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**Federal Communications Commission
2004 Biennial Regulatory Review
WT Docket No. 04-180**

**Wireless Telecommunications Bureau
Staff Report
January 5, 2005**

I. OVERVIEW

1. Section 11 of the Communications Act of 1934, as amended, requires the Commission (i) to review biennially its regulations that apply to operations or activities of telecommunications service providers; and (ii) to determine whether those regulations are “no longer in the public interest as the result of meaningful economic competition between providers of such service.”¹ This Staff Report summarizes the findings of the staff’s review of the Federal Communications Commission’s rules implicated by Section 11 that are within the purview of the Wireless Telecommunications Bureau (WTB), *i.e.*, rules that “apply to the activities or operations” of wireless telecommunications carriers. Accompanying this report is a detailed analysis that identifies each rule part under review, explains the purpose, benefits, and disadvantages of the particular rule or rule part, and lists any staff recommendation for retaining, modifying, or repealing rules within that part.

II. THE 2004 BIENNIAL REGULATORY REVIEW

2. This review builds upon the Staff Report completed as part of the 2002 Biennial Regulatory Review.² As in the *2002 Biennial Review Staff Report*,³ this Report summarizes staff’s review of the Commission rules that affect wireless telecommunications carriers, the status of ongoing and recent initiatives, and recommendations on whether specific rules should be retained, modified, or repealed. The staff’s recommendations are reported in more detail in the attached rule part analysis,⁴ which also summarizes the comments that were submitted in response to the Commission’s May 11, 2004 *Public Notice* initiating this Biennial Review.⁵ In conducting this Section 11 review, staff considered: (1) the purpose of the rule; (2) the advantages of the rule; (3) the disadvantages of the rule; and (4) the impact competitive developments may have had on the need for the rule.

3. In addition to evaluating rules that affect wireless telecommunications carriers on the basis of whether they are “no longer necessary in the public interest as the result of meaningful competition,” WTB staff has taken the opportunity to consider whether any such rules should be streamlined, modified, or eliminated for reasons other than those related to competitive developments that fall within the scope of Section 11 review.

¹ 47 U.S.C. § 161.

² See 2002 Biennial Regulatory Review, GC Docket No. 02-390, *Report*, 18 FCC Rcd 4726 (rel. Mar. 14, 2003); Federal Communications Commission Biennial Regulatory Review 2002, GC Docket No. 02-390, *Staff Report (2002 Biennial Review Staff Report)*.

³ See generally *2002 Biennial Review Staff Report*.

⁴ See Appendix IV.

⁵ See “The Commission Seeks Public Comment in the 2004 Biennial Review of Telecommunications Regulations,” *Attachment*, “Rule Parts Containing Regulations Administered by the Wireless Telecommunications Bureau (WTB), WT Docket No. 04-180, *Public Notice*, 19 FCC Rcd 9090 (rel. May 11, 2004) (*2004 Biennial Review Public Notice*).

Thus, staff has reviewed whether circumstances other than the development of meaningful economic competition (e.g., technological change since the adoption of the rule, inconsistency in regulation of similarly situated services, reduction of regulatory burdens) justify streamlining, modification, or repeal of particular rules.

4. Once the Commission has made its determinations with respect to the recommendations in this report, staff expects that the Commission would initiate proceedings to modify or eliminate selected rules. These proceedings would conform to Commission procedural rules and the Administrative Procedure Act. Some of these proceedings have been initiated already, while we anticipate that others will be initiated next year.⁶

III. SUMMARY OF REVIEW

5. The Wireless Telecommunications Bureau is responsible for licensing and regulating all wireless communications services other than broadcast and satellite services. Wireless communications services include commercially provided services such as cellular, Personal Communications Services (PCS), and paging, as well as public safety and private radio services.

6. The functions of the Bureau largely derive from Title III of the Communications Act, which governs licensing of spectrum in general and wireless services in particular.⁷ The vast majority of the Commission's regulations affecting wireless carriers consist of: (1) allocation and service rules; (2) procedural rules concerning licensing and auctions; and (3) technical and operational rules.

7. The market for wireless carriers has changed dramatically in recent years as a result of entry by new wireless competitors, substantial growth, and increased competition in the wireless market. In 1993, Congress granted authority to the Commission to award wireless licenses by auction.⁸ Since that time, the Commission has conducted 53 spectrum auctions for services such as broadband and narrowband PCS, Specialized Mobile Radio (SMR), Wireless Communications Service (WCS), Local Multipoint Distribution Service (LMDS), and numerous other fixed and mobile wireless services.⁹ These auctions have resulted in a dramatic increase in the number of competing wireless service providers. In its *Ninth CMRS Competition Report*, released on September 28, 2004, the Commission concluded that there is effective competition in the Commercial Mobile Radio Services (CMRS) marketplace, which continues to benefit

⁶ See Appendix I.

⁷ See generally 47 U.S.C. Title III.

⁸ Omnibus Budget Reconciliation Act of 1993, Pub. Law No. 103-66, 107 Stat. 312. See 47 U.S.C. § 309(j).

⁹ See <http://www.fcc.gov/wtb/auctions>.

consumers in the form of price competition and competition to provide innovative and improved service offerings.¹⁰

8. As a result of increased wireless licensing and new competition, the Commission has substantially deregulated many aspects of wireless services. The Commission has adopted a number of policies and rule changes to streamline application processing and reduce regulatory burdens, as discussed below. The dynamic and rapidly evolving nature of the wireless industry continues to make it important for the Commission to review its wireless regulations on a regular basis.

A. Scope of Review

9. On May 11, 2004, the Commission issued a Public Notice seeking comment on the rules and regulations within its purview under the 2004 Biennial Review.¹¹ The Bureau has reviewed the following rule parts implicated by Section 11 that affect wireless telecommunications carriers:¹²

Part 1 – Practice and Procedure – In addition to containing the procedural rules of general applicability to all Commission licensees, contains certain rules that explicitly address wireless telecommunications applications and proceedings (Subpart F) and procedures relating to competitive bidding (Subpart Q).

Part 17 – Construction, Marking, and Lighting of Antenna Structures – Contains rules pertaining to the construction, marking, lighting, registration, and notification relating to radio antenna structures used for provision of wireless radio services.

Part 20 – Commercial Mobile Radio Services – Contains rules applicable to CMRS providers, including rules relating to citizenship, interconnection to facilities of local exchange carriers, roaming, Title II obligations, and 911 service.

¹⁰ See generally In the Matter of 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, *Ninth Report*, FCC 04-216 (rel. Sept. 28, 2004) (*Ninth CMRS Competition Report*). There has been a dramatic increase in the number of competing wireless providers since the first annual report on CMRS competition was issued in 1996.

¹¹ See *2004 Biennial Review Public Notice*, 19 FCC Rcd 9090 (rel. May 11, 2004).

¹² *Id.* The rule parts are discussed herein as set forth as in Title 47 of the Code of Federal Regulations. For streamlining purposes, this Staff Report does not, *infra*, cite each specific C.F.R. provision (e.g., 47 C.F.R. Part 1 or 47 C.F.R. § 1.923) for the particular Part or rule discussed herein. The *Public Notice* also identified Part 21 (Domestic Public Fixed Radio Services), and Parts 73 and Subpart I of Part 74 (Instructional Television Fixed Service) as within the purview of WTB's review but the Commission subsequently deleted these rules. See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, et al.; WT Docket Nos. 03-66, et al., *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004).

Part 22 – Public Mobile Services – Contains rules governing domestic, mobile, common carrier services including the cellular telephone service, that are authorized to provide radio telecommunication services for hire to the public.

Part 24 – Personal Communications Services – Contains rules applicable to general licensing and application filing requirements, technical standards, and operations for narrowband and broadband Personal Communications Services licensees.

Part 27 – Wireless Communications Services – Contains rules governing the provision of miscellaneous wireless communications services on various frequency bands allocated for flexible use pursuant to Section 303(y) of the Communications Act.

Part 80 – Stations in the Maritime Service – Contains licensing, technical, and operational rules for various maritime radio services.

Part 90 – Private Land Mobile Radio Services – Contains rules applicable to general licensing and application filing requirements, technical standards, and operations for Specialized Mobile Radio and other commercial, private, and public safety licensees.

Part 95 – Personal Radio Service – Contains licensing, technical, and operational rules for the 218-219 MHz Service.

Part 101 – Fixed Microwave Services – Contains licensing, technical, and operational rules for private and common carrier fixed microwave services, including rules or subparts governing the 24 GHz Local Television Transmission, Local Multipoint Distribution, and 39 GHz services, and Multiple Address Systems.

10. In response to the *Public Notice*, the Commission received three comments and two reply comments.¹³

B. Recent and Ongoing Activities

1. Major Initiatives

11. Prior to and contemporaneously with the 2004 Biennial Regulatory Review, the Bureau has engaged in a number of major initiatives to streamline and eliminate unnecessary rules affecting wireless services.

(a) Revisions to the Cellular Rules

12. In September 2002, the Commission modified or eliminated Part 22 Cellular rules that had become outdated due to technological change, increased competition, or supervening rules. Among other things, the Commission adopted a five-year sunset of the requirement that cellular licensees provide analog service, but stated that it would not eliminate the rule at the end of the five-year period if hearing aid compatible devices

¹³ Commenters are listed in Appendix II.

were not available.¹⁴ This proceeding was an outgrowth of the 2000 Biennial Review. On February 12, 2004, the Commission released the *Part 22 Cellular Biennial Review Order on Reconsideration*,¹⁵ resolving various petitions for reconsideration filed in this proceeding. Among other things, the Commission affirmed the decision to establish a five-year sunset period for the removal of the Commission's requirement that cellular carriers provide analog service.

(b) Deletion of the Wireless Resale Rule

13. As of November 24, 2002, the wireless resale rule, Section 20.12(b), which prohibited CMRS providers from unreasonably restricting resale of their services, ceased to be effective.¹⁶ The Commission previously determined that the resale rule would no longer be effective five years after completion of its initial grant of broadband PCS licenses.¹⁷ As a follow-up, the staff now recommends deletion of the resale rule from the Code of Federal Regulations.

(c) Elimination of LEC and CMRS Affiliation Requirement

14. The Commission has also eliminated the "separate affiliate" requirement for incumbent LECs under Section 20.20 of the Commission's rules.¹⁸ The rule required an incumbent LEC providing in-region broadband CMRS service to provide such services through an affiliate that satisfied certain requirements. The rule sunset on January 1, 2002. As a follow-up, the staff now recommends deletion of the separate affiliate rule from the Code of Federal Regulations.

¹⁴ See Year 2000 Biennial 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, 18410-11 (2002); Year 2000 Biennial 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).

¹⁵ 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, *Order on Reconsideration*, 19 FCC Rcd 3239 (2004).

¹⁶ See 47 C.F.R. § 20.12(b)(3).

¹⁷ See "Notice Commencement of Five-Year Preceding Termination of Resale Rule Applicable to Certain Covered Commercial Mobile Radio Service Providers," CC Docket No. 94-54, *Public Notice*, 13 FCC Rcd 17427 (1998).

¹⁸ 47 C.F.R. § 20.20(f).

(d) Spectrum Leasing

15. In 2003, in the *Secondary Markets Report and Order* in WT Docket No. 00-230, the Commission took action to remove unnecessary regulatory barriers to the development of secondary markets in spectrum usage rights.¹⁹ In that proceeding, the Commission established rules to enable spectrum users to gain access to licensed spectrum by entering into different types of spectrum leasing arrangements with licensees in most Wireless Radio Services. In addition, the Commission adopted rules to streamline its approval procedures for license assignments and transfers of control in most Wireless Radio Services. In 2004, the Commission adopted the *Secondary Markets 2nd Report and Order*, which further streamlined the processing of certain spectrum leasing and transfer/assignment applications and authorized licensees to make spectrum available to third-party users on a “private commons” basis.²⁰

(e) Historic Preservation Programmatic Agreement

16. On October 5, 2004, the Commission released a *Report and Order* to implement a Nationwide Programmatic Agreement to be signed by the Commission, the Advisory Council on Historic Preservation (“Advisory Council” or “Council”) and the National Conference of State Historic Preservation Officers (“Conference”).²¹ The Nationwide Agreement, as authorized by Section 214 of the National Historic Preservation Act of 1966 (“NHPA”) and Section 800.14(b) of the Advisory Council’s rules, streamlines and tailors the Section 106 NHPA review process for communications towers and other Commission-licensed facilities.

(f) Rural Report & Order

17. As part of its 2000 Biennial Review, the Commission in October 2003 released a *Notice of Proposed Rule Making* in WT Docket No. 02-381, which sought comment regarding a variety of proposals to eliminate unnecessary regulatory barriers and encourage the deployment of spectrum-based services in rural areas.²² On September

¹⁹ In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 20604 (2003) (*Secondary Markets Report and Order*).

²⁰ In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking*, 19 FCC Rcd 17503 (2004) (*Secondary Markets 2nd Report and Order*).

²¹ In the Matter of Nationwide Programmatic Agreement Regarding The Section 106 National Historic Preservation Act Review Process, WT Docket No. 03-128, *Report and Order*, FCC 04-222 (rel. Oct. 5, 2004).

²² Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, WT Docket No. 02-381, 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services, WT Docket No. 01-14, Increasing Flexibility to Promote Access to and the Efficient and Intensive Use of Spectrum and the Widespread Deployment of Wireless Services, and to Facilitate Capital Formation, WT Docket No. 03-202, *Notice of Proposed Rulemaking*, 18 FCC Rcd 20802 (2003) (*Rural NPRM*).

27, 2004, the Commission issued the *Rural R&O and FNPRM* and adopted several measures designed to increase carrier flexibility, reduce regulatory costs of providing service to rural areas, and promote access to both spectrum and capital resources for entities seeking to provide or improve wireless services in rural areas.²³ The Commission also adopted measures to facilitate the deployment of wireless services in rural areas, including the elimination of the cellular cross-interest rule in Rural Service Areas.²⁴

(g) Air-Ground – Part 22 Non-Cellular Services Proceeding

18. As part of its 2000 and 2002 Biennial Reviews, the Commission issued a *Notice of Proposed Rulemaking* in April 2003, to reexamine its rules governing the provision of air-ground telecommunications services on commercial airplanes in order to enhance the options available to the public.²⁵ The Commission also proposed to revise or eliminate certain Part 22 Public Mobile Services rules that have become obsolete as the result of technological change, increased competition in CMRS and/or supervening changes to related Commission rules.²⁶ On December 15, 2004, the Commission adopted an *Order* revising these rules.²⁷ The Commission also announced that it would consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.²⁸ The *Notice of Proposed Rulemaking* commencing the Commission's review of this matter is expected to be released in early 2005.²⁹

(h) Quiet Zones Report and Order

19. As part of its 2000 Biennial Review, the Commission issued a *Notice of Proposed Rulemaking* in November 2001, seeking to identify and address ways of streamlining the processing of applications in designated Quiet Zones, while

²³ Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, WT Docket No. 02-381, 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services, WT Docket No. 01-14, Increasing Flexibility to Promote Access to and the Efficient and Intensive Use of Spectrum and the Widespread Deployment of Wireless Services, and to Facilitate Capital Formation, WT Docket No. 03-202, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 19078 (2004) (*Rural R&O and FNPRM*).

²⁴ *Id.*

²⁵ In the Matter of Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services - Biennial Regulatory Review-Amendment of Parts 1, 22, and 90 of the Commission's Rules, *Notice of Proposed Rulemaking*, 18 FCC Rcd 8380 (2003).

²⁶ *Id.*

²⁷ FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

²⁸ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

²⁹ FCC News Release, *Instructions on Submitting Public Comments in the FCC's Review of the Use of Cellular Telephones on Airborne Aircraft* (Docket No. WT 04-435) (rel. Dec. 23, 2004).

simultaneously ensuring the continued protection of these sensitive areas.³⁰ On February 12, 2004, the Commission released a *Report and Order*³¹ which addressed these issues and concerns raised in CTIA's Petition for Rulemaking filed as part of the Year 2002 Biennial Regulatory Review proceeding.³²

(i) Tribal Lands Proceedings

20. In March, 2003, the Commission released its *Second Report and Order and Second Further Notice of Proposed Rulemaking*³³ in this proceeding and clarified rules previously adopted in the 2000 *Report and Order and Further Notice of Proposed Rulemaking* in WT Docket 99-2661³⁴ to provide incentives for wireless telecommunications carriers to serve individuals living on tribal lands. In September, 2004, the Commission issued a *Third Report and Order and Third Further Notice of Proposed Rulemaking*,³⁵ which addressed issues raised in the *Second Report and Order*, including raising the wireline telephone penetration rate at which tribal lands are eligible for a bidding credit from 70 percent or less, to 85 percent or less, and increasing the amount of the bidding credit available to carriers that pledge to deploy on and serve qualifying tribal lands.

(j) Streamlining and Harmonization Biennial Review Proceeding

21. As part of its 2000 and 2002 Biennial Reviews, the Commission released a *Notice of Proposed Rulemaking*³⁶ on January 7, 2004, which commenced a proceeding to streamline and harmonize licensing provisions in the wireless radio services (WRS). The *Streamlining NPRM* examines whether revisions are necessary regarding our broadband PCS power rules under Part 24, including the possible elimination of the Part 24 transmitter power restrictions and possible increases to the current Part 24 radiated power

³⁰ In the Matter of Review of Quiet Zones Application Procedures, WT Docket No. 01-319, *Notice of Proposed Rulemaking*, 16 FCC Rcd 20690 (2001).

³¹ In the Matter of Review of Quiet Zones Application Procedures, WT Docket No. 01-319, *Report and Order*, 19 FCC Rcd 3267 (2004).

³² See Cellular Telecommunications & Internet Association's Petition for Rulemaking Concerning the Biennial Review of Regulations Affecting CMRS Carriers, filed July 25, 2002.

³³ In the Matter of Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 18 FCC Rcd 4775 (2003).

³⁴ In the Matter of Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 11794 (2000).

³⁵ In the Matter of Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Third Report and Order and Third Further Notice of Proposed Rulemaking*, 19 FCC Rcd 17562 (2004).

³⁶ In the Matter of Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket No. 04-356, *Notice of Proposed Rulemaking*, 19 FCC Rcd 708 (2004) (*Streamlining NPRM*).

limits. The Commission proposed various additional amendments to Parts 1, 22, 24, 27, and 90 of the rules to modify or eliminate provisions that treat licensees differently and/or have become outdated as a result of technological change, supervening changes to related Commission rules, and/or increased competition within WRS.

(k) Gulf of Mexico Cellular Proceeding

22. In 2002, the Commission released the Gulf of Mexico *Report and Order* in which it established a comprehensive regulatory scheme for the Gulf of Mexico designed to facilitate the provision of cellular service to unserved areas of the Gulf region, and to resolve operational conflicts between Gulf and land carriers while minimizing the disturbance to existing operations and contractual relationships.³⁷ In June, 2003, the Commission issued an *Order on Reconsideration* and resolved outstanding petitions for reconsideration filed against the *Report and Order*.³⁸

(l) 70/80/90 GHz Proceeding

23. In 2003, the Commission released the 70-80-90 GHz *Report and Order*,³⁹ in which it established a flexible and innovative regulatory framework for the 70/80/90 GHz bands that does not require traditional “Part 101” frequency coordination among non-Federal Government users. Under this new approach, the Commission will issue an unlimited number of non-exclusive nationwide licenses to non-Federal Government entities for the 12.9 gigahertz of spectrum allocated for commercial use. These licenses serve as a prerequisite for registering individual point-to-point links in the 70/80/90 GHz bands, which are allocated on a shared basis with Federal Government users. Thereafter, a licensee will be authorized to operate links under its nationwide license once a given link is (1) coordinated with the National Telecommunications and Information Administration (NTIA) with respect to Federal Government operations and (2) registered as an approved link with the Commission (interim process) or third-party Database Manager (permanent process).

³⁷ See Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico, WT Docket No. 97-112, 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. 97-112, *Report and Order*, 17 FCC Rcd 1209 (2002).

³⁸ See Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico, WT Docket No. 97-112, 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. 97-112, *Order on Reconsideration*, 18 FCC Rcd 13169 (2003).

³⁹ See Allocation and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, WT Docket No. 02-146, *Report and Order*, 18 FCC Rcd 23318 (2003) (*recon pending*). See also *Notice of Proposed Rule Making*, 17 FCC Rcd 12182 (2002).

(m) MDS-ITFS Proceeding

24. On July 29, 2004, the Commission released a *Report and Order and Further Notice of Proposed Rulemaking* that transforms the rules governing the Multipoint Distribution Service (MDS) and the Instructional Television Fixed Service (ITFS) in order to encourage the deployment of broadband services by commercial and educational entities.⁴⁰ To better reflect the forward-looking vision for these services, the Commission renamed MDS the Broadband Radio Service (BRS) and ITFS the Educational Broadband Service (EBS). In addition, the Commission deleted Part 21 and Subpart I of Part 74, and consolidated the rules for BRS and EBS into Part 27 of the Commission's Rules.

(n) AWS Service Rules Proceeding

25. In November 2003 the Commission released a *Report and Order* adopting service rules for the first 90 megahertz of Advanced Wireless Service (AWS) spectrum, consisting of 1710-1755 and 2110-2155 MHz.⁴¹ Most significantly, the order provided for flexible use of the spectrum under Part 27 of the Rules. On September 24, 2004 the Commission released a Notice of Proposed Rule Making proposing service rules for 20 megahertz of additional AWS spectrum (1915-1920, 1995-2000, 2175-2180 and 2020-2025 MHz), again to be licensed under the Part 27 flexible use regime.⁴²

C. Summary of Recommendations

26. Pursuant to Section 11, the Bureau has determined based on its own review or on comments received in this proceeding that there are some areas in which the development of meaningful competition among wireless telecommunications providers may warrant changing or eliminating regulations. As summarized below, the staff recommends revising or eliminating a number of several specific rules, either as part of various efforts already underway or as part of newly initiated proceedings.⁴³

1. Review/Revision/Streamlining Efforts Already Under Way

27. The Bureau already is in the process of considering revisions or possible elimination of numerous rules relating to wireless radio services. These efforts include revisions guided by competitive developments contemplated by Section 11 as well as

⁴⁰ See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, et al.; WT Docket No. 03-66, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004).

⁴¹ See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162 (2003).

⁴² See Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands, WT Docket No. 04-356, *Notice of Proposed Rule Making*, 19 FCC Rcd 19263 (2004).

⁴³ For a detailed discussion of the staff's rule part analysis, including a discussion of each of the comments filed in this Biennial Review proceeding and the staff's recommendations, see Appendix IV, *infra*.

streamlining efforts that fall outside the scope of Section 11. They are briefly summarized below.

28. *Parts 1, 22, 24, 27, and 90* - The Commission is currently considering proposed revisions to streamline and harmonize various technical rule parts affecting the wireless radio services.⁴⁴

29. *Section 20.11 rules relating to intercarrier compensation.* The Commission currently is exploring ways of reforming its intercarrier compensation rules, including the rules set forth in Section 20.11. It is examining the existing patchwork of interconnection rules and seeking to adopt an approach that minimizes the need for regulatory intervention.⁴⁵

30. *Section 20.12(c) rules relating to CMRS carrier "roaming" obligations.* The Commission is examining whether, in light of competitive and other developments, it should eliminate the manual roaming rule applicable to CMRS carriers.⁴⁶

31. *Part 22* – The Commission is considering revisions to various Part 22 Public Mobile Service rule sections proposed in the *Streamlining NPRM*.⁴⁷ In addition, on December 15, 2004, the Commission adopted a *Notice of Proposed Rulemaking* seeking comment on whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.⁴⁸ The *Notice of Proposed Rulemaking* commencing the Commission's review of this matter is expected to be released in early 2005.

32. *Part 24* – The Commission is currently considering whether to eliminate the Part 24 transmitter output power restrictions and increase the current Part 24 radiated power limits.⁴⁹

33. *Part 80 rules.* In 2002, the Commission converted the Automated Maritime Telecommunications System (AMTS) to geographic licensing,⁵⁰ and 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

⁴⁴ See generally *Streamlining NPRM*, 19 FCC Rcd 708 (2004).

⁴⁵ See Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Notice of Proposed Rulemaking*, 16 FCC Rcd 9610 (2001).

⁴⁶ See Automatic and Manual Roaming Obligations Pertaining to Commercial Mobile Radio Service, WT Docket No. 00-193, *Notice of Proposed Rulemaking*, 15 FCC Rcd 21628 (2000) (*Roaming Notice*).

⁴⁷ See *Streamlining NPRM*, 19 FCC Rcd 708 (2004).

⁴⁸ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

⁴⁹ See *Streamlining NPRM*, 19 FCC Rcd 708 (2004).

⁵⁰ See Amendment of the Commission's Rules Concerning Maritime Communications, PR Docket No. 92-257, *Second Memorandum Opinion and Order and Fifth Report and Order*, 17 FCC Rcd 6685 (2002).

unnecessary or duplicative requirements.⁵¹ On January 8, 2004, the Commission updated and streamlined Part 80.⁵² On May 11, 2004, the Commission, on its own motion, accelerated the effective date of the rules adopted in the *GMDSS Second Report and Order* governing certification of AIS equipment.⁵³

34. *Part 90 rules relating to Intelligent Transportation Systems (ITS) Radio Service rules.* On November 7, 2002, the Commission sought comment on licensing and service rules for Dedicated Short-Range Communication Services (DSRCS) in the 5.9 GHz band.⁵⁴ Generally, the *NPRM* sought comment on licensing and service rules proposed by DOT and ITS America. On December 17, 2003, the Commission adopted service and licensing rules for DSRCS in the ITS Radio Service in the 5.9 GHz band.⁵⁵ On September 30, 2004, the Wireless Telecommunications Bureau announced the details of the licensing and transmitter location registration process for DSRCS in the ITS.⁵⁶ The Commission received petitions for reconsideration of the *ITS Report and Order*, which the staff is reviewing. The Commission also has pending before it a Petition for Rulemaking regarding its Location and Monitoring Service (LMS) rules.⁵⁷

2. Proceedings that Staff Recommends Be Initiated in Order To Modify or Repeal Current Rules

35. In response to the comments received or as a result of ongoing review of the rules within the purview of the Bureau, staff recommends initiating a new proceeding or proceedings to consider modifying or eliminating the following rules. The modifications proposed below generally involve streamlining of procedural, technical, and operational rules for reasons that fall outside the scope of Section 11 review.

⁵¹ See Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 00-48, 17 FCC Rcd 6741 (2002).

⁵² See Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Second Report and Order, Sixth Report and Order and Second Further Notice of Proposed Rulemaking*, WT Docket No. 00-48, 19 FCC Rcd 3120 (2004)

⁵³ See Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Order on Reconsideration*, WT Docket No. 00-48, 19 FCC Rcd 9105 (2004)

⁵⁴ Amendment of the Commission's Rules Regarding Dedicated Short-Range Communication Services in the 5.850-5.925 GHz Band (5.9 GHz Band), *Notice of Proposed Rulemaking and Order*, 17 FCC Rcd 23,136 (2002).

⁵⁵ Amendment of the Commission's Rules Regarding Dedicated Short-Range Communication Services in the 5.850-5.925 GHz Band (5.9 GHz Band), *Report and Order*, 19 FCC Rcd 2458 (2004).

⁵⁶ Wireless Telecommunications Bureau Announces Details Concerning the Licensing and Transmitter Location Registration Process for the Dedicated Short Range Communications Service in the Intelligent Transportation, *Public Notice*, DA 04-3165, (Sept. 30, 2004).

⁵⁷ See "Wireless Telecommunications Bureau Seeks Comment On Petition For Rulemaking Regarding Location And Monitoring Service Rules," *Public Notice*, 17 FCC Rcd 6438 (WTB 2002); "Wireless Telecommunications Bureau Extends Comment Cycle On Petition For Rulemaking Regarding Location And Monitoring Service Rules," *Public Notice*, 17 FCC Rcd 8377 (WTB 2002).

36. *Section 1.2111(a) filing requirements for applications for transfers of control or assignment of licenses.* Staff continues to recommend that the Commission consider revising section 1.2111(a) to eliminate the requirement that an applicant seeking approval for a transfer of control or assignment of a license within three years of receiving the license through competitive bidding file transaction documents with the Commission. In addition, since the staff made its initial recommendation, the Commission has adopted rules governing secondary market transfers that, with the exception of transfers involving designated entities, generally do not require that the parties to the transfer file transaction documents with the Commission. Staff's proposal to revise section 1.2111(a) is therefore consistent with the Commission's recent approach of generally not requiring parties transferring licenses to file transaction documents with the Commission.

37. *Part 17 rules.* WTB 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. PCIA filed comments suggesting changes to the following Part 17 Rules: Sections 17.2, 17.4, 17.23, 17.47, 17.50, 17.51 and 17.57.⁵⁸ Cingular and CTIA filed Reply Comments in support of PCIA's recommended changes.⁵⁹ CTIA further recommended that any Part 17 changes reflect the competitive nature of the wireless industry, streamline the siting of wireless communications structures and antennas, provide frequency and timely coordination with Federal Aviation Administration rules and procedures, and facilitate the siting of wireless communications structures.⁶⁰ WTB 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.

38. *Section 20.12 as it relates to wireless resale.* Staff recommends that paragraph (b) of this Section (and the last sentence of paragraph (a) defining the scope of paragraph (b)) be removed. Section 20.12(b)(3) provides that the rule has already sunset as of November 24, 2002.⁶¹

⁵⁸ Comments of PCIA – The Wireless Infrastructure Association (PCIA) filed July 12, 2004.

⁵⁹ Reply Comments of Cingular Wireless, LLC (Cingular) filed August 16, 2004; Reply Comments of CTIA – The Wireless Association (CTIA) filed August 12, 2004.

⁶⁰ Reply Comments of CTIA – The Wireless Association (CTIA) filed August 12, 2004.

⁶¹ See also "Notice Commencement of Five-Year Period Preceding Termination of Resale Rule Applicable to Certain Covered Commercial Mobile Radio Service Providers," CC Docket No. 94-54, *Public Notice*, 13 FCC Rcd 17427 (1998).

IV. APPENDICES

39. Attached to this Staff Report are three appendices. Appendix I lists all of the proceedings initiated pursuant to the 2002 Biennial Regulatory Review, as well as major related proceedings that have streamlined, revised, or eliminated rule provisions within the purview of the Bureau. Appendix II lists the commenting parties in this proceeding. Finally, Appendix III provides a full analysis of the rule parts implicated by Section 11 within the Bureau's purview, discusses advantages and disadvantages associated with the particular rules, summarizes comments received, and details staff recommendations.

**APPENDIX I: 2000 AND 2002 BIENNIAL REGULATORY REVIEW AND
RELATED PROCEEDINGS**

**I. PROCEEDINGS INITIATED – COMPLETED/SIGNIFICANT ORDERS
ISSUED**

- (1) Commission implemented rules to introduce spectrum leasing and transfer/assignment applications. *See* In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 19 FCC Rcd 17503 (2004).
- (2) Commission has adopted rules to eliminate reviews under Section 106 of the National Historic Preservation Act where the potential for impact upon historic sites is quite unlikely, and to clarify and streamline the review process for those undertakings that remain subject to review. Specifically, the following categories of undertakings have been excluded from the Section 106 review process: enhancements to towers; replacement and temporary towers; certain towers constructed on industrial and commercial properties or utility corridor rights-of-way; and construction in SHPO/THPO-designated areas. *See* In the Matter of Nationwide Programmatic Agreement Regarding The Section 106 National Historic Preservation Act Review Process, WT Docket No. 03-128, *Report and Order*, FCC 04-222 (rel. Oct. 5, 2004).
- (3) Commission adopted a *Report and Order and Further Notice of Proposed Rulemaking* that transforms the rules governing the Multipoint Distribution Service (MDS) and the Instructional Television Fixed Service (ITFS) in order to encourage the deployment of broadband services by commercial and educational entities. *See* Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, WT Docket Nos. 03-66, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004).
- (4) Commission adopted revisions to the service rules for licensing the Multichannel Video Data & Distribution Service (MVDDS) in response to several petitions. *See* Amendment of Parts 2 and 25 of Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in Ku-Band Frequency Range, ET Docket No. 98-206, *Fourth Memorandum Opinion and Order*, 18 FCC Rcd 8428 (2003) (*appeal pending*).
- (5) Commission revised and improved the service areas for licensing Multichannel Video Data & Distribution Service (MVDDS). *See* Amendment of Parts 2 and 25 of Commission's Rules to Permit Operation of NGSO FSS

Systems Co-Frequency with GSO and Terrestrial Systems in Ku-Band Frequency Range, ET Docket No. 98-206, *Third Report and Order*, 18 FCC Rcd 13468 (2003). *See also Second Further Notice of Proposed Rulemaking*, 18 FCC Rcd 7589 (2003).

- (6) Commission streamlined its requirements for applications affecting Quiet Zones and amended Section 101.31(b)(1)(v) to permit Part 101 applicants to initiate conditional operation provided they have obtained prior consent of the Quiet Zone entity. *See Review of Quiet Zones Application Procedures*, WT Docket No. 01-319, *Report and Order*, 19 FCC Rcd 3267 (2004).
- (7) Commission adopted new licensing and service rules to promote the commercial development and growth of spectrum in the 71-76 GHz, 81-86 GHz and 92-95 GHz bands. *See Allocation and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands*, WT Docket No. 02-146, *Report and Order*, 18 FCC Rcd 23318 (2003).
- (8) Commission adopted a *Third Order on Reconsideration* based on a petition filed by Independent MultiFamily Communications Council. *See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use*, IB Docket 98-172, *Third Order on Reconsideration*, 19 FCC Rcd 10777 (2004).
- (9) Commission adopts several measures designed to increase carrier flexibility, reduce regulatory costs of providing service to rural areas, and promote access to both spectrum and capital resources for entities seeking to provide or improve wireless services in rural areas. *See Rural R&O and FNPRM*, WT Docket No. 03-202, 19 FCC Rcd 19078 (2004).
- (10) Commission addresses raising the wireline telephone penetration rate at which tribal lands are eligible for a bidding credit from 70 percent or less, to 85 percent or less, and increasing the amount of the bidding credit available to carriers that pledge to deploy on and serve qualifying tribal lands. *See In the Matter of Extending Wireless Telecommunications Services to Tribal Lands*, WT Docket No. 99-266, *Third Report and Order and Third Further Notice of Proposed Rulemaking*, 19 FCC Rcd 17652 (2004).
- (11) Commission establishes comprehensive regulatory scheme for Gulf of Mexico to provide cellular service to unserved Gulf region. *See Cellular Service and Other Commercial Mobile Radio Services in the Gulf of Mexico*, WT Docket No. 97-112, 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. 97-112, *Report and Order*, 17 FCC Rcd 1209 (2002).
- (12) Commission adopted rules to foster a more timely transition to narrowband technology in the 150-174 MHz and 421-512 MHz bands. *See*

Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, WT Docket No. 99-87, RM-9332, 18 FCC Rcd 3034 (2003).

- (13) Commission allocated 50 megahertz of spectrum in the 4940-4990 MHz (4.9 GHz) band for fixed and mobile services in support of public safety, and adopted service rules for this band. *See* The 4.9 GHz Band Transferred from Federal Government Use, WT Docket No. 00-32, *Second Report and Order and Further Notice of Proposed Rulemaking*, 17 FCC Rcd 3955 (2002). Commission adopted licensing and service rules for the 4.9 GHz band. *See* 4.9 GHz Band Transferred from Federal Government Use, *Memorandum Opinion and Order and Third Report and Order*, 18 FCC Rcd 9152 (2003).
- (14) Commission adopted rules to consolidate, revise, and streamline Part 80 of its rules to address new international maritime requirements, improve the operational ability of users of marine radios, and remove unnecessary or duplicative requirements. *See* Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, WT Docket No. 00-48, *Report and Order*, 19 FCC Rcd 3120 (2004).
- (15) Commission revised rules and policies governing low power (two watt) operations in the 450-470 MHz band. *See* Amendment of Part 90 of the Commission's Rules and Policies for Applications and Licensing of Low Power Operations in the Private Land Mobile Radio 450-470 MHz Band, *Report and Order*, WT Docket No. 02-57, 18 FCC Rcd 3948 (2003).
- (16) Commission provided procedural guidelines regarding the documentation of Public Safety Answering Point (PSAP) readiness. *See* Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, *Order on Reconsideration*, FCC 03-98 (rel. May 8, 2003).
- (17) Commission adopted service rules for the first 90 megahertz of Advanced Wireless Service (AWS) spectrum, consisting of 1710-1755 and 2110-2155 MHz. Most significantly, the order provided for flexible use of the spectrum under Part 27 of the Rules. *See* Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162 (2003).
- (18) Commission adopted technical and procedural measures to address the ongoing and growing problem of interference to public safety communications in the 800 MHz band. *See* Improving Public Safety Communications in the 800 MHz Band, WT Docket 02-55, [Report and Order](#), [Fifth Report and Order](#), [Fourth Memorandum Opinion and Order](#), and [Order](#), [19 FCC Rcd 14969 \(2004\)](#) as amended by Erratum, DA 04-3208, 19 FCC Rcd 19651 (2004) and Erratum, DA 04-3459, rel. Oct. 29, 2004. *See also* In the

Matter of Improving Public Safety Communications in the 800 MHz Band, Supplemental Order and Order on Reconsideration, WT Docket 02-55, FCC 04-294 (rel. Dec. 22, 2004).

- (19) Commission imposed requirements on wireless carriers to port numbers to other carriers. *See Telephone Number Portability*, Memorandum Opinion and Order, CC Docket No. 95-116, 18 FCC Rcd 29071 (2003), *appeal docketed*, Central Texas Tel. Coop. Inc. v. FCC, No. 03-1405 (D.C. Cir. Nov. 11, 2003). This porting requirement, also referred to as local number portability (LNP), allows consumers to retain their existing phone numbers when switching carriers. *See* 47 U.S.C. § 153(30); 47 C.F.R. § 52.21(l); *Telephone Number Portability*, CC Docket No. 95-116, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, 8368 (1996). In November, 2003, Commission clarified issues relating to LNP between wireless and wireline carriers, also known as intermodal porting. *See Telephone Number Portability*, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking, CC Docket No. 95-116, 18 FCC Rcd 23697 (2003), *appeal docketed*, United States Telecom Ass'n v. FCC, No. 03-1414 (D.C. Cir. Nov. 20, 2003). Commission concurrently sought comment on facilitating wireline-to-wireless porting if the rate center associated with the wireless number is different from the rate center in which the wireline carrier seeks to serve the customer. *Id.* at 23714-15. On September 16, 2004, Commission sought comment on the recommendation of the North American Numbering Council for reducing the time interval for intermodal porting. *See Telephone Number Portability*, Second Further Notice of Proposed Rulemaking, CC Docket 95-116, 19 FCC Rcd 18515 (2004).
- (20) Commission adopted an Order revising the rules governing the air-ground telecommunications service and eliminating or streamlining a number of other rules pertaining generally to Part 22 public land mobile radio services. *See* FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).
- (21) Commission announced that it would consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft. *See* FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004). The Notice of Proposed Rulemaking commencing the Commission's review of this matter is expected to be released in early 2005. *See* FCC News Release, *Instructions on Submitting Public Comments in the FCC's Review of the Use of Cellular Telephones on Airborne Aircraft (Docket No. WT 04-435)* (rel. Dec. 23, 2004).

II. PROCEEDINGS INITIATED/REVIEW PENDING

- (1) Commission has proposed possible revision or elimination of requirements placed on CMRS carriers regarding obligations to provide roaming. *See*

Automatic and Manual Roaming Obligations Pertaining to Commercial Mobile Radio Service, WT Docket No. 00-193, *Notice of Proposed Rulemaking*, 15 FCC Rcd 21628 (2000).

- (2) Commission has proposed service rules for 20 megahertz of additional Advanced Wireless Service (AWS) spectrum (1915-1920, 1995-2000, 2175-2180 and 2020-2025 MHz), to be licensed under the Part 27 flexible use regime. *See Service Rules for Advanced Wireless Services in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz Bands*, WT Docket No. 04-356, *Notice of Proposed Rule Making*, 19 FCC Rcd 19263 (2004).
- (3) Commission has released a Notice of Inquiry regarding the impact that wireless communications facilities, such as cellular and broadcast towers, may have on migratory birds. The inquiry is designed to gather comment and information on scientific research and other related data relevant to migratory bird collisions with communications towers. *See In the Matter of Effects of Communications Towers on Migratory Birds*, WT Docket No. 03-187, FCC 03-205, *Notice of Inquiry*, 18 FCC Rcd 16,938 (rel. Aug. 20, 2003)
- (4) Commission is reviewing comments filed in response to a Petition for Rulemaking filed by FiberTower, Inc on May 26, 2004, to consider requirements to increase spectrum use by allowing a decrease in the size of antennas in the 10.7-11.7 GHz frequency band. *See RM-11043, Public Notice*, Rpt. No. 2666 (rel. July 23, 2004).
- (5) Commission has initiated a rulemaking in the 17.7-19.7 GHz frequency bands based on a filing by The Fixed Wireless Communications Coalition on May 4, 2001, to consider requirements to increase spectrum use and to accommodate licensees who need to relocate facilities from the 18.3-19.3 GHz band by allowing additional sizes of channels. *See Rechannelization of the 17.7-19.7 GHz Frequency Band for Fixed Microwave Services under Part 101 of the Commission's Rules*, WT Docket No. 04-143, *Notice of Proposed Rulemaking*, 19 FCC Rcd 11658 (2004).
- (6) Commission has initiated a rulemaking to propose rules for fixed, point-to-point microwave service in the 37-38.6 GHz and 42.0-42.5 GHz frequency bands and to modify certain rules in the 38.6-40.0 GHz frequency band. *See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz*, ET Docket No. 95-183, *Third Notice of Proposed Rule Making*, 19 FCC Rcd 8232 (2004).
- (7) On December 15, 2004, the Commission proposed to relax the rules restricting the provision of air-ground telecommunications service and is currently considering additional proposed revisions to various Part 22 Public Mobile Service rule sections, including the Paging and Radiotelephone Service. *See FCC News Release, Daily Digest Vol. 23 No. 238* (Dec. 16,

- 2004); In the Matter of Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services - Biennial Regulatory Review-Amendment of Parts 1, 22, and 90 of the Commission's Rules, *Notice of Proposed Rulemaking*, 18 FCC Rcd 8380 (2003).
- (8) Commission initiates proceeding to streamline and harmonize licensing provisions in the wireless radio services (WRS) under Parts 1, 22, 24, 27, and 90. *See* In the Matter of Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Notice of Proposed Rulemaking*, 19 FCC Rcd 708 (2004).
- (9) Commission has proposed to amend its rules to permit VHF public coast (VPC) and automated maritime telecommunications system (AMTS) station licensees to provide private mobile radio service to units on land. *See* In the Matter of Maritel, Inc. and Mobex Network Services, LLC, Petitions for Rule Making to Amend the Commission's Rules to Provide Additional Flexibility for AMTS and VHF Public Coast Station Licensees, WT Docket No. 04-257, RM-10743, 19 FCC Rcd 15225 (2004).
- (10) Commission is reviewing comments filed in response to Commission's *Second Further Notice of Proposed Rule Making* in WT Docket No. 99-87, in which Commission sought comment on a plan to migrate narrowband technology users to 6.25 kHz in the 150-174 MHz and 421-512 MHz bands. *See* Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, WT Docket No. 99-87, RM-9332, 18 FCC Rcd 3034 (2003).
- (11) Commission is in the process of resolving petitions for reconsideration that seek to expand or clarify the exception for attribution of affiliate gross revenues to rural telephone cooperatives. *See* Amendment of Part 1 of the Commission's Rules -- Competitive Bidding Procedures, *Second Order on Reconsideration of the Third Report and Order and Order on Reconsideration of the Fifth Report and Order*, FCC 03-98 (rel. May 8, 2003).

APPENDIX II

COMMENTING PARTIES (DOCKET NO. 04-180)

Comments:

Ericsson Inc.

PCIA – The Wireless Infrastructure Association (“PCIA”)

Reply Comments:

Cingular Wireless, LLC (“Cingular”)

CTIA – The Wireless Association (“CTIA”)

Ex Parte Comments:

Ericsson Inc.

APPENDIX III: 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.⁶² 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. 98-20.⁶³ 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.⁶⁴ The Commission made minor changes to those rules in the 1999 reconsideration of the *ULS Report and Order*.⁶⁵

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.

⁶² 47 C.F.R. Part 1, subpart F.

⁶³ 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*).

⁶⁴ 47 C.F.R. §1.913.

⁶⁵ 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

On January 7, 2004, the Commission released a Notice of Proposed Rulemaking (*Streamlining Notice*) initiating a proceeding to streamline and harmonize licensing provisions in the wireless radio services (WRS) that were identified in part during the Commission's 2000 and 2002 biennial regulatory reviews.⁶⁶ Among other matters, the Commission proposed to modify its rules to classify a deletion of a frequency and/or transmitter site from a multi-site authorization under Part 90 as a minor modification and sought comment on whether to eliminate the Part 24 transmitter output power limits and increase Part 24 EIRP limits in certain circumstances.

On February 12, 2004, the Commission released a Report and Order revising and streamlining its requirements for applications affecting Quiet Zones (*Quiet Zones Report and Order*).⁶⁷ In that Report and Order, the Commission made several changes to its Part 1 rules relating to Quiet Zones, including providing for immediate processing of applications that may implicate Quiet Zones if consent of the Quiet Zone entity has been

⁶⁶ See In the Matter of Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket No. 03-264, *Notice of Proposed Rulemaking*, 19 FCC Rcd 708 (2004) (*Streamlining NPRM*).

⁶⁷ See In the Matter of Review of Quiet Zones Application Procedures, WT Docket No. 01-319, *Report and Order*, 19 FCC Rcd 3267 (2004) (*Quiet Zones Report and Order*).

obtained, and allowing applicants to begin coordination with Quiet Zone entities in advance of filing an application with the Commission.

On September 27, 2004, the Commission released the *Rural R&O and FNPRM*, adopting measures to facilitate the deployment of wireless services in rural areas including the elimination of the cellular cross-interest rule in RSAs and an increase in permissible power levels for base stations in certain wireless services that are located in rural areas or that provide coverage to otherwise unserved areas.⁶⁸ In lieu of the cellular cross interest rule, the Commission adopted new reporting requirements in section 1.919 for use in conjunction with a case-by-case approach to reviewing substantial transfers or assignments.

Comments

No comments were filed with respect to this subpart.

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.”

⁶⁸ *Rural R&O and FNPRM*, 19 FCC Rcd 19078 (2004).

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

Description

Part 1, Subpart I of the Commission's rules⁶⁹ implements the requirements of the National Environmental Policy Act (NEPA)⁷⁰ as well as a series of other federal environmental laws, including the Endangered Species Act of 1973, as amended,⁷¹ the National Historic Preservation Act of 1966 (NHPA),⁷² the Wilderness Act of 1964, as amended,⁷³ statutory provisions relating to Indian religious sites,⁷⁴ and the Wildlife Refuge Laws.⁷⁵ In addition, the Commission's environmental rules implement Executive Orders regarding flood plains and wetlands regulation.⁷⁶ By statute and regulations of the Council on Environmental Quality (CEQ),⁷⁷ 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 neighborhoods⁷⁸ and the effect of radio frequency emissions on the human environment.⁷⁹

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.

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

⁶⁹ The Commission's environmental rules are codified at 47 C.F.R. §§ 1.1301-1.1319.

⁷⁰ 42 U.S.C. §§ 4321-4347.

⁷¹ 16 U.S.C. §§ 1531-1543.

⁷² 16 U.S.C. §§ 470 *et seq.*

⁷³ 16 U.S.C. §§ 1131-1136.

⁷⁴ 42 U.S.C. § 1996.

⁷⁵ 16 U.S.C. § 668dd.

⁷⁶ 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).

⁷⁷ 40 C.F.R. §§ 1500-1508.

⁷⁸ 47 C.F.R. § 1.1307(a)(8).

⁷⁹ 47 C.F.R. § 1.1307(b).

in an environmental assessment (EA), and file that document with the Commission.⁸⁰ The Commission has concluded that actions not identified in its rules are categorically excluded from environmental review.⁸¹ The Commission's environmental rules explain what information is required in an EA,⁸² the methods for the public to file objections to EAs,⁸³ and those situations in which a full environmental impact statement must be completed,⁸⁴ as required by NEPA.

Comments

No comments were filed with respect to this Subpart.

Analysis

The Part 1, subpart I rules are beyond the scope of the Biennial Review proceeding. These Commission rules implement NEPA,⁸⁵ as well as other federal environmental laws and executive orders.⁸⁶ The rules were not promulgated under the Communications Act of 1934, as amended, and therefore are not part of the Biennial Review.⁸⁷

It is worth noting, however, that on October 5, 2004, the Commission released a *Report and Order* to implement a Nationwide Programmatic Agreement to be signed by the Commission, the Advisory Council on Historic Preservation ("Advisory Council") and the National Conference of State Historic Preservation Officers.⁸⁸ The Nationwide Agreement, as authorized by Section 214 of the National Historic Preservation Act of 1966 ("NHPA") and Section 800.14(b) of the Advisory Council's rules, streamlines and tailors the Section 106 NHPA review process for communications towers and other Commission-licensed facilities. It eliminates reviews under Section 106 of the National Historic Preservation Act where the potential for impact upon historic sites is quite unlikely, and it clarifies and streamlines the review process for those undertakings that remain subject to review. Specifically, the following categories of undertakings have been excluded from the Section 106 review process: enhancements to towers;

⁸⁰ 47 C.F.R. § 1.1307(a).

⁸¹ 47 C.F.R. § 1.1306.

⁸² See 47 C.F.R. §§ 1.1308, 1.1311.

⁸³ 47 C.F.R. § 1.1313.

⁸⁴ 47 C.F.R. §§ 1.1314-1.1319.

⁸⁵ 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).

⁸⁶ 47 C.F.R. § 1.1307(a).

⁸⁷ Section 11 of the Communications Act instructs the Commission to review "all regulations issued *under this Act . . .*" 47 U.S.C. § 161 (emphasis added).

⁸⁸ In the Matter of Nationwide Programmatic Agreement Regarding The Section 106 National Historic Preservation Act Review Process, WT Docket No. 03-128, *Report and Order* (FCC 04-222, rel. Oct. 5, 2004).

replacement and temporary towers; certain towers constructed on industrial and commercial properties or utility corridor rights-of-way; and construction in SHPO/THPO-designated areas.

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 1993⁸⁹ and amended by the Balanced Budget Act of 1997.⁹⁰ 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.⁹¹ 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.”⁹²

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*.

⁸⁹ See Omnibus Budget Reconciliation Act of 1993, Pub. Law No. 103-66 (1993).

⁹⁰ See Balanced Budget Act of 1997, Pub. Law No. 105-33, § 3002, 111 Stat. 251 (1997) (amending 47 U.S.C. § 309(j)).

⁹¹ In service-specific rule making proceedings, the Commission continues to establish the appropriate size standards for each auctionable service.

⁹² 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.⁹³ 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 2002 Biennial Review. In the *Second Order on Reconsideration of the Part 1 Third Report and Order* and *Part 1 Fifth Report and Order*, the Commission: clarified that personal net worth, including personal income, of an applicant's officers and directors will not be attributed to the applicant for purposes of calculating an applicant's gross revenues; provided that under certain narrow circumstances the gross revenues of affiliates of directors and officers of rural telephone cooperatives need not be attributed to the cooperative; modified the Part 1 default payment rule to incorporate the combinatorial bidding default rule previously adopted for combinatorial auctions in the 700 MHz bands; made certain conforming and technical edits, including a reorganization of section 1.2112(a) for greater clarity.⁹⁴ The changes regarding gross revenues attributed to rural telephone cooperatives addressed the substance of comments filed by National Telecommunications Cooperative Association

⁹³ 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).

⁹⁴ See Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, *Second Order on Reconsideration of the Third Report and Order* and *Order on Reconsideration of the Fifth Report and Order*, FCC 03-98 (rel. May 8, 2003)

in conjunction with the 2002 Biennial Review. The Bureau is currently addressing petitions for reconsideration submitted in response to the *Order on Reconsideration of the Part 1 Fifth Report and Order*. These petitions seek expansion or clarification of the exception for attribution of affiliate gross revenues to rural telephone cooperatives.

After the release of the 2002 Biennial Review, the Bureau denied petitions for reconsideration of the *Second Order on Reconsideration of the Part 1 Third Report and Order*.⁹⁵ In part, the Bureau clarified that the default obligations of licensees paying winning bids in installments are not mitigated by subsequent winning bids for licenses authorizing use of the same spectrum.

Comments

No comments were filed with respect to this rule part.

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, as part of the 2002 Biennial Regulatory Review, staff concluded that section 1.2111(a), which requires transactions documents to be filed with certain applications to transfer control or assign licenses, may no longer be necessary in the public interest and accordingly recommended a revision. More particularly, staff recommended that the Commission adopt a recommendation by prior commenters 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. For the reasons discussed in the 2002 Biennial Regulatory Review, and incorporated by reference herein, staff continues to recommend the previously proposed revision to section 1.2111(a).⁹⁶

⁹⁵ See Amendment of Part 1 of the Commission’s Rules – Competitive Bidding Procedures, WT Docket No. 97-82, *Third Order on Reconsideration of the Third Report and Order*, 19 FCC Rcd 2551 (2004).

⁹⁶ 2002 Biennial Review Staff Report, 18 FCC Rcd at 4276-77.

PART 1, SUBPART X – SPECTRUM LEASING

Description

Part 1, Subpart X, establishes rules to enable spectrum users to gain access to licensed spectrum by entering into different types of spectrum leasing arrangements with licensees in most Wireless Radio Services. In addition, this subpart contains rules that streamline the Commission's approval procedures for license assignments and transfers of control in most Wireless Radio Services.

Purpose

Part 1, Subpart X rules are intended to significantly expand and enhance secondary markets to permit spectrum to flow more freely among users and uses in response to economic demand, to the extent consistent with allowing more flexible use of spectrum by licensees and other spectrum users, better defining licensees' and spectrum users' rights and responsibilities, enabling use of spectrum across various dimensions (frequency, space and time), promoting the efficient use of spectrum, and providing for continued technological advances.

Analysis

Status of Competition

Because the rules in Part 1, Subpart X, became effective only in the 2003-2004 period, it is too early to assess status of competition with respect to this subpart.

Advantages

These rules are intended for the express purpose of promoting efficient use of spectrum through the elimination of barriers to the development of secondary markets. These flexible policies continue our evolution toward greater reliance on the marketplace to expand the scope of available wireless services and devices, leading to more efficient and dynamic use of the important spectrum resource to the ultimate benefit of consumers. Facilitating the development of these secondary markets enhances and complements our efforts to encourage the development of broadband services, promote increased facilities-based competition among service providers, enhance economic opportunities and access for the provision of communications services by designated entities, and enable development of additional and innovative services in rural areas.

Disadvantages

The Part 1, Subpart X rules include streamlined processing procedures for assignments and transfers that will need to be assessed for workability and effectiveness over time. Additionally, we need to determine, over time, whether a correct balance has been achieved between our desire to maximize market-based access opportunities and our need to fulfill our statutory mandates with respect to assignments and transfers.

Recent Efforts

40. In 2003, in the *Secondary Markets Report and Order* in WT Docket No. 00-230, the Commission took action to remove unnecessary regulatory barriers to the development of secondary markets in spectrum usage rights, and created Part 1, Subpart X.⁹⁷ In 2004, the Commission adopted the *Secondary Markets 2nd Report and Order*, which further streamlined the processing of certain spectrum leasing and transfer/assignment applications and authorized licensees to make spectrum available to third-party users on a “private commons” basis.⁹⁸

Comments

None.

Recommendation

Staff recommends retention of these rules, as they are intended to foster competition.

⁹⁷ In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Report and Order and Further Notice of Proposed Rulemaking*, 18 FCC Rcd 20604 (2003) (*Secondary Markets Report and Order*).

⁹⁸ In the Matter of Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets, WT Docket No. 00-230, *Second Report and Order, Order on Reconsideration, and Second Further Notice of Proposed Rulemaking*, 19 FCC Rcd 17503 (2004) (*Secondary Markets 2nd Report and Order*).

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,⁹⁹ 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.¹⁰⁰ 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.¹⁰¹

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.

⁹⁹ 47 U.S.C. § 303(q).

¹⁰⁰ 47 C.F.R. Part 17.

¹⁰¹ Section 17.5 exempts geographically licensed services from this requirement. See 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

PCIA filed comments suggesting changes to the following Part 17 Rules: Sections 17.2, 17.4, 17.23, 17.47, 17.50, 17.51 and 17.57.¹⁰² Specifically, PCIA commented as follows:

Section 17.2: PCIA contends that the current definition of “antenna structure” (and “antenna structure owner”) is too broad.¹⁰³ The current definition includes carrier transmission facilities that are neither owned, nor controlled by tower/infrastructure providers. As such, PCIA believes that the compliance obligations of licensed carriers and unlicensed infrastructure providers become ambiguous, resulting in wasteful, duplicative compliance efforts by both entities.

Section 17.4(f): PCIA notes that the current rule requires structure owners to immediately provide paper copies of FCC Form 854R to each permittee and tenant licensee. Given that the required 854R information is currently posted on the ULS website, PCIA recommends that Section 17.4(f) should be revised so that permittees and licensees may instead obtain a copy of Form 854R from the website.

Section 17.23: PCIA states that the current rules reference an FAA Advisory Circular that has been superseded (AC 70/7460-1J – making compliance with the painting and lighting provisions in that circular mandatory). PCIA encourages the Commission to revise Rule 17.23 to conform its requirements to those of the FAA on an ongoing basis, especially since these matters affect public safety.

Section 17.47: PCIA notes that the current rule requires that all automatic or mechanical control devices, indicators and alarm systems be inspected at intervals not to exceed three months. PCIA argues that in today’s environment, those systems are automatically monitored in a near “real-time” continuous fashion by centralized Network Operation Control (“NOC”) centers and do not require quarterly physical inspections. PCIA suggests elimination or substantial revision of this requirement.

¹⁰² Comments of PCIA – The Wireless Infrastructure Association (PCIA) filed July 12, 2004.

¹⁰³ We note that the Commission’s rules do currently define separately “antenna structure” in Section 17.2(a) and “antenna structure owner” in Section 17.2(c).

Section 17.50: PCIA recommends that the current rule be harmonized with the FAA's rules regarding cleaning or repainting towers as often as necessary to maintain good visibility. PCIA states that the Commission's rules provide no standard for measuring good visibility. PCIA suggests that our rule be revised to reflect the standard used by the FAA. In particular, PCIA recommends that the FCC revise Rule 17.50 to state that visibility standards are met if the paint on the structure is within the color tolerance depicted on the FAA's "In Service Aviation Orange Tolerance Chart," as measured against the base of the tower from a distance of ¼ mile.

Section 17.51: PCIA recommends that the current rule be harmonized with the FAA's treatment of malfunctioning top steady or flashing obstruction lights. That is, PCIA believes that Rule 17.51 should be revised to provide that a malfunctioning top steady light or any malfunctioning flashing light does not violate Rule 17.51, so long as a NOTAM (notification of the malfunctioning of a light) has been sought by the tower owner or operator and issued by the FAA. PCIA suggests that the rule should also provide that Section 17.51 is not violated when a malfunction is beyond the control of the tower owner/operator (such as in a power failure).

Section 17.57: PCIA recommends that the current rule be harmonized with the FAA's procedures. This section requires that the owner of a registered tower notify the FCC within 24 hours of construction or dismantlement of a tower/structure. It also requires such a registrant to notify the FCC within 24 hours of any change in ownership. PCIA suggests that the rule be revised to comply with the FAA's treatment of such actions.

Cingular and CTIA filed Reply Comments in support of PCIA's recommended changes.¹⁰⁴ CTIA further recommended that any Part 17 changes reflect the competitive nature of the wireless industry, streamline the siting of wireless communications structures and antennas, provide frequent and timely coordination with FAA rules and procedures, and facilitate the siting of wireless communications structures.¹⁰⁵

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."

¹⁰⁴ Reply Comments of Cingular Wireless, LLC (Cingular) filed August 16, 2004; Reply Comments of CTIA – The Wireless Association (CTIA) filed August 12, 2004.

¹⁰⁵ Reply Comments of CTIA – The Wireless Association (CTIA) filed August 12, 2004.

While staff generally concludes that Part 17 rules remain necessary in the public interest, it nonetheless also concludes 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 initiate a proceeding in part to consider the specific recommendations of PCIA and others with respect to Part 17. Such a proceeding would 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.

PART 20 – COMMERCIAL MOBILE RADIO SERVICES**Description**

This rule part sets forth the requirements and conditions applicable to commercial mobile radio service providers. It is comprised of the following sections:

- § 20.1 Purpose.
- § 20.3 Definitions.
- § 20.5 Citizenship.
- § 20.6 CMRS spectrum aggregation limit.
- § 20.7 Mobile services.
- § 20.9 Commercial mobile radio service.
- § 20.11 Interconnection to facilities of local exchange carriers.
- § 20.12 Resale and roaming.
- § 20.13 State petitions for authority to regulate rates.
- § 20.15 Requirements under Title II of the Communications Act.
- § 20.18 911 Service.
- § 20.19 Hearing aid-compatible mobile handsets.
- § 20.20 Conditions applicable to provisions of CMRS service by incumbent Local Exchange Carriers.

Comments

Any comments are noted section-by-section in the following analysis of each rule section in Part 20 relevant to the Biennial Review.

Analysis

Staff recommendations are noted section-by-section in the following analysis of each rule section in Part 20 relevant to the Biennial Review.

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

Description

Section 20.6¹⁰⁶ limited the amount of broadband PCS, cellular, and commercial SMR spectrum that any entity could control or influence in a significant way in a common geographic area. The rule (commonly known as the “spectrum cap”) further defined the types of ownership and other interests that were attributable under the cap.

On December 18, 2001, the Commission adopted a *Report and Order* that eliminated the spectrum cap effective January 1, 2003.¹⁰⁷ 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.¹⁰⁸ The Commission determined, however, that a sunset period was necessary in order to prepare for case-by-case review.¹⁰⁹ The sunset period was codified in Section 20.6(f) of the rules.¹¹⁰ 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.¹¹¹

Comments

No comments were filed with respect to this rule.

Analysis

Because this rule has sunset, no further review of the rule is necessary as part of this Biennial Review. Staff recommends that this rule be removed from the Code of Federal Regulations.

¹⁰⁶ 47 C.F.R. § 20.6.

¹⁰⁷ 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*).

¹⁰⁸ See *Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22670-71.

¹⁰⁹ See *id.* at 22669.

¹¹⁰ 47 C.F.R. § 20.6(f).

¹¹¹ 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,¹¹² which was enacted by Congress as part of the Omnibus Budget Reconciliation Act of 1993.¹¹³ Section 20.11¹¹⁴ 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.¹¹⁵ 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 252.¹¹⁶ 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.¹¹⁷ 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 51.¹¹⁸

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.

¹¹² 47 U.S.C. § 332(c)(1)(B).

¹¹³ See 47 U.S.C. § 332.

¹¹⁴ 47 C.F.R. § 20.11.

¹¹⁵ See 47 U.S.C. §§ 251, 252.

¹¹⁶ 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*).

¹¹⁷ *Local Competition First Report and Order*, 11 FCC Rcd at 16005, ¶ 1023.

¹¹⁸ 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 *Ninth CMRS Competition Report*, the Commission noted that in February 2004, the Current Population Survey of the Census Bureau included a special supplement about wireless phone usage. On the basis of the information in this supplement, the Census Bureau estimates that 5 to 6 percent of all households now have wireless phones only.¹¹⁹ 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.¹²⁰

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.

¹¹⁹ *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 212, n.575.

¹²⁰ *See id.* at ¶ 215.

Recent Efforts

The Commission has commenced a fundamental examination of all forms of intercarrier compensation.¹²¹ 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 petitions¹²² that request rulings regarding the intercarrier compensation regime applicable to certain types of wireless traffic.¹²³ 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.¹²⁴ 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.”¹²⁵ 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.¹²⁶

¹²¹ 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*).

¹²² 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*).

¹²³ *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).

¹²⁴ 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).

¹²⁵ *US LEC Petition*. The Commission placed the petition into the record of CC Docket No. 01-92.

¹²⁶ 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*.¹²⁷

Comments

No comments were filed with respect to this rule.

Recommendation

Staff notes that issues relevant to this Biennial Review concerning section 20.11 are within the scope of the pending *Intercarrier Compensation* rulemaking proceeding (CC Docket No. 01-92)

¹²⁷ See *T-Mobile Petition*, *US LEC Petition*, and *Sprint PCS Petition*.

PART 20, SECTION 20.12 – RESALE**Description**

Section 20.12(b)¹²⁸ 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, 2002.¹²⁹

Comments

No comments were filed with respect to this rule.

Analysis

Because this rule (paragraph (b) of Section 20.12) is no longer in effect, no review is required as part of this Biennial Review. Staff recommends that paragraph (b) of this Section (and the last sentence of paragraph (a) defining the scope of paragraph (b)) be removed from the Code of Federal Regulations.

¹²⁸ 47 C.F.R. § 20.12(b).

¹²⁹ See 47 C.F.R. § 20.12(b)(3). See also “Commencement of Five-Year Period Preceding Termination of Resale Rule Applicable to Certain Covered Commercial Mobile Radio Service Providers,” CC Docket No. 94-54, *Public Notice*, 13 FCC Rcd 17427 (1998).

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)¹³⁰ 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 1996.¹³¹

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.¹³² 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

¹³⁰ 47 C.F.R. § 20.12(c).

¹³¹ 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).

¹³² 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.¹³³ 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.¹³⁴ 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.¹³⁵ 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.

¹³³ 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).

¹³⁴ 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).

¹³⁵ Automatic and Manual Roaming Obligations Pertaining to Commercial Mobile Radio Service, *Notice of Proposed Rulemaking*, 15 FCC Rcd 21628 (2000) (*Roaming Notice*).

Recommendation

Staff recommends no action in connection with this Biennial Review. WT Docket No. 00-193 is pending.

PART 20, SECTION 20.18 – 911 SERVICE

Description

Section 20.18 requires cellular carriers (as delineated in subpart (a) of the rule) to comply with requirements set by the Commission for the implementation of basic and Enhanced 911 services (E911).¹³⁶ As part of basic 911 service, carriers are required to deliver all 911 calls they receive to local Public Safety Answering Points (PSAPs), including for customers using Text Telephone (TTY) devices.

The rule provides for implementation of E911 in two phases. Under Phase I, carriers must 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, subject to specified accuracy and reliability standards, so that the 911 caller's location can be more accurately determined.

Implementation of Phase I was scheduled to begin on April 1, 1998, or within six months of a request by a (PSAP), whichever was later. The Phase II rules took effect on October 1, 2001. Under Phase II, carriers who employ network-based solutions must provide ALI service to at least 50 percent of their coverage area or population within six months of a PSAP request and to 100 percent within 18 months. Carriers employing handset-based technologies must begin deploying ALI-capable handsets by October 1, 2001 and complete deployment (to at least 95 percent of their customers) by December 31, 2005; the carriers must also begin delivering location information to PSAPs within six months of a request.

Purpose

The purpose of section 20.18 is to enhance public safety and facilitate effective and efficient law enforcement. Almost all PSAPs have the technology to automatically identify the location and number of wireline 911 calls. Prior to the adoption of section 20.18, however, a dispatcher receiving a wireless 911 call could only obtain information regarding the caller's location and callback number if the caller was able to provide it. Section 20.18 attempts to provide the same reliable and ubiquitous information for both wireless and wireline 911 calls.

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.

¹³⁶ 47 C.F.R. § 20.18.

Advantages

The E911 rule sets national standards and deadlines to ensure that all cellular 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. This location technology can also be used for commercial features and services.

Disadvantages

The E911 rule imposes administrative, technical, and economic costs on carriers who must deploy location technology and transmission capability to comply with the rule.

Recent Efforts

The Commission continues to promote the deployment of wireless E911 service as rapidly and universally as possible, and to address implementation problems as they arise. In a November 2002 order, the Commission further clarified the requirements for a valid PSAP request and established procedures to encourage cooperative deployment efforts.¹³⁷ Where major carriers fell behind schedule or requested additional time, the Commission negotiated consent decrees which provided penalties for failure to comply and set specific enforceable future Phase II deployment schedules.¹³⁸

In March 2003, the Commission launched its E911 Coordination Initiative, which brought together E911 stakeholders for a series of meetings to share experiences and devise strategies for expediting E911 deployment.¹³⁹ To monitor progress, the Commission required major wireless carriers to file quarterly reports in a spreadsheet format and has worked to improve the accuracy and utility of this data.¹⁴⁰

Recognizing the special challenges often encountered by the smallest wireless carriers, the Commission allowed additional time for those carriers to deploy Phase II and opened a filing window to receive additional information to support requests for relief in an October 2003 Order.¹⁴¹

¹³⁷ Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, 17 FCC Rcd 24282 (2002)

¹³⁸ AT&T Wireless Services, Inc., *Order and Consent Decree*, 17 FCC Rcd 11510 (2002); Cingular Wireless LLC, *Order and Consent Decree*, 18 FCC Rcd 11746 (2003); T-Mobile USA, Inc., *Order and Consent Decree*, 18 FCC Rcd 15123 (2003).

¹³⁹ See <http://wireless.fcc.gov/outreach/e911/>

¹⁴⁰ See, e.g., Public Notice, WTB Announces Updates and Enhancements to FCC'S Master Public Safety Answering Point (PSAP) Registry, DA 04-2255, 19 FCC Rcd 13820 (2004).

¹⁴¹ Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, 18 FCC Rcd 20987 (2003).

The Commission also took action to upgrade wireless handsets for 911 calls. In a November 2003 *Order*, the Commission directed the programming of carrier-donated and other 911-only handsets to alert PSAP dispatchers that call-back might not be possible.¹⁴² In a July 2004 *Order*, the Commission clarified its rules requiring that manufacturers incorporate improved methods of completing 911 calls into analog wireless handsets.¹⁴³

The Commission also continues to consider additional steps to improve public safety. In November 2003, the Commission clarified and expanded the scope of the E911 rules for other services, including mobile satellite services, telematics, and resold services, as well as for equipment such as disposable phones and PDAs.¹⁴⁴

Comments

No comments were filed with respect to this rule.

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.”

¹⁴² Revision of the Commission’s Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems; Non-Initialized Phones, CC Docket No. 94-102, 18 FCC Rcd 23383 (2003)

¹⁴³ Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems; 911 Call Processing Modes, CC Docket No. 94-102, WT Docket No. 99-328, 19 FCC Rcd 13448 (2004).

¹⁴⁴ Revision of the Commission’s Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, *Report and Order and Second Further Notice of Proposed Rulemaking*, CC Docket No. 94-102, IB Docket No. 99-67, 18 FCC Rcd 25340 (2003).

PART 20, SECTION 20.19 – HEARING AID COMPATIBLE MOBILE HANDSETS**Description**

Section 20.19 requires CMRS providers and manufacturers of wireless phones to comply with guidelines established by the Commission for the implementation of the Hearing Aid Compatibility (HAC) Act.¹⁴⁵ The Commission requires compliance by all such providers and manufacturers to ensure that individuals with hearing disabilities receive the benefits of wireless telecommunications – including emergency, business, and social communications – thereby increasing the value of the wireless network for all Americans.

The rules state that a wireless phone is hearing aid compatible if it meets certain performance levels set forth in a technical standard established by the American National Standards Institute (ANSI). For radio frequency (RF) interference, the rules require certain digital wireless phone models to provide reduced RF interference (*i.e.*, meet a “U3” rating under the ANSI standard), and require certain digital wireless phone models to provide telecoil coupling capability (*i.e.* meet a “U3T” rating under the ANSI standard).

To ensure a smooth transition, the Commission adopted a phased approach for manufacturers and carriers to comply with the requirements for the wireless handsets. First, manufacturers and CMRS providers must offer at least two handset models for each air interface offered by September 16, 2005. Second, they must ensure that 50% of their handset offerings for each air interface offered comply with the Commission’s RF interference rules by February 18, 2008. Third, each manufacturer and CMRS provider must offer at least two handset models for each air interface that complies with the Commission’s inductive coupling rules by September 18, 2006. Finally, they must provide the models for testing in carrier-owned stores. To accommodate small business concerns, the Commission adopted a *de minimis* exception that exempts, from the HAC requirements, manufacturers or service providers that offer two or fewer digital wireless handset models in the U.S.

This rule section provides that states that adopt Section 20.19 of the Commission’s Rules may enforce the rule. Accordingly, the Commission requires State personnel to attempt to resolve a complaint within thirty days of the filing of a complaint. In instances where a state does not adopt this rule section or fails to act within six months from the filing of a complaint, the Commission will accept complaints.

Purpose

The purpose of section 20.19 is to facilitate access to telecommunications services for individuals with hearing disabilities thereby ensuring that individuals with hearing disabilities have access to the same public safety, social, professional, and convenience benefits offered by wireless telecommunications to all Americans.

¹⁴⁵ 47 C.F.R. § 20.19.

Analysis

Status of Competition

Because the purpose of section 20.19 is to facilitate access to telecommunications services for individuals with hearing disabilities by providing guidance to manufacturers, service providers, consumers and other members of the telecommunications industry regarding HAC implementation requirements, general competitive developments in the services to which the rule applies do not affect the need for this rule.

Advantages

Section 20.19 establishes hearing aid compatibility rules and implementation requirements to ensure the universal availability of hearing aid compatible handsets within an established time-frame.

Disadvantages

Section 20.19 imposes administrative, technical, and economic costs on manufacturers and service providers who must take the necessary steps to comply with the Commission's rules.

Recent Efforts

41. The Commission remains committed to the extension of the benefits of wireless telecommunications to individuals with hearing disabilities. In order to permit digital wireless telecommunications access to every American, the Commission is actively participating in an on-going dialogue with others in the telecommunications industry to achieve this goal. The Commission has been working with such groups as ATIS, CTIA, and FDA. The Commission's Disability Rights Office and the Consumer Affairs and Outreach Division of the Consumer and Governmental Affairs Bureau, have been actively involved in outreach efforts to ensure that consumers are informed of the steps the Commission takes in this area. A major focus of these outreach efforts has been coordination between representatives of government, including the Commission, and others in the telecommunications industry to develop mechanisms to educate consumers and to obtain consumer feedback as to what their hearing aid compatibility needs are and how those needs can best be satisfied. Working groups have been created that are examining various alternatives in terms of testing, labeling and reporting.

Comments

No comments were filed with respect to this rule.

Recommendation

As stated above, the purpose of section 20.19 is to facilitate access to telecommunications services for individuals with hearing disabilities by providing guidance to manufacturers,

service providers, consumers and other members of the telecommunications industry regarding HAC implementation requirements. 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.”

**PART 20, SECTION 20.20 – CONDITIONS APPLICABLE TO
PROVISION OF CMRS SERVICE BY INCUMBENT
LOCAL EXCHANGE CARRIERS**

Description

Section 20.20¹⁴⁶ 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.¹⁴⁷

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 removed from the Code of Federal Regulations.

¹⁴⁶ 47 C.F.R. § 20.20.

¹⁴⁷ 47 C.F.R. § 20.20(a).

PART 21 – DOMESTIC PUBLIC FIXED RADIO SERVICES**Description**

Part 21 has been deleted by the *EBS/BRS Report and Order*.¹⁴⁸ New rules for Multipoint Distribution Service (MDS) operations (now renamed the Broadband Radio Service) are in Part 27 of the Commission's rules.

¹⁴⁸ Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands; Part 1 of the Commission's Rules - Further Competitive Bidding Procedures; Amendment of Parts 21 and 74 to Enable Multipoint Distribution Service and the Instructional Television Fixed Service Amendment of Parts 21 and 74 to Engage in Fixed Two-Way Transmissions; Amendment of Parts 21 and 74 of the Commission's Rules With Regard to Licensing in the Multipoint Distribution Service and in the Instructional Television Fixed Service for the Gulf of Mexico; WT Docket Nos. 03-66, 03-67, 02-68, MM Docket No. 97-217, *Report and Order and Further Notice of Proposed Rulemaking*, 19 FCC Rcd 14165 (2004) (*EBS/BRS Report and Order*).

PART 22 – PUBLIC MOBILE SERVICES

Description

Part 22¹⁴⁹ 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

¹⁴⁹ 47 C.F.R. Part 22.

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.

Analysis

Status of Competition

As detailed in the *Ninth 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.¹⁵⁰ 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 December 2002, the Commission released a *Notice of Inquiry* that sought comment on the effectiveness of its existing regulatory tools in promoting service to rural areas and asked how the Commission's policies could be modified to further encourage the provision of wireless services in rural areas.¹⁵¹ In a follow-up *Notice of Proposed Rule Making*, released in October 2003, the Commission sought to build upon the record

¹⁵⁰ *Ninth CMRS Competition Report*, FCC 04-216 at ¶¶ 167-197 (2004).

¹⁵¹ Facilitating the Provision of Spectrum-Based Service to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, WT Docket No. 03-281, *Notice of Inquiry*, 17 FCC Rcd 25554 (2002) (*Rural NOI*).

developed in response to the *Rural NOI* and sought comment regarding a variety of proposals to eliminate unnecessary regulatory barriers and encourage the deployment of spectrum-based services in rural areas.¹⁵² The *Rural NPRM* focused on measures that would increase flexibility, reduce regulatory costs of providing service to rural areas, and promote access to both spectrum and capital resources for entities seeking to provide wireless services in rural areas. On September 27, 2004, the Commission issued the *Rural R&O and FNPRM*.¹⁵³ In that Order, the Commission affirmed its conclusion that market-oriented policies, in tandem with capital investment by licensees, have led to the growth of valuable, productivity-enhancing wireless services to the vast majority of Americans, including many who reside, work, or travel in rural areas. The Commission determined, however, that additional steps are still needed to promote greater deployment of wireless services in rural areas, such as eliminating disincentives to serve or invest in rural areas, and helping to reduce the costs of market entry, network deployment and continuing operations. Therefore, the Commission adopted several measures designed to increase carrier flexibility, reduce regulatory costs of providing service to rural areas, and promote access to both spectrum and capital resources for entities seeking to provide or improve wireless services in rural areas. In addition, the Commission eliminated the cellular cross interest rule (22.942) in Rural Service Areas, which substantially limited the ability of parties to have interests in cellular carriers on different channel blocks in the same rural geographic area.

In April 2003, the Commission released a *Notice of Proposed Rulemaking*, initiating a reexamination of its rules governing the Air-Ground Radiotelephone Service.¹⁵⁴ The Commission also, partly to fulfill its biennial review responsibilities, proposed to revise or eliminate certain Part 22 Public Mobile Services rules that have become obsolete as the result of technological change, increased competition in the CMRS, supervening changes to related Commission rules, or a combination of these factors. On December 15, 2004, the Commission adopted an *Order*, which substantially revised the rules governing the Air-Ground Radiotelephone Service.¹⁵⁵ In that same *Order*, the Commission also eliminated or streamlined numerous other Part 22 rules pertaining to Licensing Requirements and Procedures, Operational and Technical Requirements, Developmental Authorizations, as well as the Paging and Radiotelephone Service, the Rural Radiotelephone Service, and the Offshore Radiotelephone Service. In addition, on December 15, 2004, the Commission adopted a Notice of Proposed Rulemaking consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.¹⁵⁶

¹⁵² *Rural NPRM*, 18 FCC Rcd 20802 (2003).

¹⁵³ *Rural R&O and FNPRM*, 19 FCC 19078 (2004).

¹⁵⁴ In the Matter of Amendment of Part 22 of the Commission's Rules to Benefit the Consumers of Air-Ground Telecommunications Services, Biennial Regulatory Review – Amendment of Parts 1, 22, and 90 of the Commission's Rules, *Notice of Proposed Rulemaking*, 18 FCC Rcd 8380 (2003).

¹⁵⁵ See FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

¹⁵⁶ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

Comments

No comments were filed with respect to this rule part.

Recommendation

The Part 22 general licensing and technical rules establish general procedural and technical requirements applicable to our many 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, 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.”

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).¹⁵⁷ 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.¹⁵⁸ 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.¹⁵⁹ 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.

¹⁵⁷ 47 C.F.R. Part 22, subpart E.

¹⁵⁸ See *ULS Report and Order*, 13 FCC Rcd 21027.

¹⁵⁹ 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 *Ninth 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.¹⁶⁰ 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.¹⁶¹

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

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

Comments

No comments were filed with respect to this subpart.

¹⁶⁰ See *Ninth CMRS Competition Report*, FCC 04-216 at ¶¶ 177-178.

¹⁶¹ See *id.* at ¶¶ 178-179.

Recommendation

The various Part 22, subpart E rules 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.”

PART 22, SUBPART F – RURAL RADIOTELEPHONE SERVICE

Description

Part 22, subpart F¹⁶² 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

¹⁶² 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, especially with the implementation of the *Rural Report and Order*.

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 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.”

PART 22, SUBPART G – AIR-GROUND RADIOTELEPHONE SERVICE**Description**

Part 22, subpart G¹⁶³ 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 provides service. At the same time, the Commission has seen increased interest from a number of airlines in the possible liberalization of the Commission’s rules in this area.

¹⁶³ 47 C.F.R. Part 22, subpart G.

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.¹⁶⁴

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

On December 15, 2004, the Commission adopted a *Report and Order*, which substantially revises the rules governing the Air-Ground Radiotelephone Service.¹⁶⁵ Specifically, the Commission decided to auction new licenses for the four megahertz of commercial air-ground spectrum in three possible band plan configurations and proposed auction rules for this spectrum. The ultimate band configuration will be determined based on the results of the auction. However, in order to further competition and ensure maximum use of the frequency band for air-ground services, the Commission imposed an eligibility limitation to prevent a single entity from holding new licenses for all four megahertz of air-ground spectrum. In a related concurrent action, the Commission announced that it would consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.¹⁶⁶

Comments

No comments were filed with respect to this subpart.

¹⁶⁴ 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).

¹⁶⁵ See FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

¹⁶⁶ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

Recommendation

The Part 22, subpart G rules govern the licensing and operation of air-ground radiotelephone stations and systems. As noted above, the Commission adopted a *Report and Order* on December 15, 2004, which substantially revises these rules.¹⁶⁷ Accordingly, we take no further action on these rules at this time.

¹⁶⁷ See FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

PART 22, SUBPART H – CELLULAR RADIOTELEPHONE SERVICE

Description

Part 22, subpart H¹⁶⁸ 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 *Ninth 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.¹⁶⁹ As several of the largest providers of mobile telephony in the country have combined cellular service and PCS into single

¹⁶⁸ 47 C.F.R. Part 22, subpart H.

¹⁶⁹ See *Ninth CMRS Competition Report*, FCC 04-216 at ¶¶ 167-197.

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 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.¹⁷⁰

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

On February 12, 2004, the Commission released the *Part 22 Cellular Biennial Review Order on Reconsideration*,¹⁷¹ resolving various petitions for reconsideration of the *2000 Part 22 Cellular Biennial Review Order*.¹⁷² In the order, the Commission affirmed the decision to establish a five-year sunset period for the removal of the Commission's requirement that cellular carriers provide analog service. The Commission also affirmed the decision to remove the rule section governing electronic serial numbers (ESNs) in cellular telephones, but clarified that fraudulent and unauthorized use of ESNs was unlawful. Further, the Commission reconsidered and adopted a proposal to permit, in certain circumstances, cellular carriers to extend into neighboring unserved areas without prior Commission approval.

¹⁷⁰ *Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22669-70 ¶ 2, 22670 ¶ 5.

¹⁷¹ 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, *Order on Reconsideration*, 19 FCC Rcd 3239 (2004).

¹⁷² 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) (*2000 Part 22 Cellular Biennial Review Order*).

On September 27, 2004, the Commission released the *Rural R&O and FNPRM*, adopting measures to facilitate the deployment of wireless services in rural areas including the elimination of the cellular cross-interest rule in RSAs and an increase in permissible power levels for base stations in certain wireless services that are located in rural areas or that provide coverage to otherwise unserved areas.¹⁷³

42. On December 15, 2004, the Commission announced that it would consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.¹⁷⁴ In a related concurrent action the Commission restructured the rules for the air-ground radio telephone service, and proposed auction rules for that spectrum.¹⁷⁵ The *Notice of Proposed Rulemaking* commencing the Commission's review of its rules prohibiting the use of cellular telephones on airborne aircraft is expected to be released in early 2005.¹⁷⁶

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 22, subpart H rules 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.”

¹⁷³ *Rural R&O and FNPRM*, 19 FCC Rcd 19078 (2004).

¹⁷⁴ FCC News Release, *FCC to Examine Ban on Using Cellular Telephones on Airborne Aircraft* (rel. Dec. 15, 2004).

¹⁷⁵ *Id.*

¹⁷⁶ FCC News Release, *Instructions on Submitting Public Comments in the FCC's Review of the Use of Cellular Telephones on Airborne Aircraft (Docket No. WT 04-435)* (rel. Dec. 23, 2004).

PART 22, SUBPART I – OFFSHORE RADIOTELEPHONE SERVICE**Description**

Part 22, subpart I¹⁷⁷ 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.¹⁷⁸

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 subpart.

¹⁷⁷ 47 C.F.R. Part 22, subpart I.

¹⁷⁸ 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.”

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.¹⁷⁹ Part 22, subpart J¹⁸⁰ 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.¹⁸¹ These rules were adopted in 1999.¹⁸² The Commission has adopted parallel requirements and standards for broadband PCS licensees in Part 24, subpart J¹⁸³ and for wireline telecommunications carriers in Part 64, subpart W.¹⁸⁴

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 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.¹⁸⁵

¹⁷⁹ 47 U.S.C. § 1002.

¹⁸⁰ 47 C.F.R. Part 22, subpart J.

¹⁸¹ *Id.*

¹⁸² See Communications Assistance for Law Enforcement Act, *Third Report and Order*, 14 FCC Rcd 16794 (1999).

¹⁸³ 47 C.F.R. Part 24, subpart J.

¹⁸⁴ 64 C.F.R. Part 64, subpart W.

¹⁸⁵ 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).¹⁸⁶ 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).¹⁸⁷ 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 1993,¹⁸⁸ and were modified on reconsideration in 1994.¹⁸⁹ In 2000, the Commission issued an order further revising certain aspects of

¹⁸⁶ 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.

¹⁸⁷ 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.

¹⁸⁸ 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).

¹⁸⁹ 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 –

(continued....)

the Part 24 narrowband PCS rules.¹⁹⁰ The CALEA rules were adopted in a separate proceeding.¹⁹¹

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 Act¹⁹² 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

Broadband PCS providers offer mobile telephony service in competition with cellular and some SMR services. PCS, cellular, and digital SMR networks use the same basic design.¹⁹³ The Commission estimates that as of December 2003, there were 160.6 million mobile telephone subscribers, up from 141.8 million at the end of 2002, which translates into a nationwide penetration rate of 54 percent.¹⁹⁴ The additional 18.8 million subscribers was nearly a 40 percent increase from the 13.3 million added in 2002. The *Ninth CMRS Competition Report* cites an analyst that postulates that the surge in subscriber growth is attributable to three factors: 1) wireless is economically sensitive

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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).

¹⁹⁰ See Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order*, 15 FCC Rcd 10456 (2000).

¹⁹¹ See Communications Assistance for Law Enforcement Act, CC Docket No. 97-213, *Third Report and Order*, 14 FCC Rcd 16794 (1999), *vacated in part and remanded*, *United States Telecom Ass'n v. FCC*, 227 F.3d 450 (D.C. Cir. 2000).

¹⁹² 47 U.S.C. § 309(j)(3).

¹⁹³ 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 *Eighth Report*, 18 FCC Rcd 14783 (2003) ("*Eighth Report*"). All use a series of low-power transmitters to serve relatively small areas ("cells"), and all employ frequency reuse to maximize spectrum efficiency. In the past, cellular and SMR networks used an analog technology, while PCS networks were designed from the start to use a digital format. Digital technology provides better sound quality and increased spectral efficiency than analog technology. From a customer's perspective, digital service in the cellular band or SMR bands is virtually identical to digital service in the PCS band. Digital technology is now dominant in the mobile telephone sector, with approximately 88 percent of all wireless subscribers using digital service.

¹⁹⁴ *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 174 (2004).

and with the improving economy the industry is experiencing improved growth; 2) around the current penetration rate, a network effect takes over that promotes increased subscriber growth; and 3) the increased availability of data applications increases the desirability and utility of a cell phone.¹⁹⁵ Digital subscribers made up approximately 91 percent of all wireless subscribers at the end of 2003, up from 88 percent at the end of 2002.¹⁹⁶ Approximately 14 million analog-only mobile telephone subscribers remain.¹⁹⁷

Non-voice services continue to play an increasingly important role in the CMRS industry. While subscriber numbers for paging continue to drop, the number of mobile data users appears to be rising both absolutely and as a percentage of the mobile telephone subscriber base.¹⁹⁸ The *Eighth Report* cited an estimate by one analyst that there were 11.9 million mobile telephone users who subscribed to some type of mobile data service at the end of 2002, less than 10 percent of the total number of U.S. mobile telephone subscribers at that time.¹⁹⁹ In contrast the *Ninth CMRS Competition Report* cites an analyst's estimate that almost 25 percent of U.S. mobile subscribers can be considered casual data users, most of whom use SMS and some of whom use picture mail, download ring tones or do simple web surfing. The *Ninth CMRS Competition Report* cites that there are only 1 million wireless data devices in service today, with a data device defined as a PDA such as a Blackberry or a laptop card, down from 2.3 million data-only mobile users at the end of 2002.²⁰⁰

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.

¹⁹⁵ See *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 175.

¹⁹⁶ During 2003, the number of customers subscribing to digital services climbed 17 percent, from approximately 125 million to 146 million. See *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 176.

¹⁹⁷ See *Ninth CMRS Competition Report*, ¶ 176.

¹⁹⁸ See *Ninth CMRS Competition Report*, ¶ 178. Also, the Commission estimates there were 11.2 million paging units in service as of the end of 2003, down 21 percent from 14.1 million units at the end of 2002. *Ninth CMRS Competition Report*, ¶ 177, citing, Craig Stroup and John Vu, Numbering Resource Utilization in the United States as of December 31, 2003, Federal Communications Commission, May 2004, at 12 (Table 1: Number Utilization by Carrier Type as of December 31, 2003).

¹⁹⁹ *Ninth CMRS Competition Report*, ¶ 178, citing, *Eighth Report*, at 14839.

²⁰⁰ See *Ninth CMRS Competition Report*, ¶ 179.

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

On January 7, 2004, the Commission released a Notice of Proposed Rulemaking (*Streamlining Notice*) initiating a proceeding to streamline and harmonize licensing provisions in the wireless radio services (WRS) that were identified in part during the Commission's 2000 and 2002 biennial regulatory reviews.²⁰¹ The Commission concluded that streamlining and harmonizing these rules would clarify spectrum rights and obligations for affected licensees and support recent efforts to maximize the public benefits derived from the use of the radio spectrum. Among other matters, the Commission sought comment on whether all power limit references in Part 22 and 24 should be specified in terms of equivalent isotropically radiated power (EIRP) or whether all references to power limits should continue to be expressed in terms of EIRP and effective radiate power (ERP). The Commission also sought comment on whether to eliminate the Part 24 transmitter output power limits and increase Part 24 EIRP limits in certain circumstances.

A Narrowband PCS auction (Auction No. 50) concluded on September 29, 2003, after 4 applicants placed winning bids on 48 licenses.²⁰² A second Regional Narrowband PCS auction, employing combinatorial bidding, (Auction No. 51) concluded on September 25, 2003, after an applicant placed a single winning bid on 5 licenses.²⁰³

Comments

Section 24.232(a) – Power limitations. Ericsson requests that the Commission seek comment on 1) eliminating all references to “peak” or, alternatively, also including references to “average” each time “peak” is mentioned in Section 24.232(a), (b), and (c) so that the rule will permit output power measurements on either a “peak” or “average” basis, without restriction; 2) revising the Section 24.232(a) transmitter limit to eliminate any output restrictions on transmitters; 3) revising its Section 24.232(a) base station EIRP limit to 6560 watts/MHz/carrier for channel bandwidths 1 MHz and greater, and 6560

²⁰¹ See In the Matter of Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, WT Docket No. 03-264, *Notice of Proposed Rulemaking*, 19 FCC Rcd 708 (2003) (*Streamlining NPRM*).

²⁰² “Narrowband PCS Spectrum Auction Closes; Winning Bidders Announced,” *Public Notice*, DA 03-3012 (rel. Oct. 2, 2003).

²⁰³ “Regional Narrowband PCS Spectrum Auction Closes; Winning Bidder Announced,” *Public Notice*, DA 04-3006 (rel. Oct. 1, 2003).

watts per carrier for channel bandwidths less than 1 MHz; and 4) eliminating any transmitter limits and mirroring these base station EIRP and “peak” rule changes in Section 27.50(d)(1) of its Advanced Wireless services (“AWS”) rules to ensure regulatory parity.²⁰⁴

Recommendation

In its *Notice*, the Commission requested comment on whether to eliminate the transmitter output power limit and whether to revise the base station EIRP limit of 24.232(a). These issues should be resolved in a subsequent Report and Order. Further, the staff recommends that the Commission initiate a proceeding to review whether the references to measuring “peak” power should be eliminated from 24.232(a) or whether licensees should be allowed to alternatively measure “peak” or “average” power without restriction. The staff also recommends seeking comments on whether to mirror these changes in Part 27.

²⁰⁴ Ericsson Comments at 2.

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES**Description**

Part 27²⁰⁵ 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;²⁰⁶ (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 eleven 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
- H – Competitive Bidding Procedures for the 698-746 MHz Band
- I – 1.4 GHz Band
- J – 1670-1675 MHz Band
- K – 2385-2390 MHz Band

On June 10, 2004, the Commission transformed the rules governing the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS) in the 2495-2690 MHz band by adopting rules that provide greater flexibility and a more functional band plan for MDS and ITFS licensees.²⁰⁷ The Commission’s order changed the names of the MDS and ITFS services to the Broadband Radio Service (BRS) and Educational Broadband Service (EBS), respectively, and consolidated the EBS

²⁰⁵ 47 C.F.R. Part 27.

²⁰⁶ 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.*

²⁰⁷ *See EBS/BRS Report and Order*, WT Docket No. 03-66, 19 FCC Rcd 14165 (2004).

regulations with the regulations for the new BRS in Part 27. On December 10, 2004, the *EBS/BRS Report and Order* was published in the Federal Register.²⁰⁸

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.

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, the guard band portions of the Upper 700 MHz Band and the C and D Blocks of the lower 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),²⁰⁹ 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 As reflected in the *Ninth CMRS*

²⁰⁸ 69 Fed. Reg. 72020 (Dec. 10, 2004).

²⁰⁹ 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.

Competition Report, much of the Upper and Lower 700 MHz spectrum is currently encumbered by television broadcasters, and may remain so until the end of the period when broadcasters convert from analog to digital transmission systems.²¹⁰

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

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

Recent Efforts

On August 12, 2004, the Wireless Telecommunications Bureau issued a Memorandum Opinion and Order²¹¹ granting Access Spectrum LLC, a 700 MHz “A Block” Guard Band licensee, a waiver of section 27.60 of the Commission’s rules²¹² to permit 700 MHz operations within the Grade B contour of incumbent broadcaster KZJL in Houston, Texas, subject to certain conditions mostly involving resolution of interference.

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 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

²¹⁰ *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 95.

²¹¹ In the Matter of Access Spectrum, LLC, Request for waiver of Section 27.60, *Memorandum Opinion and Order*, DA 04-2527 (WTB rel. August 12, 2004).

²¹² 47 C.F.R. § 27.60.

safety.²¹³ 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.

The first Lower 700 MHz Band auction (Auction No. 44) concluded on September 18, 2002, after 102 applicants placed winning bids on 484 licenses.²¹⁴ The second Lower 700 MHz Band auction (Auction No. 49) concluded on June 13, 2003, after 35 applicants placed winning bids on 251 licenses.²¹⁵

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.²¹⁶ The 1650-1675 MHz Band auction (Auction No. 46) concluded on April 30, 2003, after an applicant placed the winning bid on the one nationwide license offered.²¹⁷

Comments

Section 24.232(a) – Power limitations. In order to achieve regulatory parity with services governed by Section 24.232(a), Ericsson requests that the Commission seek comment on 1) eliminating all references to “peak” or, alternatively, also including references to “average” each time “peak” is mentioned in Section 27.50(d)(1) of its Advanced Wireless services (“AWS”) rules so that the rule will permit output power measurements on either a “peak” or “average” basis, without restriction; 2) revising the AWS rules to eliminate any output power restrictions on transmitters; and 3) revising the AWS rules to increase the base station e.i.r.p. limit to 6560 watts/MHz/carrier for channel bandwidths 1 MHz and greater, and 6560 watts per carrier for channel bandwidths less than 1 MHz.

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.

²¹³ 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).

²¹⁴ “Lower 700 MHz Band Auction Closes; Winning Bidders Announced,” *Public Notice*, DA 02-2323 (rel. Sept. 20, 2002).

²¹⁵ “Lower 700 MHz Band Auction Closes; Winning Bidders Announced,” *Public Notice*, DA 03-1978 (rel. June 18, 2003).

²¹⁶ 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).

²¹⁷ “1650-1675 MHz Band Auction Closes; Winning Bidder Announced,” *Public Notice*, DA 03-1472 (rel. May 2, 2003).

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.”

While the staff generally determines that the Part 27 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, the staff recommends that the Commission seek comment on whether any changes in Part 24 technical operations rules should be mirrored in Part 27.

PART 27, SUBPART I – 1.4 GHZ BAND**Description**

Part 27, subpart I contains licensing, technical, and operational rules for the 1.4 GHz Band.²¹⁸ 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.

Purpose

The purpose of subpart I is to establish rules governing service in the paired 1392 – 1395 MHz and 1432 – 1435 MHz bands as well as the unpaired 1390 – 1392 MHz band (1.4 GHz band). The 1432-1435 MHz band is paired with the 1392-1395 MHz band and assigned by six (6) Economic Area Groupings. To facilitate competition, open eligibility for initial licenses assigned by geographic area licensing is employed. Licensees are permitted to partition and/or disaggregate their licenses.

²¹⁸ 47 C.F.R Part 27, subpart I.

Analysis

Status of Competition

Geographic area licensing for the paired 1392-1395 MHz and 1432-1435 MHz bands will provide licenses with substantial flexibility to respond to market demand and will better enable licensees to coordinate usage.

Advantages

The Subpart I rules provide a flexible regulatory structure and licensing framework, including proscribed coordination procedures governing certain fixed and mobile operations.

Disadvantages

The Subpart I rules impose limited administrative and technical burdens that are inherent to the licensing process and necessary for compliance with technical and operational rules and for limiting interference to co-channel incumbent Government facilities and licensees in adjacent bands.

Recent Efforts

In 2002, the Commission adopted a *Report and Order* implementing new service rules governing, *inter alia*, the 1427-1429.5 MHz, 1429.5-1432 MHz, and 1432-1435 MHz bands. These bands have been reallocated for non-government use. The latter action provides opportunities for new services to utilize this spectrum to address spectrum scarcity concerns as well as to promote the delivery of technologically innovative services to the public.

Comments

No comments were filed with respect to this subpart.

Recommendation

The various Part 27, subpart I rules concern licensing, technical, and operational rules relating to channel usage and operational or interference-related issues among Part 27 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 27 rules are “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

**PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST
AND OTHER PROGRAM DISTRIBUTIONAL SERVICES**

SUBPART I-INSTRUCTIONAL TELEVISION FIXED SERVICE

Description

Part 74 of the Commission's Rules contains the regulatory provisions applicable to the Experimental, Auxiliary and Special Broadcast, and Other Program Distributional Services. Subpart I of Part 74 specifically contained the regulations applicable to the Instructional Television Fixed Service (ITFS). The Commission recently released the *EBS/BRS Report and Order*, which revamped ITFS and changed the name of ITFS to the Educational Broadband Service (EBS).²¹⁹ In the same proceeding, the Commission consolidated the EBS regulations with the regulations for the new Broadband Radio Service and placed these regulations into Part 27.²²⁰ On December 10, 2004, the *EBS/BRS Report and Order* was published in the Federal Register.²²¹ Subpart I of Part 74 has been deleted in its entirety, and any remaining regulations applicable to the ITFS/EBS service have been deleted from Part 74.

²¹⁹ *EBS/BRS Report and Order*, WT Docket No. 03-66, 19 FCC Red 14165 (2004).

²²⁰ *Id.*

²²¹ 69 Fed. Reg. 72020 (Dec. 10, 2004).

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.²²² Most 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. (Frequencies for Automated Maritime Telecommunications Systems (AMTS) are not allocated internationally.) 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 in particular²²³). Public coast stations are CMRS providers that allow ships to send and receive messages and to interconnect with the public switched telephone network. They are unique in the Maritime Services in that they are used for commercial applications. There are three types of public coast stations: VPC (157-162 MHz), AMTS (217-220 MHz), and high seas (which operates on low frequency (.100-.160 MHz band), middle frequency (.405-.525 MHz and 2 MHz bands), and high frequency (4, 6, 8, 12, 16, 18/19, 22, and 25/26 MHz bands) spectrum). Unlike other Part 80 stations, VHF Band Public Coast (VPC) stations and AMTS stations are licensed on a geographic, exclusive-use basis, and are subject to licensing by the Commission's competitive bidding procedures.

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. VPC and AMTS stations, which generally serve ports, coastal areas, and inland waterways, have lost significant market share to other CMRS services (*e.g.*, cellular and PCS) that have coverage in those areas

²²² 47 C.F.R. Part 80.

²²³ Subparts J and Y deal exclusively with public coast station licensing and operations. Other rules governing public coast stations are in subparts B, C, G, and P. In addition, rules pertaining to all coast stations, including public coast stations, can be found in subparts D, E, and H.

and offer service at much lower cost. In addition, high seas public coast stations have lost business satellite communications providers, which can offer higher quality, more user-friendly service. Due to station closures and industry consolidation, a single entity (MariTel, Inc.) is the predominant 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, which also have experienced a reduction in the number of licensed stations.

Advantages

The Part 80 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 and AMTS licensees to use capacity that is not needed for maritime service to serve units on land.

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, VPC and high seas 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 these 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.²²⁴ In a separate docket, the Commission consolidated, revised, and streamlined 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.²²⁵ In 2004,

²²⁴ 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).

²²⁵ Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Second Report and Order, Sixth Report and Order and Second Further Notice of Proposed Rulemaking*, WT Docket No. 00-48, 19 FCC Rcd 3120 (2004).

the Commission proposed to afford VPC and AMTS licensees additional flexibility in providing service to units on land.²²⁶

The initial AMTS auction (Auction No. 57) concluded on September 15, 2004, after four applicants placed winning bids (net \$1,057,365) on ten AMTS licenses.²²⁷

Comments

No comments were filed with respect to this rule part.

Recommendation

Staff recommends taking no action regarding this rule with respect to this Biennial Review.

²²⁶ MariTel, Inc. and Mobex Network Services, LLC, *Notice of Proposed Rule Making*, WT Docket No. 04-257, 19 FCC Rcd 15225 (2004).

²²⁷ See Automated Maritime Telecommunications System Spectrum Auction Closes; Winning Bidders Announced, *Public Notice*, DA 04-3012 (rel. Sept. 17, 2004).

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).²²⁸ 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),²²⁹ 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.²³⁰ 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 23 subparts. Some of these subparts apply generally to all Part 90 licensees, while others establish rules for specific services.²³¹ 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,²³² 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.²³³

²²⁸ 47 C.F.R. Part 90.

²²⁹ 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).

²³⁰ 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*).

²³¹ *See, e.g.*, Part 90, subpart L (Authorization and Use of Frequencies in the 470-512 MHz Band).

²³² *See, e.g.*, Part 90, subpart U (Competitive Bidding Procedures for the 900 MHz Specialized Mobile Radio Service).

²³³ 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 *Ninth 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.²³⁴

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.

²³⁴ *Ninth CMRS Competition Report*, FCC 04-216 at ¶¶ 89-90.

Recent Efforts

The Commission has made numerous changes to Part 90 rules in the *Report and Order* in the Part 90 Biennial Regulatory Review proceeding.²³⁵ In addition, 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.²³⁶

In February 2003, the Commission adopted rules to encourage spectral efficiency in the 150-174 MHz and 470-512 MHz bands.²³⁷ Additionally, the Commission sought comment on whether the equipment certification provision in the current rules is sufficient to promote PLMRS migration to one voice path per 6.25 kHz bandwidth, or equivalent technology, or whether migration to 6.25 kHz bandwidth or equivalent technology should be mandatory.²³⁸

In December 2003, the Commission granted a request to stay the January 13, 2004 deadline for filing applications for new wideband systems or expansions of existing wideband systems in the 150-174 MHz and 421-512 MHz bands, pursuant to Section 90.209(b)(6) of the Commission's Rules, pending resolution of the petitions for reconsideration of the *Second Report and Order*.²³⁹ In response to petitions for reconsideration of the *Second Report and Order* and comments provided in response to the *Second FNPRM*, the Commission is considering whether to further refine the Commission's approach to encourage the migration of private land mobile radio systems in the 150-174 MHz and 421-512 MHz bands to narrowband technology.²⁴⁰

²³⁵ 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).

²³⁶ 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).

²³⁷ Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended / Promotion of Spectrum efficient technologies on Certain Part 90 Frequencies, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 18 FCC Rcd 3034 (2003) (*Second Report and Order and Second FNPRM*).

²³⁸ *Id.*

²³⁹ Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended / Promotion of Spectrum efficient technologies on Certain Part 90 Frequencies, *Order*, 18 FCC Rcd 25491 (2003).

²⁴⁰ Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended/Promotion of spectrum Efficient Technologies on Certain Part 90 Frequencies, *Third Memorandum Opinion and Order and Third Further Notice of Proposed Rule Making*, WT Docket No. 99-87, FCC 04-292 (rel. Dec. 23, 2004).

On January 7, 2004, the Commission released a *Notice of Proposed Rulemaking*,²⁴¹ which commenced a proceeding to streamline and harmonize licensing provisions in the wireless radio services (WRS)²⁴² that were identified in comments filed during the Commission's 2000 and 2002 biennial regulatory reviews pursuant to Section 11 of the Communications Act of 1934, as amended ("Communications Act" or "Act").²⁴³ In the *Notice*, the Commission proposed various amendments to Parts 1, 22, 24, 27, and 90 of the rules to modify or eliminate provisions that treat licensees differently and/or have become outdated as a result of technological change, supervening changes to related Commission rules, and/or increased competition within WRS.

In August 2004, the Commission issued a *Report and Order* establishing technical and procedural rules to remedy interference to 800 MHz public safety systems, including reconfiguring the 800 MHz band to eliminate or reduce interference.²⁴⁴

Comments

No comments were filed with respect to this rule part.

Recommendation

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

²⁴¹ In the Matter of Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Notice of Proposed Rulemaking*, 19 FCC Rcd 708 (2004) (*Streamlining and Harmonization NPRM*).

²⁴² 47 C.F.R. § 1.907. WRS is defined in the Commission's rules as "[a]ll radio services authorized in parts 13, 20, 22, 24, 26, 27, 74, 80, 87, 90, 95, 97 and 101 . . . whether commercial or private in nature." *Id.*

²⁴³ 47 U.S.C. § 161.

²⁴⁴ Improving Public Safety in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order*, 19 FCC Rcd 14969 (2004).

PART 90, SUBPART C – INDUSTRIAL/BUSINESS RADIO POOL**Description**

Part 90, subpart C²⁴⁵ 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.²⁴⁶ In 2003, the Commission adopted rules in this proceeding to accommodate a broad range of potential low power users while maximizing efficient use of the band.²⁴⁷

²⁴⁵ 47 C.F.R. Part 90, subpart R.

²⁴⁶ 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).

²⁴⁷ 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, *Report and Order*, 18 FCC (continued....)

As indicated in the overview of Part 90 above, the Commission initiated several actions to promote spectrum efficiency – specifically, the migration of PLMRS to narrowband technology - in the 150-174 MHz and 421-512 MHz bands, which comprise a significant number of industrial/business radio pool licensees. *See* Part 90 – Private Land Mobile Radio Services “Recent Efforts” discussion, *supra*.

Comments

No comments were filed with respect to this subpart.

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.”

The staff finds that the existing rules in Part 90, subpart C remain necessary in the public interest, and therefore recommends that neither modification nor repeal of these rules is warranted. However, it will continue to be receptive to further careful examination of these rules for potential repeal or modification, in the event they become no longer necessary in the public interest.

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Rcd 3948 (2003). Subsequently, for various reasons, the Commission denied a petition for reconsideration filed by American Association of Paging Carriers, which requested that the Commission prohibit the licensing of stations on frequencies (or channels) 12.5 kHz removed from eight specific Part 90 450-470 MHz band paging frequencies. *See* 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, *Memorandum Opinion and Order*, 19 FCC Rcd 18501 (2004).

PART 90, SUBPART G – APPLICATIONS AND AUTHORIZATIONS

Description

Part 90, subpart G²⁴⁸ 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

No comments were filed with respect to this subpart.

²⁴⁸ 47 C.F.R. Part 90, subpart G.

Recommendation

The staff finds that the existing rules in this subpart are necessary in the public interest and, therefore, recommends that neither modification nor repeal of these rules is warranted. However, it will continue to be receptive to further careful examination of these rules for potential repeal or modification, in the event they become no longer necessary in the public interest.

PART 90, SUBPART H – POLICIES GOVERNING ASSIGNMENT OF FREQUENCIES**Description**

Part 90, subpart H provides detailed information concerning the policies 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.²⁴⁹

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.

²⁴⁹ 47 C.F.R. Part 90, subpart H.

Recent Efforts

In a recent *Notice of Proposed Rulemaking*,²⁵⁰ 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 on frequencies in the former Police, Emergency Medical, Fire, Forestry Conservation and Highway Maintenance Radio Services. In a *Public Notice*, in 2003, the Commission sought comment on a petition for rulemaking proposing to modify the existing frequency coordination procedures for the Business and Industrial/Land Transportation Pool below 470 MHz by expanding competitive frequency coordination on frequencies in the former Petroleum, Power, Railroad, and Automobile Emergency Radio Services.²⁵¹ Further, in the *Streamlining and Harmonization NPRM*,²⁵² the Commission sought comment on whether to modify its rules concerning frequency coordination requirements for general category frequencies and its rules to classify a deletion of a frequency and/or transmitter site from a multi-site authorization under Part 90 as a minor modification.

Comments

No comments were filed with respect to this subpart.

Recommendation

The staff generally determines that the Part 90, subpart H rules remain necessary in the public interest, but will continue to consider modifications of these rules may be warranted in the public interest.

²⁵⁰ 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).

²⁵¹ See *Public Notice*, Consumer Information Bureau, Reference Information Center, Petitions for Rulemaking Filed, RM-10687 (filed Jan. 2003).

²⁵² *Streamlining and Harmonization NPRM*, 19 FCC Rcd 708 at ¶¶ 5, 19-20.

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.²⁵³ 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

In the *Streamlining and Harmonization NPRM*,²⁵⁴ the Commission sought comment, in response to comments filed in the 2002 Biennial Review, on whether to conform the section 90.210 Emission Mask “G” to a modulation-independent mask that places no limitation on the spectral power density profile within the maximum authorized bandwidth.

Comments

No comments were filed with respect to this subpart.

²⁵³ 47 C.F.R. Part 90, subpart G.

²⁵⁴ *Streamlining and Harmonization NPRM*, 19 FCC Rcd 708 at ¶¶ 21-23.

Recommendation

The staff finds that the existing rules in this subpart are necessary in the public interest and, therefore, recommends that neither modification nor repeal of these rules is warranted. However, it will continue to be receptive to further careful examination of these rules for potential repeal or modification, in the event they become no longer necessary in the public interest.

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.²⁵⁵ This band is shared with television channels 14-20 and certain Part 22 radio services.²⁵⁶ 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.²⁵⁷ 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.²⁵⁸

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.²⁵⁹ 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.²⁶⁰

²⁵⁵ 47 C.F.R. Part 90, subpart L.

²⁵⁶ See 47 C.F.R. §§ 22.621 and 22.651.

²⁵⁷ 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.

²⁵⁸ 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.

²⁵⁹ 47 C.F.R. § 90.311.

²⁶⁰ *Id.*

The rules in this subpart also specify the minimum allowable distance between co-channel stations.²⁶¹ 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.²⁶² After loading a channel to full capacity, a licensee may apply for another channel.²⁶³ 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.

Recent Efforts

As indicated in the overview of Part 90 above, the Commission initiated several actions to promote spectrum efficiency – specifically, the migration of PLMRS to narrowband

²⁶¹ 47 C.F.R. § 90.307.

²⁶² 47 C.F.R. § 90.313(a).

²⁶³ 47 C.F.R. § 90.313(c).

technology - in the 150-174 MHz and 421-512 MHz bands, which comprise limited portions of the frequencies addressed under Subpart L. *See* Part 90 – Private Land Mobile Radio Services “Recent Efforts” discussion, *supra*.

Comments

No comments were filed with respect to this subpart.

Recommendation

The staff finds that the existing rules in this subpart are necessary in the public interest and, therefore, recommends that neither modification nor repeal of these rules is warranted. However, it will continue to be receptive to further careful examination of these rules for potential repeal or modification, in the event they become no longer necessary in the public interest.

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).²⁶⁴

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.²⁶⁵

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.²⁶⁶ 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 Century²⁶⁷ 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.²⁶⁸ The Commission amended subpart M by adding technical rules establishing power, emission, and frequency stability limits for DSRCS operations but deferred consideration of DSRCS licensing and service rules and spectrum channelization

²⁶⁴ 47 C.F.R. Part 90, subpart M.

²⁶⁵ 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*).

²⁶⁶ 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.

²⁶⁷ Transportation Equity Act for the 21st Century, Pub. L. 105-178, 112 Stat. 107 (1998).

²⁶⁸ 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).

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.²⁶⁹

On December 17, 2003, the Commission adopted licensing and service rules for the 5.9 GHz Band for DSRC in the ITS radio service (WT Docket No. 01-90).²⁷⁰ The *Report and Order* was released on February 10, 2004.

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

²⁶⁹ 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*).

²⁷⁰ 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, *Report and Order*, 19 FCC Rcd 2458 (2004) (*DSRCS Report and Order*).

location service as an option in many of its new automobile models and now has more than 2 million U.S. customers.²⁷¹

The Commission began accepting applications to provide DSRC service on October 1, 2004. Upon authorization by the Commission, service may commence immediately.

Advantages

44. 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.

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.

Recent Efforts

On December 17, 2003, the Commission adopted licensing and service rules for the 5.9 GHz Band for DSRC in the ITS radio service.²⁷²

On March 5, 2002, the Wireless Telecommunications Bureau released a Public Notice seeking comment on a Petition for Rulemaking filed by Progeny LMS, LLC (Progeny) regarding certain provisions of Part 90, subpart M's rules on multilateration LMS.²⁷³

Comments

No comments were filed with respect to this subpart.

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

²⁷¹ 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.

²⁷² See *DSRC Report and Order*, *supra* note 270.

²⁷³ 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).

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.”

PART 90, SUBPART N – OPERATING REQUIREMENTS**Description**

Part 90, subpart N sets forth general operating requirements for stations operating Part 90 regulated radio stations.²⁷⁴

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.²⁷⁵

Comments

No comments were filed with respect to this subpart.

Recommendation

The staff finds that the existing rules in this subpart are necessary in the public interest and, therefore, recommends that neither modification nor repeal of these rules is

²⁷⁴ 47 C.F.R. Part 90, subpart R.

²⁷⁵ *PLMRS MO&O and Second R&O*, 17 FCC Rcd 9830.

warranted. However, it will continue to be receptive to further careful examination of these rules for potential repeal or modification, in the event they become no longer necessary in the public interest.

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.²⁷⁶ 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.²⁷⁷ 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.²⁷⁸ The Commission auctioned geographic licenses for the exclusive channels in the 929 MHz band.²⁷⁹ 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.

²⁷⁶ 47 C.F.R. Part 90, subpart P.

²⁷⁷ 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*).

²⁷⁸ 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*).

²⁷⁹ See "929 and 931 MHz Paging Auction Closes," *Public Notice*, 15 FCC Rcd 4858 (2000).

Analysis

Status of Competition

As detailed in the *Ninth CMRS Competition Report*, Part 90 CMRS paging providers operate in an environment that is marked by significant and increasing competition in mobile telephony, paging/messaging, and mobile data.²⁸⁰ However, while paging carriers have faced competition from mobile telephone carriers, traditional paging devices are generally less expensive, and paging networks have a more powerful signal strength which allows them to provide better underground and in-building coverage.²⁸¹ Paging carriers have therefore targeted their services to a smaller segment consisting mainly of commercial customers such as medical and emergency personnel and industrial companies.²⁸²

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

None.

Comments

No comments were filed with respect to this subpart.

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 11 analysis. Accordingly, we do not find that these Part 90 rules are “no longer necessary

²⁸⁰ See *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 34.

²⁸¹ *Id.*

²⁸² *Id.*

in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

**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.²⁸³ 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.²⁸⁴

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 V²⁸⁵ 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.

²⁸³ 47 C.F.R. Part 90, subpart S.

²⁸⁴ 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).

²⁸⁵ 47 C.F.R. Part 90, subparts U and V.

Analysis

Status of Competition

As detailed in the *Ninth CMRS Competition Report*, Part 90 SMR providers operate in an environment that is marked by significant and increasing competition in mobile telephony and mobile data.²⁸⁶ 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.*, build-out requirements) for different portions of their systems.

Recent Efforts

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.²⁸⁷ In August 2004, the Commission issued a *Report and Order* establishing technical and procedural rules to remedy interference to 800 MHz public safety systems, including reconfiguring the 800 MHz band to eliminate or reduce interference.²⁸⁸

²⁸⁶ See *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 2-5.

²⁸⁷ 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).

²⁸⁸ Improving Public Safety in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order*, 19 FCC Rcd 14969 (2004).

In January, 2004, the Commission issued the *Streamlining and Harmonization NPRM*,²⁸⁹ and sought comment on whether to: modify its rules to eliminate the Section 90.607(a) requirement to file certain outdated supplemental information; eliminate the loading requirement and references to the “waiting list” in Section 90.631(d) of the rules; eliminate Section 90.631(i), which may no longer be necessary because the 900 MHz specialized mobile radio (SMR) renewal period it references has long passed; modify Section 90.635 of the rules to remove the distinction between urban and suburban sites when setting the maximum power and antenna heights limits for conventional 800 MHz and 900 MHz systems; and eliminate the power limitations on systems with operational radii of less than 32 kilometers.

The 900 MHz SMR auction (Auction No. 55) concluded on February 25, 2004, after 5 applicants placed winning bids on 55 900 MHz licenses.²⁹⁰

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 90, subpart S rules involved 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.”

²⁸⁹ *Streamlining and Harmonization NPRM*, 19 FCC Rcd at ¶¶ 24-32.

²⁹⁰ “900 MHz Specialized Mobile Radio (SMR) Service Auction Closes; Winning Bidders Announced,” *Public Notice*, DA 04-578 (rel. Mar. 2, 2004).

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.²⁹¹ 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.²⁹² 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.²⁹³ 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.²⁹⁴ 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.²⁹⁵ The Commission concluded that mandating technical standards was unnecessary because

²⁹¹ 47 C.F.R. Part 90, subpart T.

²⁹² 47 C.F.R. Part 90, subpart W.

²⁹³ 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*).

²⁹⁴ 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).

²⁹⁵ 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.²⁹⁶

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. Although the 220 MHz band has narrow channelization and equipment availability for voice operations continues to be a problem for existing licensees, 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.*, build-out requirements) for different portions of their systems.

Recent Efforts

On July 13, 2004, the Wireless Telecommunications Bureau granted a request an extension of three years for all geographic area Phase II 220 MHz licensees to construct their systems, citing the unique characteristics of the band, the lack of available

²⁹⁶ *Id.*

equipment, and the prospect of more advanced digital systems in the future if the relief was granted.²⁹⁷

In January, 2004, the Commission issued the *Streamlining and Harmonization NPRM*, and proposed to eliminate section 90.737, which requires the filing of supplemental progress reports for 220 MHz Phase I licensees²⁹⁸ and update the license term for Phase I non-nationwide licensees from five years to tens years.²⁹⁹

Comments

No comments were filed with respect to this subpart.

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.”

²⁹⁷ See In the Matter of Request of Warren C. Havens for Waiver or Extension of the Five-year Construction Requirement for 220 MHz Service Phase II Economic Area and Regional Licensees, and Request of BizCom, USA, Inc., for Waiver and Extension of the Construction Requirements for 220 MHz Service Phase II Regional and Nationwide Licensees, and Request of Cornerstone SMR, Inc. for Waiver of Section 90.157 of the Commission’s Rules, *Memorandum Opinion and Order*, DA 04-2100 (Mobility Div., WTB) (rel. July 13, 2004). The relief was limited to those Phase II 220 MHz licensees that timely sought an extension prior to the applicable construction deadline and those with construction deadlines falling after the release date of the Order.

²⁹⁸ See *Streamlining and Harmonization NPRM*, 19 FCC Rcd 708 at ¶ 33.

²⁹⁹ *Id.* at ¶ 55.

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 95³⁰⁰ 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.³⁰¹ 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 1.³⁰²

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 proposed wireless data applications such as meter reading and vehicle tracking services.

³⁰⁰ 47 C.F.R. Part 95.

³⁰¹ 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).

³⁰² 47 C.F.R. Part 1.

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 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

None.

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 95, subpart F rules 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.”

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.³⁰³ Most Part 101 application processing rules, technical standards, and operational requirements apply to all Part 101 services, but others apply only to specific services,³⁰⁴ or to common carrier services but not private services (or vice versa).³⁰⁵

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 94.³⁰⁶

Part 101 contains 17 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 Service 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
- P – Multichannel Video Distribution and Data Service Rules for the 12.2-12.7 GHz Band
- Q – Service and Technical Rules for the 70/80/90 GHz Bands

³⁰³ 47 C.F.R. Part 101.

³⁰⁴ *See, e.g.*, 47 C.F.R. §§ 101.21(e), 101.61(c).

³⁰⁵ *See, e.g.*, 47 C.F.R. §§ 101.13, 101.15.

³⁰⁶ 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).

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.³⁰⁷

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, 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. In the future, commercial deployment may occur at 12.2-12.7 GHz (MVDDS) and at 70/80/90 GHz because the Commission began licensing these new services in mid-2004.³⁰⁸

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.

³⁰⁷ *Id.* at 13452-53.

³⁰⁸ See further discussion of MVDDS (subpart P) and 70/80/90 GHz (subpart Q), *infra*.

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.

Recent Efforts

In 2002, the Commission recently completed a comprehensive re-evaluation of the Part 101 rules.³⁰⁹ 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.³¹⁰

In 2004, the Commission amended section 101.31(b)(1)(v) to permit Part 101 applicants to initiate conditional operation after they have obtained consent of the Quiet Zone entity.³¹¹ The Commission also initiated a rulemaking to propose rules for fixed, point-to-point microwave service in the 37-38.6 GHz and 42.0-42.5 GHz frequency bands and to modify certain rules in the 38.6-40.0 GHz frequency band.³¹² Also in 2004, the Commission released the *Third Order on Reconsideration* rejecting a petition for reconsideration filed by Independent MultiFamily Communications Council of the *18 GHz Second Order on Reconsideration*.³¹³ In that Order, the Commission altered the 18 GHz band plan by, among other things: (1) reallocating the 18.3-18.58 GHz band on a primary basis for fixed-satellite service ("FSS"), and (2) adopting provisions to ensure the orderly migration and timely reimbursement of terrestrial fixed service ("FS") incumbents in the 18.3-18.58 GHz band.³¹⁴ The Commission also released an *NPRM* seeking comment on a proposal to rechannelize the 17.7-19.7 GHz frequency band for

³⁰⁹ 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*).

³¹⁰ *Id.* at 15041 ¶ 1.

³¹¹ See Review of Quiet Zones Application Procedures, WT Docket No. 01-319, *Report and Order*, 19 FCC Rcd 3267 (2004).

³¹² See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz, ET Docket No. 95-183, *Third Notice of Proposed Rule Making*, 19 FCC Rcd 8232 (2004).

³¹³ See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, IB Docket 98-172, *Third Order on Reconsideration*, 19 FCC Rcd 10777 (2004).

³¹⁴ See Redesignation of the 17.7-19.7 GHz Frequency Band, Blanket Licensing of Satellite Earth Stations in the 17.7-20.2 GHz and 27.5-30.0 GHz Frequency Bands, and the Allocation of Additional Spectrum in the 17.3-17.8 GHz and 24.75-25.25 GHz Frequency Bands for Broadcast Satellite-Service Use, IB Docket 98-172, *Second Order on Reconsideration*, 17 FCC Rcd 24248 (2002).

the purpose of encouraging efficient use of spectrum in that band.³¹⁵ Additional recent efforts are discussed under the relevant subpart, *infra*.

The 24 GHz auction (Auction No. 56) concluded on July 28, 2004, after three applicants placed winning bids on seven 24 GHz licenses.³¹⁶

Comments

No comments were received with respect to this rule part.

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 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.

³¹⁵ See *Rechannelization of the 17.7-19.7 GHz Frequency Band for Fixed Microwave Services under Part 101 of the Commission’s Rules*, WT Docket No. 04-143, *Notice of Proposed Rulemaking*, 19 FCC Rcd 11658 (2004).

³¹⁶ “24 GHz Service Spectrum Auction Closes; Winning Bidders Announced,” *Public Notice*, DA 04-2429 (rel. Aug. 2, 2004).

**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. The 24 GHz Service is now available for geographic licensing on either a common carrier or private basis.

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 that emerged from bankruptcy (Chapter 11 reorganization) in late 2002. In 2004, a stock transaction was publicly announced that would transfer control of the dominant license holder.

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

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.

Recent Efforts

On July 28, 2004, the Commission completed the auction of 880 24 GHz Service licenses in the 24.25-24.45 GHz and 25.05-25.25 GHz bands (24 GHz band) (“Auction No. 56”), raising (in net bids) a total of \$216,050.³¹⁷ The long-form applications filed by the successful winning bidders are under review. On May 28, 2004, the Commission made

³¹⁷ See 24 GHz Service Spectrum Auction Closes, *Public Notice*, DA 04-2429 (rel. Aug. 2, 2004).

corrections to subpart G to eliminate confusion as to the service areas of 24 GHz licenses.³¹⁸

Comments

No comments were filed with respect to this 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 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.”

Staff finds that the subpart G rules remain necessary in the public interest, and recommends that modification or repeal is not warranted.

³¹⁸ Amendments to Parts 1, 2, 87 and 101 of the Commission’s Rules to License Fixed Services at 24 GHz, WT Docket No. 99-327, *Erratum*, 19 FCC Rcd 9846 (WTB BD 2004).

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.³¹⁹ LMDS licensees may provide a variety of services, including high-speed data and Internet services and multi-channel video programming distribution.³²⁰

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.

³¹⁹ 47 C.F.R. Part 101.

³²⁰ 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.³²¹ LMDS will most likely compete with wireless and wireline broadband service providers targeting small and medium-sized businesses.³²²

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,³²³ 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.³²⁴

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.

³²¹ 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*).

³²² See *id.*

³²³ *Id.*

³²⁴ *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.³²⁵ 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, 2000. 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 recently completed a comprehensive re-evaluation of the Part 101 rules including changes to the LMDS technical rules.³²⁶

Comments

No comments were filed with respect to this subpart.

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.

³²⁵ 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).

³²⁶ See *Microwave Report and Order*, note 309, *supra*.

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

Description

Part 101 contains licensing, technical, and operational rules for the fixed microwave radio services.³²⁷ 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; (4) specify the frequencies available to MAS licensees; (5) establish license terms; (6) establish the minimum construction or coverage requirements for MAS licensees; and (7) 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 No. 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

³²⁷ 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.³²⁸ 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 recently completed a comprehensive re-evaluation of the Part 101 rules.³²⁹ In the *Competitive Bidding Conforming Edits Order*, the Wireless Telecommunications Bureau modified or eliminated certain 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.³³⁰

Comments

No comments were filed with respect to this subpart.

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.”

³²⁸ 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).

³²⁹ See *Microwave Report and Order*, note 309, *supra*.

³³⁰ 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*) (modifying or eliminating sections 101.1317 and 101.1319).

In addition, staff finds that the rules in subpart O remain necessary in the public interest, and recommends that modification or repeal is not warranted.

PART 101, SUBPART P – MULTICHANNEL VIDEO DISTRIBUTION AND DATA SERVICE RULES FOR THE 12.2-12.7 GHz BAND

Description

Part 101 contains licensing, technical, and operational rules for the fixed microwave radio services.³³¹ Multichannel Video Distribution and Data Service (MVDDS) is a fixed microwave service licensed in the 12.2-12.7 GHz band that provides various wireless services, excluding mobile and aeronautical operations.

Subpart P also contains licensing, technical, and operational rules for MVDDS.³³² In general, the rules in this part: (1) define the service area of MVDDS licenses; (2) specify the broadcast carriage and retransmission requirements for certain licensees; (3) specify the amount of available spectrum to MVDDS licensees; (4) define available spectrum band and establish permissible terms of operation; (5) establish terms for the treatment of incumbents; (6) define system operations and permissible communication services; (7) define regulatory status and eligibility; (8) establish MVDDS eligibility restrictions for cable operators; and (9) establish other license terms, usage rules and protection rules.

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. Subpart P establishes terms of operation for MVDDS licensed services in the 12.2-12.7 GHz band.

Analysis

Status of Competition

In establishing MVDDS, the Commission concluded that a fourth provider in the MVPD marketplace would provide significant public interest benefits through lower prices, improved service quality, increased innovation, and increased service to unserved or underserved rural areas.³³³ On January 27, 2004, the Commission completed the auction of the 214 MVDDS licenses (“Auction No. 53”), raising (in net bids) a total of

³³¹ 47 C.F.R. Part 101.

³³² 47 C.F.R. §§ 101.1401-101.1440.

³³³ Amendment of Parts 2 and 25 of the Commission’s Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range; Amendment of the Commission’s Rules to Authorize Subsidiary Terrestrial Use of the 12.2-12.7 GHz Band by Direct Broadcast Satellite Licensees and Their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide a Fixed Service in the 12.2-12.7 GHz Band, ET Docket No. 98-206, *Memorandum Opinion and Order and Second Report and Order*, 17 FCC Rcd 9614, 9680 (2002) (*MVDDS Second R&O*).

\$118,721,835. In this auction, ten winning bidders won a total of 192 MVDDS licenses, which the Commission issued later in 2004.³³⁴ As of the third quarter 2004, MVDDS equipment is still under development.

Advantages

The subpart P rules provide licensees with broad flexibility to identify and implement services in response to market demand, subject to interference rules to protect co-band satellite and other licensees. 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 rules, the Commission has recovered a portion of the value of the public spectrum for the benefit of the public.

Disadvantages

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

Recent Efforts

In 2002 the Commission established the Multichannel Video Distribution and Data Service (MVDDS) in the 12.2-12.7 GHz band (12 GHz band).³³⁵ In 2003, the Commission adopted revisions to the service rules for licensing the Multichannel Video Data & Distribution Service (MVDDS) in response to several petitions.³³⁶ The Commission also revised and improved the service areas for licensing Multichannel Video Data & Distribution Service (MVDDS).³³⁷

³³⁴ See Wireless Telecommunications Bureau Grants Multichannel Video Distribution and Data Service Licenses, *Public Notice*, DA 04-2331 (rel. July 27, 2004) (granting 154 licenses); Wireless Telecommunications Bureau Grants Multichannel Video Distribution and Data Service Licenses to South.Com LLC, DA 04-2547, *Public Notice*, (rel. Aug. 18, 2004) (granting 37 licenses); and DTV Norwich, LLC, Application for Multichannel Video Distribution and Data Service License, MVD001-New York; Request for Waiver of Section 101.1412(g)(4) of the Commission's Rules, *Order*, DA 04-3044 (rel. Sept. 23, 2004) (granting one license).

³³⁵ *MVDDS Second R&O*, 17 FCC Rcd at 9680.

³³⁶ See Amendment of Parts 2 and 25 of Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in Ku-Band Frequency Range, ET Docket No. 98-206, *Fourth Memorandum Opinion and Order*, 18 FCC Rcd 8428 (2003) (*appeal pending*).

³³⁷ See Amendment of Parts 2 and 25 of Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in Ku-Band Frequency Range, ET Docket No. 98-206, *Third Report and Order*, 18 FCC Rcd 13468 (2003). See also *Second Further Notice of Proposed Rulemaking*, 18 FCC Rcd 7589 (2003).

On January 27, 2004, the Commission completed the auction of the 214 MVDDS licenses (“Auction No. 53”), raising (in net bids) a total of \$118,721,835. In this auction, ten winning bidders won a total of 192 MVDDS licenses, which the Commission issued later in 2004.³³⁸

Comments

No comments were filed with respect to this subpart.

Recommendation

Section 101.1412 establishes cross-ownership restrictions between cable operators and MVDDS. The Commission adopted this MVDDS eligibility restriction in ET Docket No. 98-206, a proceeding terminated in 2003, after finding that open eligibility for in-region cable operators would pose a significant likelihood of substantial competitive harm.³³⁹ The Commission began licensing this new service in mid-2004 and as of the third quarter 2004, MVDDS equipment was still under development. As such, we do not find that this rule is “no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service.”

The other Part 101, subpart P rules concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among MVDDS and other co-band 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.”

The staff also finds that the rules in subpart P in their current form remain necessary in the public interest, and recommends that modification or repeal is not warranted.

³³⁸ See note 334, *supra*.

³³⁹ MVDDS *Second R&O*, 17 FCC Rcd at 9679-80 ¶ 164.

PART 101, SUBPART Q – SERVICE AND TECHNICAL RULES FOR THE 70/80/90 GHz BANDS

Description

Part 101 contains licensing, technical, and operational rules for the fixed microwave radio services.³⁴⁰ Subpart Q also contains licensing, technical, and operational rules for the 70/80/90 GHz bands.

The 70/80/90 GHz bands are licensed to promote the private sector development and use of the "millimeter wave" spectrum in the 71-76 GHz, 81-86 GHz and 92-95 GHz bands. In general, the rules in this part provide a flexible and innovative regulatory framework for the 70/80/90 GHz bands that do not require traditional "Part 101" frequency coordination among non-Federal Government users. Under this approach, the Commission will issue an unlimited number of non-exclusive nationwide licenses to non-Federal Government entities for the 12.9 gigahertz of spectrum allocated for commercial use. These licenses serve as a prerequisite for registering individual point-to-point links. The 70/80/90 GHz bands are allocated on a shared basis with Federal Government users. Therefore, a licensee will not be authorized to operate a link under its nationwide license until the link is both (1) coordinated with the National Telecommunications and Information Administration (NTIA) with respect to Federal Government operations and (2) registered as an approved link with the Commission (interim process) or third-party Database Manager (permanent process).

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. Subpart Q establishes terms of operation for services in the 70/80/90 GHz band.

Analysis

Status of Competition

Because the rules in Part 101, Subpart Q, became effective only in the 2003-2004 period, it is too early to assess status of competition with respect to this subpart.

Advantages

The subpart Q rules: (1) provide a flexible and streamlined regulatory framework designed to encourage innovative uses of the spectrum; (2) accommodate potential future developments in technology and equipment; (3) promote competition in the communications services, equipment and related markets; and (4) advance potential spectrum sharing between non-Federal Government and Federal Government systems. In

³⁴⁰ 47 C.F.R. Part 101.

addition, these rules encourage the use of technologies developed by our military and scientific community in a broad range of new products and services, such as high-speed wireless local area networks, and increase access to broadband services, including access systems for the Internet.

Disadvantages

Subpart Q imposes some administrative burdens inherent to the licensing process and necessary for compliance with technical and operational rules.

Recent Efforts

On October 16, 2003, the Commission adopted a *Report and Order* establishing service rules to promote non-Federal Government development and use of the “millimeter wave” spectrum in the 71-76 GHz, 81-86 GHz and 92-95 GHz bands³⁴¹ on a shared basis with Federal Government operations.³⁴²

On May 26, 2004, the Wireless Telecommunications Bureau released a public notice establishing a new licensing and interim link registration program for licenses in the 71-76 GHz, 81-86 GHz, and 92-95 GHz bands.³⁴³

On September 29, 2004, the Commission designated three private entities as database managers that will be tasked with jointly developing and managing databases of link registrations by FCC licensees.³⁴⁴

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 101, subpart Q rules concern licensing, technical, and operational rules in the 70/80/90 GHz bands. As such, the need and purposes for these rules are not directly affected by competitive developments that guide our Section 11 analysis. Accordingly,

³⁴¹ See Allocations and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, WT Docket No. 02-146, *Report and Order*, 18 FCC Rcd 23318 (2003) (*Report and Order*) (*recon. pending*). On February 23, 2004, The Wireless Communications Association International, Inc. filed a petition for reconsideration of certain aspects of the *Report and Order*.

³⁴² *Id.* at 23319 n.3.

³⁴³ See Wireless Telecommunications Bureau Announces Licensing and Interim Link Registration Process, Including Start Date for Filing Applications for Non-exclusive Nationwide Licenses in the 71-76 GHz, 81-86GHz, and 92-95GHz Bands, *Public Notice*, 19 FCC Rcd 9439 (2004).

³⁴⁴ See Allocation and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, WT Docket No. 02-146, *Order*, DA 04-3151 (rel. Sept. 29, 2004). See also Wireless Telecommunications Bureau Opens Filing Window for Proposals to Develop and Manage Independent Database of Site Registrations by Licensees in the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, *Public Notice*, 19 FCC Rcd 4597 (WTB BD 2004).

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 rules in subpart Q remain necessary in the public interest, and recommends that modification or repeal is not warranted.