" discussion, *supra*.

Advantages

The subpart N rules provide a clear structure for the operation of part 90 regulated radio stations.

Disadvantages

The subpart N rules impose limited administrative and technical burdens inherent to compliance with operational rules and necessary for compliance with technical and operational rules.

Recent Efforts

The Commission reviewed subpart N as part of the recently concluded Part 90 Biennial Regulatory Review proceeding.[297]

Comments

PCIA recommends that we eliminate section 90.419(b) for centralized trunked systems. PCIA believes this section, which imposes secondary status on communications between base stations on 450 MHz frequencies, inhibits the ability of wide-area systems to permit inter-base station communication and communication with operational fixed stations, limiting wide-area dispatch.[298]

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[296] 47 C.F.R. Part 90, subpart R.

[297] *PLMRS MO&O and Second R&*O, 17 FCC Rcd 9830.

[298] PCIA Reply Comments at 3.

Recommendation

The Part 90, subpart N rules commented upon by parties in this proceeding concern technical and operational rules, such as technical and operational standards and interference-related issues among Part 90 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, staff generally determines that the Part 90, subpart N rules remain necessary in the public interest, and recommends that modification or repeal of these rules is not warranted. Staff does not support PCIA's recommendation regarding section 90.149(b). This rule is intended to only allow base stations in the Industrial Business Pool and certain base stations in the Public Safety pool to communicate with base stations, operational fixed stations, or fixed receivers in certain restricted circumstances involving *urgent* need to contact mobile units.[299] Staff believes sufficient fixed spectrum dedicated to day-to-day operations such as those envisioned by PCIA exists without eliminating this rule.[300] Moreover, certain service specific exceptions exist (*e.g.*, section 90.259 making fixed operations co-primary to land mobile on telemetry frequencies in the 217-220 and 1427-1432 MHz band).

[299] *See* Amendment of the Commission's Rules governing the Private Land Mobile Radio Services to provide a New Part 90 that re-regulates and consolidates Parts 89, 91, and 93, *Notice of Proposed Rulemaking*, 65 FCC 2d 975, 980 ¶18 (1977).

[300] *See* 47 C.F.R. § 90.35.

PART 90, SUBPART P – PAGING OPERATIONS IN THE 929 MHZ BAND

Description

Part 90, subpart P contains licensing, technical, and operational rules for paging operations in the 929 MHz Band.[301] This rule part includes services such as commercial paging and private carrier paging (PCP). Licensees may operate on exclusive channels or designated shared channels on a CMRS or PMRS basis.

In general, the rules in this subpart (1) specify the exclusive channels and shared channels; and (2) define technical limits on operation (*e.g.*, antenna height, transmitter power) to prevent interference. For paging operations on exclusive channels, the licensees are subject to Part 22 of the Commission's rules regarding the Paging and Radiotelephone Service.

The Commission has made significant changes to its Part 90, subpart P rules in recent years. In the mid-1990s, the Commission converted the authorization of stations in the 929 MHz Band from the original site-by-site procedure to a geographic area licensing process. The *Second Report and Order* established geographic area licensing for 929 MHz paging and adopted competitive bidding procedures.[302] The *Third Report and Order* changed the geographic area licensing of 929 MHz paging from MTAs to MEAs, clarified that spectrum will automatically revert to the geographic area licensee in all instances in which a non-geographic area incumbent licensee permanently discontinues service, and allowed geographic area licensees to partition their licenses and disaggregate the spectrum.[303] The Commission auctioned geographic licenses for the exclusive channels in the 929 MHz band.[304] Furthermore, the Part 22 Rules regarding paging now apply to all 929 MHz licensees on exclusive channels and, in 1999, the application filing rules were moved from this subpart to Part 1 in connection with implementation of electronic filing procedures and the Universal Licensing System.

Purpose

The purposes of the Part 90, subpart P rules are to establish basic ground rules for assignment and use of exclusive or shared channels in the 929 MHz Band and to prevent interference.

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[301] 47 C.F.R. Part 90, subpart P.

[302] *See* Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, *Second Report and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 2732 (1997) (*Second Report and Order*).

[303] *See* Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, *Memorandum Opinion and Order on Reconsideration and Third Report and Order*, 14 FCC Rcd 10030 (1999) (*Third Report and Order*).

[304] *See* "929 and 931 MHz Paging Auction Closes," *Public Notice*, 15 FCC Rcd 4858 (2000).

Analysis

Status of Competition

As detailed in the *Seventh CMRS Competition Report*, Part 90 paging providers operate in an environment that is marked by significant and increasing competition in mobile telephony, paging/messaging, and mobile data.[305]

Advantages

The Part 90, subpart P rules provide a clear, predictable structure for the assignment and use of spectrum. In Part 90, subpart P, frequency bands that are licensed on an exclusive basis are subject to competitive bidding. The shared channels are available to all eligible entities.

Disadvantages

The Part 90, subpart P rules impose limited administrative and technical burdens that are inherent to the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

In November 2001, the Commission eliminated interim licensing rules and lifted the freeze on the filing of new applications for shared 929 MHz frequencies by non-incumbent filers.[306] As a result, any qualified entity may submit applications for operation on the 929 MHz shared paging frequencies, including commercial use. In December 2001, the Commission completed Auction 40, and 182 bidders won 5323 licenses in the lower paging bands and upper paging bands, including the re-auctioning of previously unsold 929 MHz licenses.

Comments

There were no comments directly implicating a rule section contained in subpart P; however, as discussed in subpart H, AAPC requests that the Commission eliminate the section 90.175 frequency coordination requirement for 929 MHz shared PCP applicants.

Recommendation

The Part 90, subpart P rules concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among Part 90 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section

[305] *See Seventh CMRS Competition Report*, 17 FCC Rcd at 13049-13058.

[306] In the Matter of Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, *Order*, 16 FCC Rcd 20229 (CWD 2001).

11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

For the reasons discussed in subpart H, staff believes that the section 90.175 provisions relating to 929 MHz shared PCP applicants remain necessary in the public interest, and recommend that modification or repeal is not warranted.

PART 90, SUBPARTS S, U, AND V – REGULATIONS FOR LICENSING AND USE OF FREQUENCIES IN THE 800 AND 900 MHZ BANDS AND COMPETITIVE BIDDING PROCEDURES

Description

Subpart S contains licensing, technical, and operational rules for the 800 MHz and 900 MHz Specialized Mobile Radio (SMR) services, as well as non-commercial services above 800 MHz, *i.e.*, public safety services and services that are used by utilities, transportation companies, and other businesses for internal purposes.[307] With the passage of the Omnibus Budget Reconciliation Act (OBRA), Congress reclassified 800 MHz and 900 MHz SMR services as CMRS, and required all CMRS providers to be regulated as common carriers.[308]

In general, the rules in subpart S: (1) specify the frequency bands in which each service operates; (2) define the service area of licenses in each frequency band; (3) establish minimum construction or coverage requirements for licensees; and (4) define technical limits on operation (*e.g.*, antenna height, transmitter power) to prevent interference. This subpart provides for geographic licensing of these bands.

Subparts U and V[309] contain competitive bidding rules and procedures for the 900 MHz SMR and 800 MHz SMR services, respectively. The rules in these subparts: (1) identify the licenses to be sold by competitive bidding; (2) establish the competitive bidding mechanisms to be used in 800 and 900 MHz SMR auctions; (3) establish application, disclosure, and certification procedures for short- and long-form applications; (4) specify down payment, withdrawal, and default mechanisms; (5) provide definitions of gross revenues for designated entities and specify the bidding credits for which designated entities qualify; and (6) provide eligibility and technical requirements for partitioning and disaggregation.

Purpose

The purposes of the subpart S rules are to establish basic ground rules for the assignment of spectrum to the affected SMR and private wireless licensees, to ensure efficient spectrum use by licensees, and to prevent interference. The competitive bidding rules of subparts U and V ensure access to new telecommunications offerings by ensuring that market forces guide the allocation of licenses so that all customer segments are served with the greatest economic efficiency. Additionally, the designated entity provisions of the competitive bidding rules are intended to provide opportunities for small businesses to participate in the provision of telecommunications services.

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[307] 47 C.F.R. Part 90, subpart S.

[308] Implementation of Sections 3(n) and 332 of the Communications Act Regulatory Treatment of Mobile Services, *Second Report and Order*, 9 FCC Rcd 1411 (1994).

[309] 47 C.F.R. Part 90, subparts U and V.

Analysis

Status of Competition

As detailed in the *Seventh CMRS Competition Report*, Part 90 SMR providers operate in an environment that is marked by significant and increasing competition in mobile telephony, paging/messaging, and mobile data.[310] Some of the larger SMR carriers, particularly Nextel and Southern, provide digital wide-area voice services that compete with cellular and broadband PCS. Other SMR carriers provide more traditional dispatch service on a local or regional basis. Although SMR channels have been used primarily for voice communications, systems have also been developed to carry data and facsimile services. Additionally, new digital SMR technology is leading to the development of new features and services, such as two-way acknowledgment paging, teleconferencing, and voicemail.

Advantages

The subpart S rules provide a clear and predictable structure for the assignment and use of SMR spectrum, and afford substantial flexibility to licensees to choose the type of service they will provide based on market demand. The subparts U and V auction rules promote efficient licensing of SMR spectrum to those entities that value it the most.

Disadvantages

There continue to be differences between the licensing, technical, and operational rules that apply to grandfathered site-based SMR licenses and those that apply to geographic area licenses. This multiplicity of rules is potentially burdensome to SMR licensees who have both geographic and site-based systems, which may result in inconsistent regulatory obligations (*e.g.*, buildout requirements) for different portions of their systems.

Recent Efforts

The SMR General Category auction (Auction No. 34) concluded on September 1, 2000, after 14 winning bidders purchased 1030 800-MHz General Category licenses;[311] the SMR lower band auction ended December 5, 2000, with 22 winning bidders obtaining 2800 800-MHz licenses (Lower 80 Channels);[312] and a Multi-Radio Service auction (Auction 43) consisting, in part, of previously unawarded General Category licenses

[310] *See Seventh CMRS Competition Report*, 17 FCC Rcd at 13049-58.

[311] "800 MHz Specialized Mobile Radio (SMR) Service General Category (851-854 MHz) and Upper Band (861-865 MHz) Auction Closes; Winning Bidders Announced," *Public Notice*, DA 00-2037 (rel. Sept. 6, 2000).

[312] "800 MHz SMR Service Lower 80 Channels Auction Closes; Winning Bidders Announced," *Public Notice*, DA 00-2752 (rel. Dec. 7, 2000).

ended January 17, 2002, with 2 winning bidders obtaining 23 General Category licenses.[313]

Comments

Sections 90.607(a), 90.621(b)(5), 90.629(e), 90.631(d) and (i), 90.635(a) and (c), 90.653, and 90.658. PCIA requests the amendment or elimination of the following rules: (1) section 90.607(a), which requires that applicants describe a planned mode of operation and provide a statement regarding the eligibility of users on the system; (2) section 90.631(d), which addresses increases in system capacity in rural areas, but includes a definition of rural area to include former "wait-list" areas; (3) section 90.635(a), which specifies power limitations in suburban and urban areas; and (4) section 90.635(c), which limits power for systems with an operational radius of less than 20 miles.[314]

CTIA requests that the Commission: (1) amend section 90.621(b)(5)[315] not to require a construction certification from a licensee consenting to co-channel system separation less than that required under section 90.621(b)(4);[316] (2) eliminate as obsolete section 90.629(e),[317] which addresses SMR extended implementation periods and reporting requirements; (3) eliminate as obsolete section 90.631(i),[318] which specifies time periods by which site-specific 900 MHz SMR systems must meet certain loading requirements (4) eliminate as redundant section 90.653,[319] which provides that there shall be no limit to the number of systems authorized in a geographic area; and (5) eliminate as obsolete section 90.658,[320] which contains certain reporting requirements for systems licensed before 1993.[321] PCIA supports the elimination of section 90.658.[322]

313 "Multi-Radio Service Auction Closes; Winning Bidders Announced," *Public Notice*, 17 FCC Rcd 1446 (2002).

314 PCIA Reply Comments at 4-6.

315 47 C.F.R. § 90.621(b)(5).

316 47 C.F.R. § 90.621(b)(4).

317 47 C.F.R. § 90.629(e).

318 47 C.F.R. § 90.631(i).

319 47 C.F.R. § 90.653.

320 47 C.F.R. § 90.658.

321 CTIA Petition at 27-28.

322 PCIA Reply Comments at 6.

Recommendation

The Part 90, subpart S rules commented upon by parties in this proceeding are procedural, technical and operational in nature, and ensure interference protection among SMR service licensees, as well as non-commercial services above 800 MHz (*i.e.*, public safety and private wireless services) licensees as well licensees in adjacent services. In addition, the Part 90, subparts U and V rules contain competitive bidding procedures for the 900 MHz and 800 MHz SMR services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 90, subparts S, U, and V rules remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. In this regard, we discuss the comments and our recommendations below.

Sections 90.607(a), 90.629(e), 90.631(d) and (i), 90.635(a) and (c), 90.653, and 90.658. Because these particular rules identified by commenters above may contain outdated or burdensome requirements, may no longer serve a regulatory purpose, or are inconsistent with the Commission's policies regarding flexible use of spectrum, staff believes that these rules in their current forms may no longer be necessary in the public interest. Staff recommends that the Commission initiate a proceeding to consider whether to amend or eliminate each of these rules.

Section 90.621(b)(5). Staff does not, however, recommend that the Commission consider eliminating the Section 90.621(b)(5)[323] requirement that a certification of station construction and operation be submitted by a licensee consenting to the short-spacing of its system. Although staff recognizes that it may lead the Commission to collect duplicative information in some situations, staff believes that the rule remains necessary in the public interest and recommends that elimination is not warranted. By requiring a certification that the system of the concurring licensee is constructed and fully operational, the rule serves as a safeguard against warehousing of spectrum by licensees that have: (1) ceased operation or deconstructed and have not informed the Commission of these actions; or (2) recently obtained an authorization without an intent to use the channel(s), but rather to sell short-space consent agreements to legitimate applicants. Without the rule, a licensee without the intent to construct and operate could receive compensation from a licensee seeking to short-space, while tying up the channel during the one-year construction period. Accordingly, staff finds that section 90.621(b)(5) in its current form remains necessary in the public interest, and recommends that modification or repeal is not warranted.

[323] 47 C.F.R § 90.621(b)(5).

PART 90, SUBPARTS T AND W – REGULATIONS FOR LICENSING AND USE OF FREQUENCIES IN THE 220-222 MHZ BAND AND COMPETITIVE BIDDING PROCEDURES

Description

Part 90, subpart T contains licensing, technical, and operational rules for the 220-222 MHz (220 MHz) service.[324] In general, the rules in this part: (1) define the service area of 220 MHz licenses; (2) specify the permissible operations for authorized systems; (3) specify the frequencies available to 220 MHz licensees; (4) establish license terms; (5) establish the minimum construction or coverage requirements for 220 MHz licensees; and (6) define technical limits on operation (*e.g.*, antenna height, field strength) to prevent interference.

Part 90, subpart W contains competitive bidding rules and procedures for commercial licenses in the 220 MHz service.[325] The rules in this subpart: (1) specify which 220 MHz licenses are eligible for competitive bidding; (2) establish the competitive bidding mechanisms to be used in 220 MHz auctions; (3) establish application, disclosure, and certification procedures for short- and long-form applications; and (4) specify down payment, withdrawal, and default mechanisms.

In several orders, the Commission has taken steps to reduce regulatory burdens and afford greater flexibility to 220 MHz licensees. For example, the original 220 MHz rules required licensees to provide two-way land mobile service on a primary basis, and allowed use of the band for fixed services or for paging only on an "ancillary" basis. In the 1997 *220 MHz Third Report and Order*, the Commission eliminated the ancillary use limitation, thus allowing licensees to provide any or all of these services on a co-primary basis.[326] The Commission has also adopted rules permitting partitioning and disaggregation of 220 MHz licenses, and has eliminated the "40-mile rule" that previously limited the number of site-based licenses that an individual licensee could hold in a given geographic area.[327] Finally, in 1998 the Commission eliminated mandatory spectrum efficiency standards that had previously been adopted for provision of voice and data over 220 MHz systems that combined contiguous 5 kHz channels.[328] The Commission concluded that mandating technical standards was unnecessary because

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[324] 47 C.F.R. Part 90, subpart T.

[325] 47 C.F.R. Part 90, subpart W.

[326] *See* Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Services, PR Docket No. 89-552, *Third Report and Order; Fifth Notice of Proposed Rulemaking*, 12 FCC Rcd 10943 (1997) (*220 MHz Third Report and Order*).

[327] *See* Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Services*, Fourth Report and Order*, 12 FCC Rcd 13453 (1997).

[328] *See* Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Services, *Memorandum Opinion Order on Reconsideration*, 13 FCC Rcd 14569 (1998).

market forces would spur efficient spectrum use, and that retaining mandatory standards could impair rather than encourage technical innovation.[329]

Purpose

The purposes of the subparts T and W rules are to facilitate the assignment of spectrum in the 220 MHz service, to ensure efficient spectrum use by licensees, and to prevent interference through establishment of technical limits on operation (*e.g.*, siting requirements and limits on transmitter power).

Analysis

Status of Competition

Licensees in the 220 MHz service are permitted to provide voice, data, paging, and fixed communications. Many 220 MHz licensees have begun to deploy their networks, and traditional dispatch services are being increasingly offered in this band and other non-SMR bands.[330] Suppliers of 220 MHz equipment anticipate that there will be increased buildout and demand for service in the next several years.[331] Thus, there is potential for the 220 MHz service to be increasingly competitive and to contribute to inter-service CMRS competition.

Advantages

The subpart T rules provide a clear and predictable structure for the assignment and use of 220-222 MHz band spectrum, and afford substantial flexibility to licensees to choose the type of service they will provide based on market demand. The subpart W auction rules promote efficient licensing of 220 MHz spectrum to those entities that value it the most.

Disadvantages

Although the Commission has simplified and streamlined the 220 MHz rules in many respects (see below), there continue to be differences among the licensing, technical, and operational rules that apply to grandfathered site-based licenses and those that apply to geographic area licenses. This multiplicity of rules is potentially burdensome to 220 MHz licensees who have systems comprised of both types of licenses, which may result in inconsistent regulatory obligations (*e.g.*, buildout requirements) for different portions of their systems.

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329 *Id.*

330 *See Seventh CMRS Competition Report*, 17 FCC Rcd at 12996.

331 *Id.*

Recent Efforts

On October 16, 2002, the Wireless Bureau granted a waiver request filed by Access 220, LLC and its parent, Access Spectrum, LLC, to extend their existing 700 MHz band management activities to Access 220's newly acquired 220-222 MHz licenses. By authorizing a market-based mechanism such as band management activities in the 220-222 MHz band, the Commission is facilitating more efficient use of spectrum and is creating additional options for deploying 220 MHz facilities.

As discussed above, in the *Competitive Bidding Conforming Edits Order* the Wireless Telecommunications Bureau modified the section pertaining to competitive bidding in the 220-222 MHz Specialized Mobile Radio (SMR) service and 220 MHz SMR service to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[332]

Comments

LMS Wireless recommends that the Commission use the rules in the 220 MHz service as the basic framework to create a new Part 90 service for use in an "Advanced-Technology Land Infrastructure and Safety Service (ATLIS)."[333]

Recommendation

The Part 90, subpart T rules commented upon by parties in this proceeding govern licensing in the 220 MHz service, set forth technical and operational standards, and protect against interference among 220 MHz service licensees as well licensees in adjacent services. In addition, the Part 90, subpart W rules contain competitive bidding procedures for the 220 MHz service. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 90 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

While staff generally determines that the Part 90, subparts T and W rules remain necessary in the public interest, it nonetheless also concludes that certain modifications of these rules may be warranted in the public interest for reasons other than those related to competitive developments that fall within the scope of section 11 review. In this regard, we discuss the comments and our recommendations below.

Because LMS Wireless' comments raise reallocation questions and other issues involving the creation of new rules that are more in the nature of a petition for rulemaking or waiver request than a review to modify or eliminate existing rules, staff concludes that

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[332] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 90.705 (220-222 MHz SMR service) and 90.1001, 90.1003, 90.1005, 90.1007, 90.1009, 90.1011, 90.1013, 90.90.1015, 90.1017, 90.1021, 90.1023, and 90.1025 (220 MHz SMR service)).

[333] LMS Wireless Reply Comments at 9-10.

these comments are beyond the scope of this Biennial Review proceeding and recommends that they be considered in the various dockets as appropriate.

WTB staff believes that certain provisions of subpart T in its current form may no longer be necessary in the public interest. Specifically, staff recommends a technical change to clarify rule section 90.743(c)[334] to reflect that Phase I non-nationwide licensees have license terms of 10 years, and not 5 years as currently specified. Further, staff recommends that consideration be given to whether certain rules applicable to 220 MHz site-based licensees continue to be necessary in the public interest. For example, section 90.737 imposes certain reporting requirements and restrictions on assignments of unconstructed site-based licenses that were intended to prevent speculation and trafficking in licenses awarded by lottery.[335] Now that licensing by lottery has been discontinued, however, these rules may actually impede the transferability of 220 MHz spectrum. Staff therefore recommends that the Commission initiate a proceeding to consider modifying or eliminating these rules.

[334] 47 C.F.R. § 90.743 (c).

[335] 47 C.F.R. § 90.737.

PART 95, SUBPART F – 218-219 MHZ SERVICE

Description

For purposes of the Biennial Regulatory Review, the analysis of Part 95 in this report focuses on the 218-219 MHz Service (subpart F), which is unique among the Personal Radio Services in that it may be used for commercial applications, is licensed on a geographic exclusive-use basis, and its licensure is subject to the Commission's competitive bidding procedures. Part 95[336] contains licensing, technical, and operational rules for the Personal Radio Services, a collection of wireless services that are generally used by individuals for personal communications and to support the radio needs of their activities and interests.

Subpart F was originally created to support the Interactive Video and Data Service (IVDS), a short-distance communications service by which licensees could provide information, products, or services to, and allow interactive responses from, subscribers within the licensees' service area. In 1998, the Commission renamed IVDS the 218-219 MHz Service and revised subpart F to allow 218-219 MHz licensees greater flexibility to identify and structure services in response to market demand.[337] Under the current service rules, both common carrier and private operations are permitted, and both one- and two-way communications are allowed.

The licensing and technical rules for the 218-219 MHz Service are contained in subpart F, although certain rules that are broadly applicable to all wireless telecommunications services (including the 218-219 MHz Service) have been consolidated in Part 1.[338]

Purpose

The rules are intended to provide licensees with maximum flexibility to structure their services, while protecting over-the-air television reception of TV Channel 13.

Analysis

Status of Competition

The original IVDS service was generally not commercially successful, and little or no competition emerged to use the 218-219 MHz band to provide interactive television applications. Under the revised service rules, 218-219 MHz Service licensees have

[336] 47 C.F.R. Part 95.

[337] Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service*, Memorandum Opinion and Order and Notice of Proposed Rulemaking*, 13 FCC Rcd 19064 (1988), *recon. granted* 14 FCC Rcd 21078 (1999), *recon. denied* 15 FCC Rcd 25020 (2000).

[338] 47 C.F.R. Part 1.

proposed wireless data applications such as meter reading and vehicle tracking services. Accordingly, the expectation is that the 218-219 MHz Service could soon provide sources of competition for other wireless services. However, competition is developing slowly, due in part to (1) the limited permissible use of the service before its recent restructuring; (2) the fact that many 218-219 MHz Service markets are not currently licensed due to payment defaults; and (3) the ongoing implementation of the service restructuring.

Advantages

The Part 95, subpart F rules provide licensees with the flexibility to identify and implement services in response to market demand. For example, the technical rules have general interference protection requirements, and there is a substantial service requirement.

Disadvantages

The rules impose limited administrative and technical burdens that are inherent to the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

The Commission has made significant changes to its Part 95, subpart F rules in recent years. As noted above, the Commission renamed the service and revised the rules in 1998 to afford more flexibility to licensees regarding use of the spectrum. The Commission adopted additional sweeping changes to the 218-219 MHz service in September 1999, including permitting licensees eligible to participate in the restructuring plan to elect among three options: (i) reamortization and resumption of payments; (ii) amnesty; or (iii) prepayment.[339] The Wireless Telecommunications Bureau is still implementing these changes, and several petitions for reconsideration remain pending in the docket. In addition, the 218-219 MHz Service has been affected by a number of broadly applicable rulemaking actions, such as the Universal Licensing System (ULS) proceeding that was initiated in conjunction with the 1998 Biennial Regulatory Review.

Licensees eligible to participate in the restructuring plan for the 218-219 MHz Service were required to make an election for each of their licenses on or before January 31, 2001.[340] The licenses of licensees who elected the amnesty or prepay-return options, or who failed to make an election, cancelled as of January 31, 2001.

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[339] Amendment of Part 95 of the Commission's Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 1497 (1999).

[340] *See* Federal Communications Commission Announces Change to The Election Date For 218-219 MHz Service, *Public Notice,* 16 FCC Rcd 4007 (2000); Wireless Telecommunications Bureau Announces Revised Election Date (January 31, 2001) And Amended Eligibility List For 218-219 MHz Service, *Public Notice*, 16 FCC Rcd 5937 (2001).

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated certain Part 95 rules pertaining to competitive bidding in the 218-219 MHz service to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[341]

Comments

LMS Wireless recommends that the Commission replace the 218-219 MHz service with a new Part 90 service for use in an "Advanced-Technology Land Infrastructure and Safety Service (ATLIS)."[342]

Recommendation

The Part 95, subpart F rules commented upon by parties in this proceeding concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among 218-219 MHz service licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 95 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, staff finds that the 218-219 MHz service rules remain necessary in the public interest, and recommends that modification or repeal of rules in this subpart is not warranted. Due to the recent comprehensive evaluation and restructuring of the 218-219 MHz Service, the staff does not recommend any changes to this subpart at this time. The rules that were retained in the 1999 restructuring are an integral part of the basic licensing and spectrum management functions performed by the Commission. The staff anticipates that provision of competitive services within the 218-219 MHz Service will develop as a result of the restructuring, and staff will continue to monitor developments in order to determine whether any additional rule modifications are necessary to foster competition.

Because LMS Wireless' comments raise reallocation questions and other issues involving the creation of new rules that are more appropriate for a Petition for Rulemaking or waiver request than a review to modify or eliminate existing rules, these comments are beyond the scope of this biennial review proceeding and will be considered in the various dockets as appropriate.

[341] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 95.816 and 95.823).

[342] LMS Wireless Reply Comments at 5, 9-10.

PART 101 – FIXED MICROWAVE SERVICES

Description

Part 101 contains licensing, technical, and operational rules for the microwave services. Fixed microwave spectrum is primarily used to deliver video, audio, data, and control functions for other specific communications services from one point and/or hub to other points and/or subscribers for distribution.[343] Most Part 101 application processing rules, technical standards, and operational requirements apply to all Part 101 services, but others apply only to specific services,[344] or to common carrier services but not private services (or vice versa).[345]

Part 101 was created in 1996 through consolidation of the rules for the common carrier and private operational fixed (POFS) microwave services contained in Parts 21 and 94.[346]

Part 101 contains 15 lettered subparts:

A – General
B – Applications and Licenses
C – Technical Standards
D – Operational Requirements
E – Miscellaneous Common Carrier Provisions
F – Developmental Authorizations
G – 24 GHz Services and Digital Electronic Message Service
H – Private Operational Fixed Point-to-Point Microwave Service
I – Common Carrier Fixed Point-to-Point Microwave Service
J – Local Television Transmission Service
K – [Reserved]
L – Local Multipoint Distribution Service
M – Competitive Bidding Procedures for LMDS
N – Competitive Bidding Procedures for the 38.6-40.0 GHz Band
O – Multiple Address Systems

Purpose

The Part 101 rules are intended to reduce or eliminate the differences in application processing between common carriers and private operational fixed microwave service licensees, and to further the regulatory parity among these microwave services.[347]

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[343] 47 C.F.R. Part 101.

[344] *See, e.g.,* 47 C.F.R. §§ 101.21(e), 101.61(c).

[345] *See, e.g.*, 47 C.F.R. §§ 101.13, 101.15.

[346] Reorganization and Revision of Parts 1, 2, 21, and 94 of the Rules to Establish a New Part 101 Governing Terrestrial Microwave Fixed Radio Services*, Report and Order*, 11 FCC Rcd 13449 (1996) (*Part 101 Order*).

Analysis

Status of Competition

Because the Part 101 microwave services encompass a variety of private and common carrier applications, and because some services are licensed on a point-to-point basis while others are licensed geographically, the level of competition varies greatly among individual microwave services.

The largest commercial deployment of Part 101 microwave services has occurred in the 24 GHz Digital Electronic Messaging Service (DEMS), 28 GHz (LMDS), and 39 GHz bands. The licensees in these bands have the potential to create facilities-based competition in numerous industries, including high-speed broadband services. In other Part 101 services, licensees continue to rely on traditional point-to-point microwave systems to meet their operational support and critical infrastructure needs, as opposed to using microwave technologies to access customers directly.

Advantages

The Part 101 rules provide for a unified regulatory approach for the microwave services, and eliminate the differences in processing applications between common carriers and POFS licensees that existed in the former rules. Because each of the microwave services shares at least some frequencies with other microwave services, and because some frequencies are shared with government users, the rules minimize repetition, reduce the potential for interference, and aid different microwave users in efficient use of the microwave spectrum.

Part 101 also contains competitive bidding rules (Subparts M and N) that, in conjunction with our spectrum allocation rules, promote economic growth and enhance access to telecommunications service offerings for consumers, producers, and new entrants. The competitive bidding rules are structured to promote opportunity and competition. In contrast to lotteries and comparative hearings, auctions are faster, more efficient, and more likely to get spectrum to entities that value it the most. Through these rules, the Commission has recovered a portion of the value of the public spectrum.

Disadvantages

The Part 101 rules impose limited administrative and technical burdens inherent to the licensing process and necessary for compliance with technical and operational rules.

[347] *Id.* at 13452-53.

Recent Efforts

The Commission recently completed a comprehensive re-evaluation of the Part 101 rules.[348] This proceeding sought to eliminate rules that were duplicative, outmoded, or otherwise unnecessary; it also sought comment on specific proposals to streamline the regulations to make sure that the regulations conform to the Communications Act of 1934, as amended.[349]

Specifically the Commission adopted rules to:

- permit private operational fixed (POFS) microwave services to lease reserve capacity to common carriers for their common carrier traffic;
- establish a band plan for the 23 GHz band; and
- modify antenna standards in the 10 GHz and 23 GHz bands. [350]

In May 2001, the Commission released an order adopting competitive bidding rules for the 24 GHz band for Digital Electronic Messaging Service.[351]

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified certain Part 101 rules pertaining to competitive bidding for the Fixed Microwave services, DEMS service, LMDS, and Multiple Address Systems (MAS) service to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[352]

Comments

Winstar recommends that the Commission amend the requirement in section 101.17 that licensees in the 38.6-40.0 GHz band (39 GHz band) demonstrate "substantial service" at the time of license renewal.[353] Winstar contends that requiring such a showing as a condition precedent to license renewal is inconsistent with prior Commission rules and

[348] *See* Amendment of Part 101 of the Commission's Rules to Streamline Processing of Microwave Applications in the Wireless Telecommunications Services, *Report and Order*, 17 FCC Rcd 15040 (2002) (*Microwave Report and Order*).

[349] *Id.* at 15041 ¶ 1.

[350] *Id.* at 15042-43 ¶¶ 2-3.

[351] In the Matter of Amendment to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz, *Order on Reconsideration*, 16 FCC Rcd 11156 (2001).

[352] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 101.56 (Fixed Microwave services); 101.531, 101.537, and 101.538 (Digital Electronic Messaging service); 101.1101-101.1102, 101.1107, 101.1109-101.1110, 101.1112, 101.1201-101.1209 (Local Multipoint Distribution service); 101.1317 and 101.1319 (Multiple Address Service)).

[353] Winstar Comments at 1-2, *citing* 47 C.F.R. § 101.17.

precedent which only used "substantial service" as a factor for justifying a renewal expectancy.[354]

Recommendation

The Part 101 rules commented upon by parties in this proceeding concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among Part 101 licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 101 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, after reviewing the comments submitted in this proceeding, staff finds that the Part 101 rules in their current form remain necessary in the public interest, and recommends that modification or repeal is not warranted. In light of the recent Part 101 rulemaking, in which the Commission conducted a thorough and substantial review of the Part 101 rules, staff does not recommend making any additional changes to the rules within the context of this Biennial Review.

As regards section 101.17, staff believes that the rules in its current form remains necessary in the public interest, and recommends that modification or repeal is not warranted. Staff does not recommend that the Commission consider adopting Winstar's proposal. The Commission, in adopting section 101.17, rejected specific build-out requirements for 39 GHz band licensees, believing that the substantial service showing provided licensees greater flexibility to demonstrate they were providing service to the public.[355] Moreover, the fact that the substantial service standard was originally used to determine renewal expectancy does not preclude the Commission from applying it more broadly as a performance requirement.[356]

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[354] Winstar Comments at 3, *citing* Amendment of Part 22 of the Commission's Rules Relating to License Renewals in the Domestic Public Cellular Radio Telecommunications Service, *Report and Order*, 7 FCC Rcd 719 (1992); Amendment of Part 22 of the Commission's Rules Relating to License Renewals in the Domestic Public Cellular Radio Telecommunications Service, *Memorandum Opinion and Order on Reconsideration*, 8 FCC Rcd 2834 (1993).

[355] *See* Amendment of the Commission's Rules Regarding the 37.0-38.6 and 38.6-40.0 GHz Bands, *Report and Order and Second Notice of Proposed Rulemaking*, 12 FCC Rcd 18600, 18623-18625 (1997).

[356] *See*, *e.g.*, Applications for Renewal of Licenses to Provide Microwave Services in the 38.6-40.0 GHz Band, *Memorandum Opinion and Order*, 17 FCC Rcd 4404 (2002).

PART 101, SUBPART G – 24 GHZ SERVICE AND DIGITAL ELECTRONIC MESSAGE SERVICE (DEMS)

Description

Part 101 contains licensing, technical, and operational rules for fixed operational microwave services that require operating facilities on land or in certain offshore coastal areas. Subpart G contains rules for the 24 GHz Service and the Digital Electronic Message Service (DEMS). DEMS systems are common carrier point-to-multipoint microwave networks designed to communicate information between a fixed (nodal) station and a multiple fixed user terminals,[357] and this subpart was originally intended to accommodate operation of high-speed, two-way, point-to-multipoint terrestrial microwave transmission systems.[358] The 24 GHz Service is now available for geographic licensing on either a common carrier or private basis. DEMS is licensed for use in the 24.25-24.45 GHz and 25.05-25.25 GHz bands.[359]

Purpose

The purpose of Part 101 subpart G is to establish the rules for allocation and use of wireless services at 24 GHz, to ensure efficient spectrum use, and to prevent interference.

Analysis

Status of Competition

The majority of licenses are currently held by a single entity. The 24 GHz spectrum used by DEMS has been identified as a potential competitor in the local exchange telephone market.[360] The dominant license holder, which is now in bankruptcy, had completed its initial plan to roll out service in 40 U.S. markets, including provision of a bundle of broadband fixed wireless telecommunication services to small- and medium-sized businesses.

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[357] *See* Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules to Allocate Spectrum at 18 GHz for, and to Establish other Rules and Policies Pertaining to, the Use of Radio in Digital Termination Systems and in Point-to-Point Microwave Radio Systems for the Provision of Digital Electronic Message Services, and for other Common Carrier, Private Radio, and Broadcast Auxiliary Services, 54 Rad. Reg. 2d 1091 (1983).

[358] *See id*.

[359] *See* Amendment to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, Report and Order*, 15 FCC Rcd 16934 (2000).

[360] *See* Amendment to Parts 1, 2, 87 and 101 of the Commission's Rules to License Fixed Services at 24 GHz*, Notice of Proposed Rulemaking*, 14 FCC Rcd 19263, 19275 ¶ 20 (1999).

Advantages

The current rules provide a clear regulatory framework for the development of competitive fixed wireless services. The existing technical and operational rules are necessary for administration of a radio service at 24 GHz.

Disadvantages

The current subpart G rules were written when the primary use of DEMS was expected to be by businesses requiring internal networks to distribute documents, share data, and hold teleconferences. Accordingly, some of the terminology contained in the rules reflects this initial service concept. However, as detailed in the "Recent Efforts" section below, while the subpart G rules contain dated terminology, the Commission has made several changes to these rules that have increased the amount of operational flexibility for licensees covered by this subpart.

Recent Efforts

In a Report and Order adopted July 25, 2000, the Commission revised Part 101, subpart G to regulate operations within the 24 GHz band comprehensively. Under the newly adopted changes, the Commission will license the 24 GHz band in 40 MHz channel pairs, provide 24 GHz band licensees more flexibility in system design, implement a ten-year license term and a "substantial service" requirement at renewal, allow 24 GHz band licensees to partition and/or disaggregate their licenses, and introduce flexible technical standards. In its recently completed comprehensive re-evaluation of the Part 101 rules, the Commission modified Section 101.139(a) to allow equipment self-verification in the DEMS bands.[361]

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated certain Part 101 rules pertaining to competitive bidding in the Digital Electronic Messaging service to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[362]

Comments

No comments were filed with respect to this rule subpart.

Recommendation

The Part 101, subpart G rules concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among 24 GHz and DEMS licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide

[361] *See Microwave Report and Order*, 17 FCC Rcd at 15063-64 ¶ 50.

[362] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 101.531, 101.537, and 101.538).

our Section 11 analysis. Accordingly, we do not find that these Part 101 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, staff notes that the Commission recently completed a comprehensive review of its 24 GHz rules in WT Docket No. 99-327 and review of all the Part 101, subpart G rules. Staff finds that the subpart G rules remain necessary in the public interest, and recommends that modification or repeal is not warranted.

PART 101, SUBPARTS L AND M – LOCAL MULTIPOINT DISTRIBUTION SERVICE (LMDS) AND COMPETITIVE BIDDING PROCEDURES

Description

Part 101 contains licensing, technical, and operational rules for the fixed microwave radio services. Local Multipoint Distribution Service (LMDS) systems are fixed point-to-point or point-to-multipoint radio systems that consist of hub and subscriber stations.[363] LMDS licensees may provide a variety of services, including high-speed data and Internet services and multi-channel video programming distribution.[364]

Subpart L contains licensing, technical, and operational rules for LMDS. In general, the rules in this part: (1) provide eligibility restrictions in this service; (2) define the service areas of LMDS licenses; (3) specify the permissible operations for authorized systems; (3) specify the frequencies available to LMDS licensees; (4) establish license terms; (5) establish the minimum construction or coverage requirements for LMDS licensees; and (6) define system operations and permissible communication services.

Subpart M contains competitive bidding rules and procedures for commercial licenses in LMDS. In particular, the rules, on a service-specific basis: (1) provide competitive bidding mechanisms and design options; (2) establish application, disclosure, and certification procedures for short- and long-form applications; (3) specify down payment, unjust enrichment, withdrawal, and default mechanisms; (4) provide definitions of gross revenues for designated entities and specify the bidding credits for which designated entities qualify; and (5) provide eligibility and technical requirements for partitioning and disaggregation.

Purpose

The purpose of the Part 101 rules is to establish rules for assignment of spectrum for private operational, common carrier, and LMDS fixed microwave operations that require operating facilities on land or in specified offshore coastal areas. Subpart L contains the basic licensing and operational rules for LMDS. Subpart M helps to ensure access to new telecommunications offerings by ensuring that all customer segments are served, that there is not an excessive concentration of licenses, and that small businesses, rural telephone companies, and businesses owned by women and minorities will have genuine opportunities to participate in the provision of service.

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[363] 47 C.F.R. Part 101.

[364] Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services*, Sixth Notice of Proposed Rulemaking*, 14 FCC Rcd 21520, 21532 ¶ 32 (1999).

Analysis

Status of Competition

The initial LMDS operator no longer provides multi-channel video programming distribution services and has announced plans to offer high-speed data access on a portion of its original spectrum. The remaining licenses were issued following auctions held in March 1998 and April and May 1999. LMDS equipment is still subject to limited availability, and the majority of licensees are still developing their systems.[365] LMDS will most likely compete with wireless and wireline broadband service providers targeting small and medium-sized businesses.[366]

Advantages

The subpart L rules provide licensees with broad flexibility to identify and implement services in response to market demand. The Commission recently allowed LMDS eligibility restrictions for incumbent local exchange carrier and cable companies to sunset;[367] this development should provide access to additional capital to develop LMDS fully, make administration of LMDS consistent with other competitive services, and aid the development of LMDS in rural markets.[368]

The subpart M competitive bidding rules, in conjunction with our spectrum allocation rules, promote economic growth and enhance access to telecommunications service offerings for consumers, producers, and new entrants. The competitive bidding rules of subpart M were structured to promote opportunity and competition. This has resulted in the rapid implementation of new and innovative services and the efficient use of spectrum, thereby fostering economic growth. In contrast to other licensing mechanisms such as lotteries and comparative hearings, auctions are faster, more efficient, and more likely to get spectrum to entities that value it the most. Through these rules, the Commission has recovered a portion of the value of the public spectrum for the benefit of the public.

Disadvantages

The subpart L rules impose administrative burdens inherent to the licensing process and necessary for compliance with technical and operational rules.

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[365] *See generally* Rulemaking to Amend Parts 1, 2, 21, and 25 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, to Reallocate the 29.5-30.0 GHz Frequency Band, to Establish Rules and Policies for Local Multipoint Distribution Service and for Fixed Satellite Services, *Third Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 11857, 11875 App. B (comprehensive list of LMDS launches and the types of service each carrier is providing) (*LMDS Third Report and Order*).

[366] *See id*.

[367] *Id.*

[368] *Id.* at 11871 ¶ 33.

The auction rules in subpart M impose certain transaction costs on auction participants (aside from the obligation on the winning bidder to pay the amount bid). These auction-related costs may be somewhat higher than the cost of filing a lottery application but significantly less than the cost of a comparative hearing.[369] In addition, certain aspects of the auctions process (*e.g.*, setting of minimum opening bid amounts, bid increments, and bidding credit levels) still require service-specific notice and comment prior to each individual auction.

Recent Efforts

The June 23, 2000, *LMDS Third R&O* allowed the cross-ownership restriction to expire on June 30. The decision to allow the cross-ownership rule to sunset was based on a thorough analysis of competitive issues and the LMDS market.

The Commission has made significant changes to the competitive bidding rules of Part 1 Subpart Q. In the *Part 1 Third Report and Order*, the Commission made substantive amendments and modifications to the competitive bidding rules for all auctionable services.[370] These changes to the competitive bidding rules are intended to streamline regulations and eliminate unnecessary rules wherever possible, increase the efficiency of the competitive bidding process, and provide more specific guidance to auction participants. The changes also advance our auction program by reducing the burden on the Commission and the public of conducting service-by-service auction rule makings, such as those rule makings that created the competitive bidding rules of Subpart M.

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated certain Part 101 rules pertaining to competitive bidding in the Local Multipoint Distribution service to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[371]

The Commission recently completed a comprehensive re-evaluation of the Part 101 rules including changes to the LMDS technical rules.[372]

Comments

No comments were filed with respect to these rule subparts.

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[369] *See* FCC Report to Congress on Spectrum Auctions, WT Docket No. 97-150, *Report*, FCC 97-353, Section III, p. 8 (rel. October 9, 1997) (citing studies estimating costs of $800 per application under the lottery system and $130,000 per application under the comparative hearing process).

[370] *See* Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use*, Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374 (1997), *modified by erratum*, 13 FCC Rcd 10274 (1998) (*Part 1 Third Report and Order*).

[371] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 101.1101-101.1102, 101.1107, and 101.1109-101.1110, 101.1112).

[372] *See Microwave Report and Order, supra.*

Recommendation

The Part 101, subpart L rules concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among LMDS licensees as well as licensees in adjacent services. In addition, the Part 101, subpart M rules contain competitive bidding procedures for the LMDS service. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 101 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, staff finds that the Part 101 rules in subparts L and M remain necessary in the public interest, and recommends that modification or repeal is not warranted.

PART 101, SUBPART O – MULTIPLE ADDRESS SYSTEMS (MAS)

Description

Part 101 contains licensing, technical, and operational rules for the fixed microwave radio services.[373] Multiple Address Systems (MAS) consist of 3.2 MHz of spectrum for fixed point-to-point or point-to-multipoint radio systems located in the 900 MHz band and have been primarily used by the power, petroleum, and security industries for various alarm, control, interrogation, and status reporting requirements, and by the paging industry for control of multiple paging transmitters in the same general geographic area.

Subpart O also contains licensing, technical, and operational rules for MAS. In general, the rules in this part: (1) provide eligibility restrictions in this service; (2) define the service area of MAS licenses; (3) specify the permissible operations for authorized systems; (3) specify the frequencies available to MAS licensees; (4) establish license terms; (5) establish the minimum construction or coverage requirements for MAS licensees; and (6) define system operations and permissible communication services.

MAS uses competitive bidding rules and procedures set forth in Part 1, subpart Q.

Purpose

The purpose of the Part 101 rules is to establish rules for assignment of spectrum for private internal services that require operating facilities on land or in specified offshore coastal areas.

Analysis

Status of Competition

Competition in the MAS market has been slow to develop. In November 2001, the Commission held Auction 42, which offered 5104 licenses for sale in the 932/941 MHz and 928/959 MHz MAS bands. Bidders only purchased 878 of the available licenses.

Advantages

The subpart O rules provide licensees with broad flexibility to identify and implement services in response to market demand. Use of competitive bidding rules, in conjunction with our spectrum allocation rules, promote economic growth and enhance access to telecommunications service offerings for consumers, producers, and new entrants. This has resulted in the rapid implementation of new and innovative services and the efficient use of spectrum use, thereby fostering economic growth. In contrast to other licensing mechanisms such as lotteries and comparative hearings, auctions are faster, more efficient, and more likely to get spectrum to entities that value it the most. Through these

[373] 47 C.F.R. Part 101.

rules, the Commission has recovered a portion of the value of the public spectrum for the benefit of the public.

Disadvantages

The MAS licensing rules impose administrative burdens inherent to the licensing process and necessary for compliance with technical and operational rules.

The auction rules in this subpart impose certain transaction costs on auction participants (aside from the obligation on the winning bidder to pay the amount bid). These auction-related costs may be somewhat higher than the cost of filing a lottery application but significantly less than the cost of a comparative hearing.[374] In addition, certain aspects of the auctions process (*e.g.*, setting of minimum opening bid amounts, bid increments, and bidding credit levels) still require service-specific notice and comment prior to each individual auction.

Recent Efforts

The May 29, 2001, *MAS MO&O* addressed four petitions for reconsideration and/or clarification of rules in subpart O. Additionally, the Commission recently completed a comprehensive re-evaluation of the Part 101 rules.[375]

In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated the following rules pertaining to competitive bidding in the MAS service to conform with the general competitive bidding rules set forth in Part 1 of the Commission's rules.[376]

Comments

API asks the Commission to amend section 101.31(b) to make conditional temporary authorizations available for MAS applicants.[377] In addition, API asks the Commission to amend section 101.47 to reallocate unsold commercial licenses for site-by-site private use.[378]

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[374] *See FCC Report to Congress on Spectrum Auctions*, WT Docket No. 97-150, *Report*, FCC 97-353, Section III, pg. 8 (rel. October 9, 1997) (citing studies estimating costs of $800 per application under the lottery system and $130,000 per application under the comparative hearing process).

[375] *See Microwave Report and* Order, 17 FCC Rcd 15040.

[376] *See Competitive Bidding Conforming Edits Order*, *supra* (modifying or eliminating sections 101.1317 and 101.1319).

[377] API Comments at 7.

[378] *Id.* at 6.

Recommendation

The Part 101, subpart O rules concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among MAS licensees as well as licensees in adjacent services. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 101 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

In addition, after reviewing the comments filed in this proceeding, staff finds that the rules in subpart O remain necessary in the public interest, and recommends that modification or repeal is not warranted. Staff believes that API's proposals regarding sections 101.31(b) and 101.47 are outside of the scope of this review because they do not seek to modify or eliminate existing rules but seek to add new requirements. In addition, staff notes that the Commission addressed API's request for conditional temporary authorizations as part of its recently completed review of Part 101 rules.