Federal Communications Commission
2006 Biennial Regulatory Review
WT Docket No. 06-156

Wireless Telecommunications Bureau
Staff Report
February 14, 2007

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. SCOPE OF REVIEW

2. This review builds upon the Staff Report completed as part of the 2004 Biennial Regulatory Review.[2] As in the *2004 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of ongoing and recent initiatives, and recommendations on whether specific rules should be retained, modified, or repealed.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 August 10, 2006 *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. Thus, although not required to do so under Section 11, staff has reviewed whether

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1 47 U.S.C. § 161.

2 *See* 2004 Biennial Regulatory Review, WT Docket No. 04-180, Wireless Telecommunications Bureau *Staff Report*, 20 FCC Rcd 124 (WTB 2005) (*2004 Biennial Review Staff Report*).

3 *See generally 2004 Biennial Review Staff Report.*

4 *See* Appendix III.

5 *See* "The Commission Seeks Public Comment in the 2006 Biennial Review of Telecommunications Regulations," *Attachment*, "Rule Parts Containing Regulations Administered by the Wireless Telecommunications Bureau (WTB), WT Docket No. 06-156, *Public Notice*, 21 FCC Rcd 9422 (*2006 Biennial Review Public Notice*).

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 in the next year.

5. The Wireless Telecommunications Bureau is responsible for licensing and regulating all wireless communications services other than unlicensed devices, public safety, broadcast and satellite services. Wireless communications services include commercially provided services such as cellular, Personal Communications Services (PCS), and paging, as well as fixed 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.[6] 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.[7] Since that time, the Commission has conducted 66 spectrum auctions for services such as broadband and narrowband PCS, Specialized Mobile Radio (SMR), Wireless Communications Service (WCS), Local Multipoint Distribution Service (LMDS), Multichannel Video Distribution and Data Service (MVDDS), Advanced Wireless Services (AWS), and numerous other fixed and mobile wireless services.[8] These auctions have resulted in a dramatic increase in the number of competing wireless service providers. In its *Eleventh CMRS Competition Report*, released on September 29, 2006, the Commission concluded that there is effective competition in the Commercial Mobile Radio Services (CMRS) marketplace, which continues to benefit consumers in the form of price competition and competition to provide innovative and improved service offerings.[9]

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6 *See generally* 47 U.S.C. Title III.

7 Omnibus Budget Reconciliation Act of 1993, Pub. Law No. 103-66, 107 Stat. 312. *See* 47 U.S.C. § 309(j). Congress expanded the Commission's authority to assign licenses by competitive bidding in the Balanced Budget Act of 1997. Pub. L. No. 105-33, Title III, 111 Stat. 251 (1997).

8 *See* http://www.fcc.gov/wtb/auctions.

9 *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

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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.

9. On August 10, 2006, the Commission issued a Public Notice seeking comment on the rules and regulations within its purview under the 2006 Biennial Review.[10] The Bureau has reviewed the following rule parts implicated by Section 11 that affect wireless telecommunications carriers:[11]

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, hearing aid compatibility, Title II obligations, and 911 service.

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

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to Commercial Mobile Services, *Eleventh Report,* FCC 06-142 (rel. Sept. 29, 2006) (*Eleventh 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.

[10] *See 2006 Biennial Review Public Notice*, 21 FCC Rcd 9422.

[11] *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.

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 commercial 218-219 MHz Service, individuals needing land mobile licenses, and other personal radio uses such as medical telemetry devices.

Part 101 – Fixed Microwave Services – Contains licensing, technical, and operational rules for private and common carrier terrestrial fixed point-to-point microwave services, including rules or subparts governing the 24 GHz Service, 39 GHz Service, the 70/80/90 GHz bands, Local Television Transmission Service, Local Multipoint Distribution Service, Multiple Address Systems, Multichannel Video Distribution and Data Service, and Digital Electronic Message Service.

10. In response to the *Public Notice*, the Commission received two comments and one reply comment related to these rule parts.

III. RECENT AND ONGOING ACTIVITIES

11. During the past two years, the Bureau has engaged in a number of major initiatives to streamline and eliminate unnecessary rules affecting wireless services.

(a) Procedures For Participation of Federally Recognized Indian Tribes and Native Hawaiian Organizations Under the Nationwide Programmatic Agreement

12. On October 6, 2005, the Commission issued a *Declaratory Ruling* interpreting the provisions in the Nationwide Programmatic Agreement For Review of Effects On Historic Properties For Certain Undertakings Approved By The Federal Communications Commission that govern participation of Indian tribes and Native Hawaiian Organizations ("NHOs").[12] The *Declaratory Ruling* established a process for addressing situations where a federally recognized Indian tribe or NHO has not responded to efforts by the applicant and the Commission to determine whether the Indian tribe or NHO has an interest in participating in the review of proposed construction of communications towers and antennas.

[12] In the Matter of Clarification of Procedures for Participation of Federally Recognized Indian Tribes and Native Hawaiian Organizations Under the Nationwide Programmatic Agreement, *Declaratory Ruling*, 20 FCC Rcd 16092 (2005).

(b) Spectrum Leasing

13. 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.[13]

(c) Upper 700 MHz Guard Band Proceeding

14. In September 2006, the Commission adopted a *Notice of Proposed Rule Making* that seeks comment on several service rule changes that may provide greater flexibility to 700 MHz Guard Bands licensees, while maintaining adequate interference protection for public safety licensees.[14] Among other things, the Commission asked commenters to discuss whether: (1) the FCC's spectrum leasing rules should be extended to the Guard Bands; (2) the Commission should take steps to increase band manager flexibility for incumbents and prospective licensees; (3) the prohibition on deploying cellular architectures within the Guard Bands should be eliminated; and (4) the current Adjacent Channel Power (out of band emission) limits in the Guard Bands should be changed. The Commission also sought comment on proposals for re-licensing the Guard Bands licenses that were returned from Nextel.

(d) Streamlining and Harmonization Biennial Review Proceeding

15. In July 2005, the Commission adopted a *Report and Order and Further Notice of Proposed Rule Making* that streamlines and harmonizes the Part 1, 22, 24, 27, and 90 rules to clarify spectrum rights and obligations and optimize flexibility for wireless service licensees.[15] For example, the Commission relaxed the rules to classify as a minor modification the deletion of frequencies and transmitter sites from a multi-site authorization under Part 90. It also eliminated the transmitter output power limits under Part 24 and removed or modified several additional licensing provisions. In the *Further Notice*, the Commission sought comment on potential changes to the broadband PCS radiated power limits.

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[13] 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*).

[14] Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission s Rules Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Notice of Proposed Rule Making*, FCC 06-133, WT Docket Nos. 06-169, 96-86 (rel. Sept. 8, 2006).

[15] Biennial Regulatory Review -- Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 03-264, 20 FCC Rcd 13900 (2005).

(e) Air-Ground Proceeding

16. On December 15, 2004, the Commission adopted a *Report and Order* that substantially revises the rules governing the Air-Ground Radiotelephone Service.[16] Among other things, the Commission decided to offer nationwide licenses for the four megahertz of commercial air-ground spectrum in three alternative band plan configurations. The Commission decided that, in the event mutually exclusive applications were accepted for filing, it would award to winning bidders in an auction the licenses comprising the band plan that received the highest aggregate gross bid. On December 8, 2005, in response to petitions for reconsideration of the 2004 *Report and Order*, the Commission adopted a *Reconsideration Order* clarifying, *inter alia,* that stratospheric platforms, such as high-altitude balloons, may be used to provide air-ground services.[17] In a *Report and Order* of the same date, the Commission adopted competitive bidding rules for the 800 MHz commercial and 400 MHz general aviation air-ground services, including size standards for determining small business eligibility for bidding credits in the 800 MHz commercial air-ground service.[18] An auction was held for the 800 MHz licenses (Auction No. 65) ending June 6, 2006,[19] and the Commission granted licenses to the winning bidders on October 31, 2006 under call signs WQFX728 and WQFX729.[20]

(f) Part 22 Non-Cellular Services

17. As part of the *Report and Order* regarding the Air-Ground Radiotelephone Service discussed in the preceding paragraph, the Commission also streamlined certain non-cellular Part 22 Public Mobile Services rules that were found no longer to be warranted.[21] For example, the Commission removed the requirement that Part 22

[16] *See* 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Report and Order and Notice of Proposed Rule Making*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 4403 (2005); *See* FCC News Release, *FCC Paves the Way for New Broadband Services in the Air*, WT Docket Nos. 03-103, 05-42, 2004 WL 2913399 (F.C.C.), (rel. Dec. 15, 2004).

[17] *See* 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Order on Reconsideration and Report and Order*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 19663 (2005).

[18] *Id.*

[19] *See* "Wireless Telecommunications Bureau Grants 800 MHz Air-Ground Licenses," *Public Notice*, DA 06-2254, 21 FCC Rcd 13022 (WTB rel. Oct. 31, 2006).

[20] *See* FCC File Nos. 0002653156 and 0002658043.

[21] 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

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licensees be common carriers, modified rules governing the provision of dispatch service by paging licensees, and recodified certain Part 22 rules to Part 1 to provide uniform methods for the calculation of terrain elevation and distance for most wireless services.

(g) Rural Proceeding

18. In July 2004, the Commission adopted a *Report and Order and Further Notice of Proposed Rule Making* designed to facilitate the deployment of wireless services in rural areas. Among other things, the Commission: defined "rural areas" for wireless services; decided to continue to establish licensing areas on a case-by-case basis; modified certain rules to facilitate increased access to capital for rural licensees; and modified certain technical and licensing requirements to promote cost-effective coverage to rural areas.[22] In the *FNPRM* portion of the item, the Commission sought comment on additional ways to foster access to spectrum and deployment of services in rural areas. There were also two Petitions for Reconsideration filed addressing specific construction requirements and power limits.[23]

(h) M-LMS Proceeding

19. On March 1, 2006, the Commission adopted a *Notice of Proposed Rulemaking* (*Notice*) as part of its reexamination of the regulations governing the use of the multilateration Location and Monitoring Service (M-LMS) spectrum (*i.e.*, 904-909.75 MHz and 919.75-928 MHz) that is shared with various users, including Part 15 unlicensed devices, amateurs and Federal Government operations. [24] Specifically, the *Notice* seeks comments on the following issues: (1) whether M-LMS licensees in the 902-928 MHz band should be afforded additional flexibility in the type of service they provide (*i.e.*, not be restricted to systems that must primarily transmit status and instructional messages relate to the location or monitoring functions of that system); (2) whether to remove the restriction on real-time interconnection to the public switched

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Commission's Rules; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Report and Order and Notice of Proposed Rule Making*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 4403 (2005).

[22] Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services; 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services; 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, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket Nos. 02-381, 01-14, and 03-202, 19 FCC Rcd 19078 (2004) (*Rural R&O and FNPRM*).

[23] *See* Petition for Partial Reconsideration and/or Clarification filed by Airwave Wireless, LLC and GW Wireless, Inc. (Jan. 14, 2005); Petition for Reconsideration filed by Powerwave Technologies, Inc. (Jan. 14, 2005).

[24] Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands, *Notice of Proposed Rulemaking*, 21 FCC Rcd 2809 (2006).

network; (3) whether to adopt stricter technical and/or power limits for M-LMS licensees to ensure that flexibility for these licensees does not increase interference to unlicensed devices; (4) whether to adopt its tentative conclusion that it would be in the public interest to retain the Part 15 safe harbor, which provides that unlicensed and amateur operations that comply with certain technical parameters will not be considered to be causing harmful interference to M-LMS systems; (5) whether to eliminate restrictions on the aggregation of spectrum that permit a licensee to aggregate two, but not all three M-LMS spectrum blocks, for a total of 8 megahertz out of the 14 megahertz in this band; and (6) whether to eliminate the requirement that M-LMS licensees conduct field tests on their systems to ensure that they do not cause unacceptable interference to Part 15 devices.

(i) 70/80/90 GHz Proceeding

20. In 2004 and 2005, the Commission took further steps in its establishment of 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.[25] Under this approach, as originally adopted in 2003, 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. On September 29, 2004, the Wireless Telecommunications Bureau released an Order announcing the appointment of three private entities as independent database managers responsible for the design and management of the third-party link registration system for the bands.[26] On February 3, 2005, the Wireless Telecommunications Bureau announced a permanent process for registering links in the bands.[27] On March 3, 2005, the Commission released a *Memorandum Opinion and Order* that modified the rules to: require interference analyses prior to registering all new or modified links in the 71-76 GHz and 81-86 GHz bands; eliminate the band segmentation and loading requirements and relax the efficiency requirement to 0.125 bits per second (bps)/Hertz (Hz); and accommodate smaller (18"), less expensive antennas by lowering the minimum antenna gain requirement to 43 dBi and 1.2 degree half-power beamwidth.[28]

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[25] *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).

[26] *See* Allocation and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, WT Docket No. 02-146, *Order*, 19 FCC Rcd 20524 (WTB BD 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).

[27] *See* WTB Announces Permanent Process for Registering Links in the 71-76 GHz, 81-86 GHz, and 92-95 GHz Bands, *Public Notice*, 20 FCC Rcd 2261 (WTB 2005).

[28] *See* Allocation and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, WT Docket No. 02-146, *Memorandum Opinion and Order*, 20 FCC Rcd 4889 (2005).

(j) BRS-EBS Proceeding

21. 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.[29] 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). The Commission created a new band plan for 2495-2690 MHz that eliminates the use of interleaved channels by BRS and EBS licensees and creates distinct band segments for high power operations, such as one-way video transmission, and low power operations, such as two-way fixed and mobile broadband applications. The Commission also established a mechanism for transition from the existing band configuration to the new band plan. BRS and EBS providers will have a three-year period during which they may propose transition plans for relocating existing facilities of all other licensees within the same Major Economic Area (MEA) to new spectrum assignments in the revised band plan. 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. On April 27, 2006, the Commission released a *Third Memorandum Opinion and Order and Second Report and Order* in this proceeding.[30] Among other things, the Commission changed the transition size area from MEA to Basic Trading Area, and decided to permit licensees to self-transition if a proponent has not come forward by 30 months after the effective date of the amended rules.

(k) AWS Proceedings

22. In 2004 through 2006, the Commission took several steps to build on its establishment of a flexible-use licensing framework under Part 27 for the first 90 megahertz of Advanced Wireless Service spectrum ("AWS-1"), consisting of 1710-1755 and 2110-2155 MHz.[31] Separately, in 2004, the Commission allocated spectrum in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz bands for fixed and mobile use, designated it for AWS ("AWS-2"), and proposed service rules for this 20 megahertz of additional AWS spectrum under the Part 27 flexible use regime.[32] In 2005,

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[29] *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).

[30] 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, *Third Memorandum Opinion and Order and Second Report and Order,* WT Docket No. 03-66, 21 FCC Rcd. 5606 (2006) (*BRS/EBS 3rd MO&O)*.

[31] *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); *modified by Order on Reconsideration*, 20 FCC Rcd 14058 (2005) (codified at 47 C.F.R. Part 27, Subpart L).

[32] *See* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third

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the Commission allocated an additional 20 MHz of spectrum at 2155-2175 MHz ("AWS-3") suitable for AWS uses, and modified its rules for the AWS-1 band to provide additional opportunities for smaller and rural wireless carriers to access this spectrum.[33] In 2006, the Commission established procedures by which new AWS licensees may relocate incumbent BRS and Fixed Microwave Service (FS) operations in spectrum that has been allocated for AWS, and established cost sharing obligations for AWS and Mobile Satellite Service (MSS) entrants that benefit from the relocation of FS and BRS operations in these bands.[34] In addition, on September 18, 2006, the Commission completed the auction of AWS-1 licenses in the 1710-1755 MHz and 2110-2155 MHz bands (Auction No. 66), in which 104 winning bidders won a total of 1,087 licenses.[35] The Commission has granted over two-thirds of the applications submitted by winners in Auction No. 66, issuing 942 licenses,[36] and is currently reviewing the remaining applications.

(l) Commercial Spectrum Enhancement Act (CSEA) Proceeding

23. The Commercial Spectrum Enhancement Act (CSEA) established a mechanism to use spectrum auction proceeds to reimburse federal agencies operating in the 1710-1755 MHz bands and certain other frequency bands for the cost of relocating operations.[37] The 1710-1755 MHz band is identified by CSEA as government transfer spectrum for which auction proceeds must be placed in a trust fund established to reimburse federal agencies operating on those frequencies for the cost of relocating to

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Generation Wireless Systems, ET Docket No. 00-258, *Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order*, 19 FCC Rcd 20720 (2004);.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).

[33] *See* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, *Eighth Report and Order, Fifth Notice of Proposed Rulemaking and Order*, 20 FCC Rcd 15866 (2005) ("*AWS Eighth Report and Order*" and "*AWS Fifth Notice*"); Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Order on Reconsideration*, 20 FCC Rcd 14058 (2005).

[34] *See* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, Service Rules for Advances Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Ninth Report and Order and Order*, 21 FCC Rcd 4473 (2006) (*recon. pending*) (*AWS Relocation and Cost Sharing Report and Order*).

[35] *See* Auction of Advanced Wireless Services Closes, *Public Notice*, DA 06-1882 (rel. Sept. 20, 2006). *See also* FCC web site,http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=66, for additional information.

[36] *See* Wireless Telecommunications Bureau Grants Advanced Wireless Service Licenses, *Public Notices*, DA 06-2408 (WTB rel. Nov. 29, 2006), DA 06-2179 (WTB rel. Dec. 18, 2006) and DA 07-285 (WTB rel. Jan. 29, 2007).

[37] Commercial Spectrum Enhancement Act, Pub. L. No. 108-494, 118 Stat. 3986, Title II (2004).

other bands. On June 14, 2005, the Commission released a *Declaratory Ruling and Notice of Proposed Rulemaking* seeking comment on the rules and procedures needed to comply with CSEA, including any changes needed to implement the requirement that the proceeds of an auction of spectrum subject to CSEA equal at least 110 percent of the total estimated relocation costs.[38] On January 24, 2006, the Commission released a *Report and Order* adopting modifications to its competitive bidding rules in light of CSEA.[39] Among other things, the Commission modified its reserve price rule to provide that, for any auction of "eligible frequencies" requiring the recovery of estimated relocation costs pursuant to CSEA, the Commission will establish a reserve price(s) pursuant to which the total cash proceeds shall equal at least 110 percent of the total estimated relocation costs provided to the Commission pursuant to CSEA.

(m) Designated Entity Proceeding

24. On February 3, 2006, the Commission released a *Further Notice of Proposed Rulemaking* which sought comment on whether the Commission should make any changes to its competitive bidding rules as they relate to designated entities.[40] On April 25, 2006, the Commission adopted a *Second Report and Order*, which modified the Commission's rules for determining the eligibility of applicants for designated entity benefits in the context of competitive bidding.[41] Among other things, the Commission adopted rules to limit the award of designated entity benefits to any applicant or licensee that has "impermissible material relationships" or an "attributable material relationship" created by certain agreements with one or more other entities for the lease or resale (including under a wholesale arrangement) of its spectrum capacity. At the same time the Commission released a *Second Further Notice of Proposed Rule Making* seeking comment on a variety of additional measures that might further augment the effectiveness of the rules to enhance the Commission's ability to ensure that the recipients of designated entity benefits are limited to those entities and for those purposes that Congress intended.[42] On June 2, 2006, the Commission released an *Order on*

[38] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Declaratory Ruling and Notice of Proposed Rulemaking*, 20 FCC Rcd 11268 (2005).

[39] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Report and Order*, 21 FCC Rcd 891 (2006).

[40] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Further Notice of Proposed Rulemaking*, 21 FCC Rcd 1753 (2006).

[41] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Second Report and Order*, 21 FCC Rcd 4753 (2006).

[42] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Second Further Notice of Proposed Rule Making*, 21 FCC Rcd 4753 (2006).

Reconsideration of the Second Report &Order clarifying, on its own motion, certain aspects of the *Second Report & Order*.[43]

IV. SUMMARY OF BIENNIAL REGULATORY REVIEW

25. Pursuant to Section 11, the Bureau has determined, based on its own review and 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.[44]

Review/Revision/Streamlining Efforts Already Under Way

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

27. *Parts 1, 22, 24, 27, and 90*. The Commission is currently considering what kind of mechanisms—such as performance requirements, partitioning and disaggregation, and re-licensing—might further promote the provision of wireless radio services to rural areas as well as to ensure that spectrum ultimately continues to be put to its highest use.[45]

28. *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.[46]

[43] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Order on Reconsideration of the Second Report and Order*, 21 FCC Rcd 4753 (2006).

[44] 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 III, *infra.*

[45] *See Rural R&O and FNPRM*, 19 FCC Rcd 19078 (2004).

[46] *See* Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Notice of Proposed Rulemaking,* 16 FCC Rcd 9610 (2001); *See* Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Notice of Proposed Rulemaking,* 20 FCC Rcd. 4685 (2005); Public Notice, "Comment Sought on Missoula Intercarrier Compensation Reform Plan," CC Docket No. 01-92, 21 FCC Rcd 8524 (2006).

29. *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.[47]

30. *Parts 22, 24, and 27*. The Commission is currently considering whether to modify the current Parts 22, 24 and 27 radiated power limits for certain commercial mobile services.[48]

31. *Part 27*. The Commission is currently considering whether to revise the Part 27 service rules applicable to existing and prospective Upper 700 MHz Guard Bands licensees.[49]

32. *Part 52 Rules*. The Commission is currently considering the impact of its rule regarding wireline to wireless local number portability on small entities.[50]

33. *Part 80 Rules*. The Commission is currently considering whether to permit VPC and AMTS licensees to provide private mobile radio service to units on land.[51]

34. *Part 90* – The Commission is currently considering a proposal to defer or eliminate the requirement in Section 90.203(j)(5) of the rules that certain applications for equipment authorizations received on or after January 1, 2005 specify 6.25 kHz capability.[52] The Commission is currently re-examining the M-LMS rules as indicated above.[53]

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[47] *See* Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, *Memorandum Opinion & Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 15047(2005).

[48] *See Streamlining NPRM*, 19 FCC Rcd 708 (2004).

[49] *See* Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission s Rules Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Notice of Proposed Rule Making*, WT Docket Nos. 06-169, 96-86 (rel. Sept. 8, 2006).

[50] *See* "*Federal Communications Commission Seeks Comment on Initial Regulatory Flexibility Analysis in Telephone Number Portability Proceeding*," Public Notice, CC Docket No. 95-116, 20 FCC Rcd 8616 (2005).

[51] *See* 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, *Notice of Proposed Rule Making***,** WT Docket No. 04-257, RM-10743, 19 FCC Rcd 15225 (2004).

[52] *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, *Third Memorandum Opinion and Order, Third Further Notice of Proposed Rule Making, and Order*, WT Docket No. 99-87, RM-9332, 19 FCC Rcd 25045 (2004).

[53] Amendment of the Commission's Part 90 Rules in the 904-909.75 and 919.75-928 MHz Bands, *Notice of Proposed Rulemaking*, 21 FCC Rcd 2809 (2006).

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 procedural, technical, and operational rules for reasons that fall outside the scope of Section 11 review.

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 17.4(e)-(g), 17.6(c), 17.23, 17.47(b) and 17.57.[54]

38. *Section 20.6*. Staff recommends that section 20.6 be removed from the Code of Federal Regulations. Section 20.6(f) provides that the rule has already sunset as of January 1, 2003.

39. *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.[55]

40. *Section 20.20*. Staff recommends that section 20.20 be removed from the Code of Federal Regulations. Section 20.20(f) provides that the rule has already sunset as of January 1, 2002.

[54] Comments of PCIA – The Wireless Infrastructure Association (PCIA) filed September 15, 2006.

[55] *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).

41. The staff also recommends removing the fixed microwave relocation rules for Personal Communications Services (PCS) in sections 24.239-24.253 and to amend sections 101.69-101.81 to remove the 1850-1990 MHz band because these rules have reached their sunset.[56]

[56] 47 C.F.R. §§ 24.239-24.253, 101.69-101.81.

APPENDIX I: 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.[57] 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.[58] 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.[59] The Commission made minor changes to those rules in the 1999 reconsideration of the *ULS Report and Order*.[60]

Purpose

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

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[57] 47 C.F.R. Part 1, subpart F.

[58] 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*).

[59] 47 C.F.R. §1.913.

[60] 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 May 15, 2003, the Commission adopted the *Secondary Markets Report and Order and Further Notice of Proposed Rulemaking*, which among other things provided for more streamlined approval procedures (using ULS) relating to assignment and transfer applications for many Wireless Radio Service license authorizations under section 1.948.[61] In the following year, on July 8, 2004, the Commission adopted the *Secondary Markets Second Report and Order and Second Further Notice of Proposed Rulemaking*, which provided streamlined approval procedures for all Wireless Radio Services and made immediate (i.e., overnight) approval procedures available for certain of these applications to the extent they did not raise potential public interest concerns that merited additional Commission review.[62] To implement these processing changes, the

[61] *See* Promoting Efficient Use of Spectrum Through Elimination of Barriers 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).

[62] *See* 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).

Commission in July 2005 revised its Form 603 to enable immediate processing of qualifying applications.[63]

On July 8, 2004, the Commission adopted 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.[64] 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. In the *Further Notice* portion of the item, the Commission sought comment on additional ways to foster access to spectrum and deployment of services in rural areas.

On July 22, 2005, the Commission adopted a *Report and Order and Further Notice of Proposed Rule Making* that streamlines and harmonizes the Part 1, 22, 24, 27, and 90 rules to clarify spectrum rights and obligations and optimize flexibility for wireless service licensees.[65] For example, the Commission amended sections 1.927, 1.929 and 1.939 regarding the filing of transfers of control, the classification of major vs. minor modifications and the process for filing petitions to deny, respectively.

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."

[63] *See* Wireless Telecommunications Bureau Announces Changes to the Universal Licensing System to Implement the Commission's Immediate Approval Procedures for Wireless License Assignments and Transfers, *Public Notice*, DA 05-2226 (rel. July 29, 2005).

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

[65] Biennial Regulatory Review -- Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 03-264, 20 FCC Rcd 13900 (2005).

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

Description

Part 1, Subpart I of the Commission's rules[66] implements the requirements of the National Environmental Policy Act (NEPA)[67] as well as a series of other federal environmental laws, including the Endangered Species Act of 1973, as amended,[68] the National Historic Preservation Act of 1966 (NHPA),[69] the Wilderness Act of 1964, as amended,[70] statutory provisions relating to Indian religious sites,[71] and the Wildlife Refuge Laws.[72] In addition, the Commission's environmental rules implement Executive Orders regarding flood plains and wetlands regulation.[73] By statute and regulations of the Council on Environmental Quality (CEQ),[74] the Commission is responsible for ensuring compliance with these laws. The rules identify certain special issues for consideration, including the impact of high-intensity white lights on towers in residential neighborhoods[75] and the effect of radio frequency emissions on the human environment.[76]

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

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

[67] 42 U.S.C. §§ 4321-4347.

[68] 16 U.S.C. §§ 1531-1543.

[69] 16 U.S.C. §§ 470 *et seq.*

[70] 16 U.S.C. §§ 1131-1136.

[71] 42 U.S.C. § 1996.

[72] 16 U.S.C. § 668dd.

[73] *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).

[74] 40 C.F.R. §§ 1500-1508.

[75] 47 C.F.R. § 1.1307(a)(8).

[76] 47 C.F.R. § 1.1307(b).

in an environmental assessment (EA), and file that document with the Commission.[77] The Commission has concluded that actions not identified in its rules are categorically excluded from environmental review.[78] The Commission's environmental rules explain what information is required in an EA,[79] the methods for the public to file objections to EAs,[80] and those situations in which a full environmental impact statement must be completed,[81] as required by NEPA.

Comments

The Navajo Nation requests that the Commission work with the Bureau of Indian Affairs ("BIA") to eliminate BIA approval for collocations and certain other telecommunications projects.[82] Moreover, the Navajo Nation also requests that Commission regulations be modified to facilitate and encourage collocations within existing utility (electric, water, sewer, telephone) rights-of-way on tribal lands.[83]

Recommendations

The Part 1, subpart I rules are beyond the scope of the Biennial Review proceeding. These Commission rules implement NEPA,[84] as well as other federal environmental laws and executive orders.[85] The rules were not promulgated under the Communications Act of 1934, as amended, and therefore are not part of the Biennial Review.[86]

It is worth noting, however, that the Nationwide Programmatic Agreement For Review of Effects On Historic Properties For Certain Undertakings Approved By The Federal Communications Commission ("NPA") includes exemptions and other provisions that

[77] 47 C.F.R. § 1.1307(a).

[78] 47 C.F.R. § 1.1306.

[79] *See* 47 C.F.R. §§ 1.1308, 1.1311.

[80] 47 C.F.R. § 1.1313.

[81] 47 C.F.R. §§ 1.1314-1.1319.

[82] Navajo Nation comments at 6.

[83] *Id.*

[84] *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).

[85] 47 C.F.R. § 1.1307(a).

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

are similar to much of what the Navajo Nation requests. Section I.D. of the NPA permits an Indian tribe, at its election, to adopt the provisions of the NPA for use on tribal lands.[87]

[87] 47 C.F.R. Part 1, Appendix C, Section I.D.

PART 1, SUBPART Q – COMPETITIVE BIDDING PROCEEDINGS

Description

Subpart Q implements section 309(j) of the Communications Act of 1934, as added by the Omnibus Budget Reconciliation Act of 1993[88] and amended by the Balanced Budget Act of 1997.[89] 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.[90] 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."[91]

Analysis

Status of Competition

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

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

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

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

[91] 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 the award of licenses to those entities that are most likely to put spectrum to effective and efficient use. 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.[92] 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

In the *Part 1 Order on Reconsideration of the Fifth Report and Order,* the Commission modified its rules governing attribution of gross revenues for purposes of determining designated entity eligibility. Specifically, the Commission exempted the gross revenues of the affiliates of a rural telephone cooperative's officers and directors from attribution to the applicant if certain specified conditions are met. The Commission also clarified that, in calculating an applicant's gross revenues under the controlling interest standard, it will not attribute to the applicant the personal net worth, including personal income, of its officers and directors.[93] In the *Second Order on Reconsideration of the Part 1 Fifth Report and Order*[94], the Commission revised one element of the exemption from its attribution rule for officers and directors of rural telephone cooperatives to permit a rural telephone cooperative applicant (or its controlling interest) to demonstrate either that it is

[92] *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).

[93] 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*, 18 FCC Rcd 10180 (2003).

[94] Amendment of Part 1 of the Competitive Bidding Rules − Competitive Bidding Procedures, *Second Order on Reconsideration of the Part 1 Fifth Report and Order*, 20 FCC Rcd 1942 (2005).

eligible for tax-exempt status pursuant to Section 501(c)(12) of the Internal Revenue Code[95] or that it adheres to the cooperative principles enumerated in *Puget Sound Plywood, Inc. v. Commissioner of Internal Revenue Service* ("*Puget Sound*").[96]

On June 14, 2005, the Commission released a *Declaratory Ruling and Notice of Proposed Rulemaking* seeking comment on the rules and procedures needed to comply with the Commercial Spectrum Enhancement Act (CSEA).[97] CSEA established a mechanism to use spectrum auction proceeds to reimburse federal agencies operating in the 1710-1755 MHz bands and certain other frequency bands for the cost of relocating operations.[98] The 1710-1755 MHz band is identified by CSEA as government transfer spectrum for which auction proceeds must be placed in a trust fund established to reimburse federal agencies operating on those frequencies for the cost of relocating to other bands. On January 24, 2006, the Commission released a *Report and Order* adopting modifications to its competitive bidding rules in light of CSEA.[99] Among other things, the Commission modified its reserve price rule to provide that, for any auction of "eligible frequencies" requiring the recovery of estimated relocation costs pursuant to CSEA, the Commission will establish a reserve price(s) pursuant to which the total cash proceeds shall equal at least 110 percent of the total estimated relocation costs provided to the Commission pursuant to CSEA.

In a *Second Report and Order,* the Commission modified its rules regarding eligibility for designated entity benefits for applicants or licensees that have agreements that constitute "material relationships."[100] Specifically, except as grandfathered, the Commission determined that an applicant or licensee that has agreements pursuant to which, on a cumulative basis, it may lease (under either spectrum manager or *de facto* transfer leasing arrangements) or resell (including under wholesale agreements) more than 50 percent of the spectrum capacity of any individual license, is considered to have entered into an "impermissible material relationship." Such impermissible material relationships will render such entity ineligible for the award of designated entity benefits in the context of competitive bidding and will, in secondary markets, result in the imposition of unjust enrichment obligations on a license-by-license basis.

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[95] 26 U.S.C. § 501(c)(12).

[96] *Puget Sound Plywood, Inc. v. Commissioner of the Internal Revenue Service,* 44 T.C. 305 (1965) ("*Puget Sound*").

[97] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Declaratory Ruling and Notice of Proposed Rulemaking*, 20 FCC Rcd 11268 (2005).

[98] Commercial Spectrum Enhancement Act, Pub. L. No. 108-494, 118 Stat. 3986, Title II (2004).

[99] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Report and Order*, 21 FCC Rcd 891 (2006).

[100] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Second Report and Order*, 21 FCC Rcd 4753 (2006).

In addition, an applicant or licensee that has agreements pursuant to which, on a cumulative basis, it may lease (under either spectrum manager or *de facto* transfer leasing arrangements) or resell (including under wholesale agreements) more than 25 percent of the spectrum capacity of any individual license to any individual entity, including entities and individuals attributable to that entity, is considered to have an "attributable material relationship." The attributable material relationship with that entity will be attributed to the applicant or licensee for purposes of determining that applicant's or licensee's eligibility for designated entity benefits in the context of competitive bidding and will, in secondary market transactions, be factored into an assessment of whether there are any unjust enrichment obligations applicable on a license-by-license basis.

The Commission also adopted stricter unjust enrichment rules. By extending the unjust enrichment period from five to ten years, the Commission determined that it would increase the chance that the designated entity will develop to become a competitive service provider for the benefit of the public. Pursuant to the revised schedule, for the first five years of the license term, if a designated entity loses its eligibility for a bidding credit, or seeks to assign or transfer control of a license or enter into a *de facto* transfer lease with an entity that would not qualify for the same level of bidding credits, 100 percent of the bidding credit, plus interest, would be owed. For years six and seven of the license term, 75 percent of the bidding credit, plus interest, would be owed. For years eight and nine, 50 percent of the bidding credit, plus interest, would be owed, and for year ten, 25 percent of the bidding credit, plus interest, would be owed.

In addition to revising the unjust enrichment payment schedule, the *Second Report and Order* imposed a requirement that the Commission must be reimbursed for the entire bidding credit amount owed, plus interest, if a designated entity loses its eligibility for a bidding credit for any reason, including but not limited to, entering into an "impermissible material relationship" or an "attributable material relationship," seeking to assign or transfer control of a license, or entering into a *de facto* transfer lease with an entity that is not eligible for bidding credits prior to the filing of the notification informing the Commission that the construction requirements applicable at the end of the license term have been met.[101] In light of the record in this proceeding, including the requests of various parties to conduct a further inquiry, the Commission also released a *Second Further Notice of Proposed Rule Making* seeking comment on whether the

[101] Licensees may, under section 1.946(e) of our rules, request an extension of time to meet the applicable construction requirements. 47 C.F.R. § 1.946(e). Additionally, licensees may also request a waiver of the construction requirement, and this request must meet the requirements of section 1.925 of our rules. 47 C.F.R § 1.925. We note that we will undertake careful scrutiny of requests for extension of the construction requirements filed by designated entities consistent with our rules, obligations under the Communications Act, and legal precedent, and that we will consider, as part of our review, whether the extension request is an effort to defeat the objectives of our designated entity program. If a designated entity is successful in obtaining an extension of the construction requirements beyond the initial license term, the requirement that the Commission must be reimbursed for the entire bidding credit amount, plus interest, prior to the filing of the notification informing the Commission that the applicable construction requirements will continue to apply until such notifications are filed.

Commission should adopt additional restrictions to further safeguard the benefits reserved for designated entities.[102]

Since release of the *Second Report and Order*, several parties submitted filings in this docket addressing various aspects of the order, including, among other issues, how the Commission has defined material relationships, whether the Commission should apply the revised unjust enrichment schedule to licenses issued prior to the release of its decision, and whether the new rules should apply to the AWS auction. On June 2, 2006, the Commission released an *Order on Reconsideration of the Second Report and Order* clarifying, on its own motion, certain aspects of the *Second Report and Order*.[103] The *Order on Reconsideration* effectively addressed the merits of many of the Petitioners' claims, including their claims that the *Second Report and Order's* provisions relating to the leasing and resale of spectrum and the revisions to the unjust enrichment rules violated the Administrative Procedure Act's notice and comment provisions. The Commission also clarified that the ten-year unjust enrichment schedule applies only to licenses that are granted after the release of the *Second Report and Order*. On June 6, 2006, Council Tree and two other parties filed a Petition for Review in the U.S. Court of Appeals for the Third Circuit challenging the revised designated entity rules adopted in the *Second Report and Order*. The Petition for Review is currently pending in the Third Circuit.

Since the release of the 2004 Biennial Review, the Commission has concluded a number of spectrum auctions for wireless services. On February 15, 2005, the Commission completed the auction for 242 broadband Personal Communication Service (PCS) licenses ("Auction No. 58"). In this auction, 24 winning bidders won a total of 217 licenses. On July 26, 2005, the Commission completed the auction of five Lower 700 MHz band C block (710-716/740-746 MHz) licenses (Auction No. 60), in which three winning bidders won the five licenses. On December 7, 2005, the Commission completed the auction of 22 Multichannel Video Distribution and Data Service ("MVDDS") licenses (Auction No. 63). In this auction, three winning bidders won a total of 22 licenses. On June 2, 2006, the Commission completed the auction of new nationwide commercial Air-Ground Radiotelephone Service licenses (Auction No. 65). In this auction, two winning bidders won a total of two licenses. On September 18, 2006, the Commission completed an auction of 90 MHz of AWS spectrum in the 1710-1755 MHz and 2110-2155 MHz bands (Auction No. 66). In this auction, 104 winning bidders won a total of 1,087 licenses. In addition, on February 7, 2007, the Commission commenced an auction of 64 1.4 GHz band licenses in the paired 1392-1395 MHz and 1432-1435 MHz bands, and in the unpaired 1390-1392 MHz band.

[102] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Second Further Notice of Proposed Rule Making*, 21 FCC Rcd 4753 (2006).

[103] Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures, *Order on Reconsideration of the Second Report and Order*, 21 FCC Rcd 4753 (2006).

Comments

No comments were filed with respect to this rule part.

Recommendation

The Part 1, 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. 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 the Part 1, subpart Q rules remain necessary in the public interest, staff continues to recommend, as part of its Section 11 analysis, 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 the 2002 Biennial Regulatory Review, staff concluded that the section 1.2111(a) requirement is no longer necessary for a number of reasons. The Commission adopted section 1.2111(a) at the outset of the auction program to accumulate the data necessary to evaluate its auction designs and judge whether winning bids were reflective of the true market value of the licenses.[104] However, in the eight years since the rule was adopted, staff indicated that the Commission had developed extensive experience with auctions and auction design, so that collection of this data no longer appeared to be needed to monitor the effectiveness of the Commission's auction designs. Moreover, staff believed that because the value of licenses changes with time and circumstances, fluctuations in secondary market values from the original auction price are not reliable indicators of whether licenses were sold for their "market value" at auction. Staff also believed that the rule was over-inclusive because it required parties engaged in many routine transfers and assignments to provide documentation that was not needed for the Commission to conduct its public interest review of those transactions. Finally, staff concluded that the provision appeared to be unnecessary to the application of the Commission's designated entity unjust enrichment provisions. Section 1.2111(a) requires disclosure that focuses on the monetary or other consideration received for the transfer or assignment of licenses. However, determining whether unjust enrichment is owed with respect to bidding credits or installment payments is based on the eligibility of the transferee or assignee for the bidding credits or installment payments, which is a question of attribution of gross revenues based on principles of control rather than on the secondary market price of the license.

[104] *See* Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Report and Order*, 9 FCC Rcd 2348, 2385 ¶ 214 (citing H.R. Rep. No. 103-111 at 257) (1994).

For the reasons discussed in the 2002 Biennial Review Staff Report, staff also recommended in the 2004 Biennial Regulatory Review Staff Report revising section 1.2111(a). 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.

By its recommendation, staff does not intend to propose any limitation on the Commission's authority under section 308(b) of the Act to require disclosure of specific transaction information, including contract documents and the transaction price, in any transfer or assignment proceeding in which the Commission needs such information to conduct its public interest review, or to determine eligibility for designated entity provisions or applicability of unjust enrichment payments.

PART 1, SUBPART X – SPECTRUM LEASING

Description

Part 1, Subpart X,[105] 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. Depending on the specific aspects of a particular proposed spectrum leasing arrangement, these rules permit licensees and spectrum lessees to enter into the arrangement either through streamlined or immediate processing procedures (as discussed below).

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 our public interest objectives, including the Commission's policies that promote competition. These rules allow more flexible use of spectrum by licensees and other spectrum users, better define licensees' and spectrum users' rights and responsibilities, enable use of spectrum across various dimensions (frequency, space and time), promote the efficient use of spectrum, and provide for continued technological advances.

Analysis

Status of Competition

Since the Part 1, Subpart X, spectrum leasing rules became effective in 2004,[106] spectrum lessees have gained access to spectrum in hundreds of different spectrum leasing arrangements in a variety of Wireless Radio Services, including Cellular Service, broadband Personal Communications Service (PCS), Specialized Mobile Radio (SMR), Broadband Radio Service (BRS), Educational Broadband Service (BRS), and the 39 GHz Service. The spectrum leasing rules facilitate competition among wireless service providers.

Advantages

These spectrum leasing rules are intended for the express purpose of promoting efficient use of spectrum through the elimination of barriers to the development of secondary

[105] 47 C.F.R. Part 1, Subpart X.

[106] *See* Wireless Telecommunications Bureau Announces FCC Form 603-T is Available and Provides Guidance Regarding the Interim Process for Filing Spectrum Leasing Notifications and Applications, *Public Notice*, DA 04-252 (rel. Feb. 2, 2004). In 2006, the Commission implemented procedures permitting immediate processing of qualifying spectrum leasing arrangements. *See* Wireless Telecommunications Bureau Announces FCC Form 608 is Available for Filing Spectrum Leasing Notifications and Applications and Private Commons Arrangements, *Public Notice*, DA 06-1723 (rel. Aug. 28, 2006).

markets. These flexible policies promote 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 these types of secondary market arrangements enhance and complement 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 impose some administrative burden on licensees and spectrum lessees in order to ensure their compliance with the Commission's rules applicable to spectrum leasing arrangements.

Recent Efforts

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[107] to permit licensees and spectrum lessees to enter into spectrum leasing arrangements using streamlined processing procedures. The rules are designed to ensure that any such arrangement is consistent with our public interest objectives, which include ensuring that any such arrangement would not cause competitive harm.[108] In 2004, the Commission created Form 603T to implement these streamlined processing procedures (in the Universal Licensing System). Later in 2004, the Commission adopted the *Secondary Markets 2nd Report and Order*, which provided for immediate (i.e., overnight) processing of certain qualifying spectrum leasing arrangements, and also authorized licensees to make spectrum available to third-party users on a "private commons" basis.[109] In 2006, the Commission implemented its overnight processing procedures through issuance of new Form 608.

Comments

No comments were filed with respect to this rule part.

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[107] 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*).

[108] *See id.* at ¶¶ 116-119, 147 (establishing policies and procedures to ensure that spectrum leasing arrangements do not contravene Commission policies that promote facilities-based competition and guard against the harmful effects of anticompetitive conduct).

[109] 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*).

Recommendation

Staff recommends retention of these rules, as they are intended to foster competition. 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." However, we will continue to be receptive to further careful examination of these rules for potential repeal or modification in the future.

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,[110] 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.[111] 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.[112]

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.

[110] 47 U.S.C. § 303(q).

[111] 47 C.F.R. Part 17.

[112] 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 requesting that the Commission initiate a rulemaking proceeding to modernize and enhance the Part 17 Rules. In support of this request, PCIA attached its Petition for Rulemaking, filed on September 12, 2006, to modernize and clarify Part 17 of the Commission's Rules. The Petition seeks five rulemaking changes, listed below:

1. PCIA seeks to amend Section 17.47(b) of the rules, which requires quarterly inspections of all automatic or mechanical control devices, indicators, and alarm systems associated with antenna structure lighting to insure that such apparatus is functioning properly, by exempting systems using network operations control (NOC)-based monitoring technology from this requirement.

2. PCIA seeks to amend Sections 17.4(e)-(f) and 17.6(c) of the rules to eliminate the requirement that owners provide tenants with paper copies of FCC Form 854R. Instead, PCIA recommends that the rules should require antenna structure owners to provide the ASR number or some indication that the ASR has been changed or updated, and then permittees and licensees may obtain relevant Form 854R information from the FCC's ASR Online Systems.

3. PCIA seeks to amend Section 17.4(g) of the rules, which provides that the "Antenna Structure Registration Number must be displayed in a conspicuous place so that it is readily visible near the base of the antenna structure." PCIA would instead clarify the rule to expressly permit posting at the compound fence or gate, on the basis that it is necessary to assure consistent application of the rule to resolve tension between the "readily visible" and "near the base" requirements.

4. PCIA seeks amendment of Section 17.23 of the rules to update a reference to an FAA Circular that has since been revised and superseded. In taking this step to incorporate revised AC 70/7460-IK, effective August 1, 2000, PCIA also seeks to amend the rule to clarify that the lighting and marking specifications assigned to the structure by the FCC upon registration do not change unless the FAA recommends new specifications for the particular structure (i.e., they do not change with new FAA circulars or interpretations). Further, PCIA would specify that any new FAA specifications for the particular structure must be based on changes in height, coordinates, or prior error in data.

5. PCIA seeks amendment of Section 17.57 to change from 24 hours to 5 days the time in which the antenna structure owner must notify the FCC of completion of construction

and/or dismantlement. For purposes of internal consistency, PCIA also recommends changing the period for notifying the FCC of changes in height or ownership from "immediately" to 5 days.

PCIA's Petition for Rulemaking has been placed on Public Notice to allow interested persons to file statements opposing or supporting it.[113]

Recommendation

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

While staff generally concludes that Part 17 rules remain necessary in the public interest, it nonetheless also concludes 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 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.

[113] Consumer & Governmental Affairs Bureau Reference Information Center Petition for Rulemakings Filed, *Public Notice*, Report No. 2794 (rel. October 30, 2006).

PART 20 – SECTION 20.6 – CMRS SPECTRUM AGGREGATION LIMIT

Description

Section 20.6[114] 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.[115] 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.[116] The Commission determined, however, that a sunset period was necessary in order to prepare for case-by-case review.[117] The sunset period was codified in Section 20.6(f) of the rules.[118] 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.[119]

Comments

No comments were filed with respect to this rule.

Analysis and Recommendation

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.

[114] 47 C.F.R. § 20.6.

[115] *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*).

[116] *See Spectrum Aggregation Limits Order*, 16 FCC Rcd at 22670-71.

[117] *See id.* at 22669.

[118] 47 C.F.R. § 20.6(f).

[119] *See id.* at 22669-70.

PART 20, SECTION 20.9 – COMMERCIAL MOBILE RADIO SERVICE

Description

Section 20.9[120] sets forth certain mobile services that may be treated as common carriage services and regulated as commercial mobile radio services (CMRS) pursuant to Section 332 of the Communications Act.[121] The section also states that a mobile service that does not meet the definition of CMRS is presumed to be a private mobile radio service (PMRS). In addition, the section states: 1) how licensees or applicants in certain services can overcome the presumption that their services are CMRS; and 2) how non-CMRS licensees or applicants can overcome their regulatory treatment as PMRS.

Purpose

The purpose of section 20.9 is to ensure that parties know which mobile services are regulated as either CMRS or PMRS. The section also provides guidance on how the regulatory presumption of CMRS or PMRS can be overcome.

Analysis

Status of Competition

As detailed in the *Eleventh CMRS Competition Report*, CMRS providers operate in an environment that is marked by increased competition, innovation, lower prices for consumers, and increased diversity of service offerings.[122] 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

Section 20.9 sets forth how mobile services will be treated as either CMRS or PMRS and provides guidance with respect to how that regulatory presumption can be overcome.

Disadvantages

Overcoming the CMRS presumptions requires the submission of regulatory filings to the Commission. These filings must be reviewed and approved by the Commission.

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[120] 47 C.F.R. § 20.9.

[121] 47 U.S.C. § 332.

[122] *Eleventh CMRS Competition Report*, FCC 06-142 at ¶¶ 149-188.

Comments

No comments were filed with respect to this rule.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." While the staff does not recommend modification or repeal of the rule at this time, it will continue to be receptive to further careful examination of this rule in the future.

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,[123] which was enacted by Congress as part of the Omnibus Budget Reconciliation Act of 1993.[124] Section 20.11[125] 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. Recent amendments further provide that LECs may not impose compensation obligations on CMRS providers for non-access traffic pursuant to tariffs, and that an incumbent LEC may request interconnection with a CMRS provider and invoke the negotiation and arbitration procedures of section 252 of the Act to reach an agreement.

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.[126] 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.[127] 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.[128] 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.[129]

Section 20.11 is organized into five 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

[123] 47 U.S.C. § 332(c)(1)(B).

[124] *See* 47 U.S.C. § 332.

[125] 47 C.F.R. § 20.11.

[126] *See* 47 U.S.C. §§ 251, 252.

[127] 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*).

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

[129] 47 C.F.R. § 20.11(c). *See also Local Competition First Report and Order*, 11 FCC Rcd at 16195.

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. Subsection (d) prohibits LECs from imposing compensation obligations pursuant to tariff. Subsection (e) authorizes incumbent LECs to request and obtain an interconnection agreement through negotiation and arbitration.

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 *Eleventh CMRS Competition Report*, the Commission noted that wireless substitution has grown significantly in recent years. It cited a 2005 National Health Interview Survey that found that 7.8 percent of adults lived in households with only wireless phones in the second half of 2005, up from 5.5 percent in the second half of 2004, and 3.5 percent in the second half of 2003.[130] The Commission also noted that, even when not "cutting the cord" completely, consumers increasingly are choosing wireless service over traditional wireline service, particularly for certain uses.[131]

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. Recent amendments ensure that any compensation obligations are imposed pursuant to an agreement between the parties.

[130] *Eleventh CMRS Competition Report*, FCC 06-142 at para. 205.

[131] *Id*. at para. 206.

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. Recent amendments requiring compensation solely pursuant to agreement rather than tariff may increase a LEC's transaction costs of obtaining compensation.

Recent Efforts

The Commission has continued its examination of how to reform the current system of intercarrier compensation and interconnection, which began with the release of a Notice of Proposed Rulemaking in 2001.[132] 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. In response to the *Intercarrier Compensation NPRM*, several groups developed comprehensive plans, which the Commission put out for comment in the *Intercarrier Compensation FNPRM* in 2005.[133] In 2006, a newly negotiated industry proposal called the Missoula Plan was also put out for comment.[134]

On February 24, 2005, the Commission released a decision addressing a petition filed by CMRS petitioners that sought 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.[135] The Commission denied the petition, but amended rule 20.11 to prohibit LECs from imposing compensation obligations on CMRS providers by tariff in the future "in order to make clear [its] preference for contractual arrangements for non-access CMRS traffic."[136] To ensure that incumbent LECs could obtain compensation in the absence of tariffs, the Commission also authorized incumbent LECs to request interconnection with CMRS providers and obtain an agreement through section 252 negotiation and arbitration procedures. It also established interim compensation terms that would apply to traffic during the negotiation and arbitration process.

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[132] 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*).

[133] *See* Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Further Notice of Proposed Rulemaking,* 20 FCC Rcd 4685 (2005) (*Intercarrier Compensation FNPRM*).

[134] Public Notice, "Comment Sought on Missoula Intercarrier Compensation Reform Plan," CC Docket No. 01-92, 21 FCC Rcd 8524 (2006).

[135] *See* 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); Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92, *Declaratory Ruling and Report and Order*, 20 FCC Rcd 4855 (2005) (*T-Mobile Order*).

[136] *T-Mobile Order*, 20 FCC Rcd at 4863.

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). We recommend that the Commission determine in that proceeding whether section 20.11 is necessary in the public interest and, if it is not, to repeal or modify the rule so that it is in the public interest.

PART 20, SECTION 20.12 – RESALE

Description

Section 20.12(b)[137] 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.[138]

Comments

No comments were filed with respect to this rule.

Analysis and Recommendation

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.

[137] 47 C.F.R. § 20.12(b).

[138] *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)[139] 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.[140]

Purpose

The purposes of the manual 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.[141] 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 regional and rural carriers have alleged that they have been unable to enter into roaming

[139] 47 C.F.R. § 20.12(c).

[140] *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).

[141] *See generally Tenth Annual CMRS Competition Report*, 20 FCC Rcd 15908 ¶¶ 128-129.

agreements with competing nationwide carriers with terms and conditions that they consider to be reasonable. 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 often results in 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

The Commission adopted its manual roaming rule in 1996, and at that time 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.[142] 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.[143] 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.[144] In August 2005, the Commission issued a *Memorandum Opinion and Order* that terminated the previous consideration of roaming issues in WT Docket No. 00-193, on the basis that the comments filed and the matters at issue therein were stale due to the passage of time and other regulatory and industry changes that had occurred since the commencement of that proceeding. In a related *Notice of Proposed Rulemaking* in WT Docket No. 05-265, the Commission initiated a new proceeding to examine CMRS roaming in a manner that takes into account current technological and market conditions.[145] Specifically, the Commission

[142] 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).

[143] 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).

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

[145] *See* Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers, WT Docket No. 05-265, *Memorandum Opinion & Order and Notice of Proposed Rulemaking*, 20 FCC Rcd 15047 (2005)(*Roaming NPRM)*.

requested comment on, among other things, 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.[146] This proceeding remains pending.

Comments

Navajo Nation filed comments stating that roaming should be universally mandated for services provided via a federally-subsidized telecom project, and there should be no charge for roaming services to customers utilizing services from these projects. In Indian reservation lands, the Navajo Nation asserts that mandatory roaming would result in choices and competitive prices for the consumers.

Recommendation

Staff notes that issues relevant to this Biennial Review concerning section 20.12 are within the scope of the pending *Roaming NPRM*.[147] We recommend that the Commission determine in that proceeding whether section 20.12 is necessary in the public interest and, if it is not, to repeal or modify the rule so that it is in the public interest. Additionally, we believe the recommendations of the Navajo Nation, because they seek new rules, are outside the scope of the Section 11 review. However, we will incorporate the Navajo Nation's comments into the record of the pending *Roaming NPRM*.

[146] *Id.*

[147] *Id.*

PART 20, SECTION 20.15 – REQUIREMENTS UNDER TITLE II OF THE COMMUNICATIONS ACT

Description

Section 20.15 sets forth requirements under Title II of the Communications Act that are applicable to commercial mobile radio service (CMRS) providers. The rule also stipulates the requirements under Title II that do not apply to CMRS carriers. The rule states that CMRS providers are not required to file copies of contracts entered into with other carriers or comply with other reporting requirements, except that CMRS providers that offer broadband service or mobile telephony are required to file reports pursuant to sections 1.7000 and 43.11 of the Commission's Rules (regarding the Commission's Form 477 local competition and broadband data gathering program).

On November 9, 2004, the Commission adopted an order that changed the rules regarding the local competition and broadband data gathering program. It determined that the Form 477 data gathering program would be extended for five years beyond the formerly designated March 2005 sunset date. The Commission also decided to eliminate reporting thresholds and adopt various modifications to Form 477.

Purpose

The purpose of the Form 477 data gathering program is to allow the Commission to monitor local telephone competition and broadband deployment.

Analysis

Status of Competition

Because the purpose of the Form 477 data gathering program is to help the Commission monitor the status of local competition and broadband deployment, general competitive developments in the services to which the rule applies do not affect the need for this rule.

Advantages

The information collected in the Form 477 program helps the Commission and the public understand the extent of local telephone competition and broadband deployment, which is important to the nation's economic, educational, and social well-being. The improvements adopted in the Commission's order were necessary to ensure that the Commission may continue to effectively evaluate broadband and local competition developments.

Disadvantages

The Form 477 data gathering program imposes reporting, record-keeping, and other compliance requirements on CMRS carriers that provide broadband service or mobile telephony.

Comments

No comments were filed with respect to this rule.

Recommendation

As noted above, the purpose of the Form 477 data gathering program is to allow the Commission to monitor local telephone competition and broadband deployment. Collecting this information improves the Commission's ability to develop, evaluate, and revise policy in these rapidly changing areas. Accordingly, pursuant to our Section 11 biennial review, 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 staff 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 future.

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).[148] 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.

[148] 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.

The Commission has recognized that requests for waiver of E911 requirements may be justified, but only if appropriately limited, properly supported, and consistent with established waiver standards. In an Order adopted March 22, 2005 and released April 1, 2005, the Commission comprehensively examined and addressed forty requests for relief from the E911 Phase II requirements filed by Tier III wireless carriers.[149]

Pursuant to the Ensuring Needed Help Arrives Near Callers Employing (ENHANCE) 911 Act of 2004, enacted December 23, 2004,[150] the Commission submitted a report to Congress on the deployment of Phase II E911 services by Tier III carriers (submitted March 23, 2005, amended April 1, 2005).

Under the ENHANCE 911 Act, the Commission must act within 100 days on petitions filed by Tier III carriers requesting a waiver of the December 31, 2005 95% handset penetration requirement (contained in Section 20.18(g)(1)(v)), and grant such a waiver if "strict enforcement … would result in consumers having decreased access to emergency services." The standard established under the ENHANCE 911 Act is distinct from the Commission's rules and established precedent regarding waivers of the E911 requirements. Beginning in late 2004, a number of Tier III carriers have filed for relief under the standard for waiver of the December 31, 2005 95% handset penetration

[149] Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems; E911 Phase II Compliance Deadlines for Tier III Carriers, CC Docket No. 94-102, *Order*, 20 FCC Rcd 7709, 7709-7710 ¶ 1 (2005).

[150] National Telecommunications and Information Administration Organization Act – Amendment, Pub. L. No. 108-494, 118 Stat. 3986 (2004).

requirement established under the ENHANCE 911 Act. Based on the particular circumstances presented, the Commission has acted within the 100-day statutory deadline to grant relief to the extent that the carriers have met the statutory standard.

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. Accordingly, pursuant to our Section 11 biennial review, 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 staff therefore recommends that neither modification nor repeal of these rules is warranted.

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 Act.[151] 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 were required to offer at least two handset models meeting a U3 rating for each air interface offered by September 16, 2005. Second, they must ensure that 50% of their handset offerings for each air interface offered meet a U3 rating by February 18, 2008. Third, each manufacturer and CMRS provider was required to offer at least two handset models for each air interface that complies with the Commission's inductive coupling rules by September 18, 2006. Tier I wireless carriers were additionally required, by September 16, 2006, to make available to consumers, per air interface, five U3-rated handsets, or twenty-five percent of the total number of handsets they offer nationwide.

The Commission also adopted rules governing labeling and in-store consumer testing of digital wireless handsets. The rules require packages containing compliant handsets be clearly labeled, and that detailed information be included in the package or product manual. Carriers must provide a means for consumers to test hearing aid-compatible handset models in their owned and operated retail stores.

To accommodate small business concerns, the Commission adopted a *de minimis* exception that exempts, from the Hearing Aid Compatibility requirements, manufacturers or service providers that offer two or fewer digital wireless handset models for any air interface in the U.S.

[151] 47 C.F.R. § 20.19.

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.

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 Hearing Aid Compatibility 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

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.

The Commission recently reconsidered certain aspects of its hearing aid-compatibility rules, modifying obligations of Tier I and TDMA carriers, and clarifying the scope of the *de minimis* exemption and the requirement to make handsets available to customers for

in-store testing. *See* Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, *Order on Reconsideration and Further Notice of Proposed Rulemaking*, 20 FCC Rcd 11221 (2005). The Commission also granted a partial waiver of hearing aid-compatibility rules to GSM carriers offering dual-band handsets that operate in the 850 MHz and 1900 MHz bands. *See* Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, *Memorandum Opinion and Order*, 20 FCC Rcd 15108 (2005). Currently, the Commission is reviewing comments in response to Commission's *Order on Reconsideration and Further Notice of Proposed Rulemaking* in which it sought comment on whether to extend the live, in-store consumer testing requirement to retail outlets that are not directly owned or operated by wireless carriers or service providers; and whether to narrow the *de minimis* exception so as to exempt from the hearing aid compatibility requirements wireless carriers, service providers and handset manufacturers that offer one digital wireless handset model per air interface, as well as other potential ways to narrow the *de minimis* exception. *See* Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones, WT Docket No. 01-309, *Order on Reconsideration and Further Notice of Proposed Rulemaking*, 20 FCC Rcd 11221 (2005).

The Commission required digital wireless carriers and handset manufacturers to report semi-annually on compliance efforts made during the first three years, then annually thereafter through the fifth year of implementation. Among other information, reports must provide: the number of compliant and non-compliant wireless phone models; the phones tested and test results; the lab used; the status of product labeling; outreach efforts; the retail availability of compliant phones; and ongoing efforts. The Commission reviews the semi-annual reports as they are filed by the carriers and manufacturers. The most recent reports were filed on November 17, 2006.

On November 8, 2006, the Bureau released a Public Notice seeking comment on: (1) the impact of the Commission's rules in achieving greater compatibility between hearing aids and digital wireless phones; (2) the development of new technologies that could provide greater or more efficient accessibility of wireless telecommunications to hearing aid users; and (3) the impact of the Commission's compatibility requirements on cochlear implant and middle ear implant users and their ability to use digital wireless phones. *See* Public Notice, Wireless Telecommunications Bureau Seeks Comment on Topics to be Addressed in Hearing Aid Compatibility Report, WT Docket No. 06-203, DA 06-2285 (WTB rel. Nov. 8, 2006). Comments were due on January 12, 2007, and reply comments were due on January 31, 2007. Based on these comments and on the carriers' and manufacturers' semi-annual reports, Commission staff will prepare a report that will form the basis for the Commission to initiate a proceeding to evaluate: (1) whether to increase or decrease the 2008 requirement to provide 50 percent of phone models that comply with a U3 rating; (2) whether to adopt hearing aid compatibility implementation benchmarks beyond 2008; and (3) whether to otherwise modify the hearing aid compatibility requirements.

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 Hearing Aid Compatibility 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 20.20[152] 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.[153]

This separate affiliation rule sunset on January 1, 2002.

Comments

No comments were filed with respect to this rule.

Analysis and Recommendation

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.

[152] 47 C.F.R. § 20.20.

[153] 47 C.F.R. § 20.20(a).

PART 22 – PUBLIC MOBILE SERVICES

Description

Part 22[154] 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) list the frequency bands allocated to each service; (2) establish technical channel assignment criteria; (3) set forth service provision and other operating requirements; and (4) provide technical limits that facilitate efficient spectrum use and reduce the likelihood of interference.

Part 22 comprises 10 subparts:

Subpart A - Scope and Authority

Subpart B - Licensing Requirements and Procedures

Subpart C - Operational and Technical Requirements

Subpart D - Developmental Authorizations

Subpart E - Paging and Radiotelephone Service

Subpart F - Rural Radiotelephone Service

Subpart G - Air-Ground Radiotelephone Service

Subpart H - Cellular Radiotelephone Service

Subpart I - Offshore Radiotelephone Service

Subpart J - Required New Capabilities Pursuant to the Communications Assistance for Law Enforcement Act (CALEA)

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

Purpose

Part 22 of the Commission's rules comprises a minimal regulatory framework that facilitates the rapid, efficient provision of commercial wireless telecommunications services to the general public at reasonable rates by: (1) utilizing a competitive bidding

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

process to issue initial geographic area based licenses where there are mutually exclusive applications; (2) encouraging competition among 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 *Eleventh 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.[155] 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 an efficient structure for the assignment of frequency bands and channels to commercial wireless mobile and fixed stations. In Part 22, provision for accepting competing mutually exclusive applications and selecting the licensee by means of competitive bidding generally 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 use of very flexible technical standards in most Part 22 services places the burden of interference avoidance and technical coordination on the licensees in the first instance.

Recent Efforts

On July 8, 2004, the Commission adopted the *Rural R&O and FNPRM*.[156] 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

[155] *Eleventh CMRS Competition Report*, FCC 06-142 at ¶¶ 149-188.

[156] *Rural R&O and FNPRM*, 19 FCC 19078 (2004).

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.

On December 15, 2004, the Commission adopted a *Report and Order* that substantially revises the rules governing the Air-Ground Radiotelephone Service.[157] Among other things, 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. In December 2005, in response to petitions for reconsideration of the 2004 *Report and Order*, the Commission adopted a *Reconsideration Order and Report and Order* affirming most of its decisions and clarifying some minor points.[158] The Commission also adopted final competitive bidding rules for the 800 MHz commercial and 400 MHz general aviation air-ground services and defined small businesses eligible for bidding credits. In 2006, the commercial aviation Air-Ground auction was held and it was successful in selecting both a band plan and two new licensees.

As part of the *Report and Order* regarding the Air-Ground Radiotelephone Service discussed in the preceding paragraph, the Commission also streamlined certain non-cellular Part 22 Public Mobile Services rules that were found no longer to be warranted.[159] For example, the Commission removed the requirement that Part 22

[157] *See* 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Report and Order and Notice of Proposed Rule Making*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 4403 (2005); *See* FCC News Release, *FCC Paves the Way for New Broadband Services in the Air* (rel. Dec. 15, 2004).

[158] *See* 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Order on Reconsideration and Report and Order*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 19663 (2005).

[159] 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of

(continued....)

licensees be common carriers, modified rules governing the provision of dispatch service by paging licensees, and recodified certain Part 22 rules to Part 1 to provide uniform methods for the calculation of terrain elevation and distance for most wireless services.

On December 15, 2004, the Commission adopted a *Notice of Proposed Rulemaking* to consider whether to revise or eliminate its current ban on the use of cellular telephones on airborne aircraft.[160]

On July 22, 2005, the Commission adopted a *Report and Order and Further Notice of Proposed Rule Making* that streamlines and harmonizes the Part 1, 22, 24, 27, and 90 rules to clarify spectrum rights and obligations and optimize flexibility for wireless service licensees.[161] For example, the Commission removed or modified various out of date licensing provisions relating to dispatch service. In the *Further Notice*, the Commission sought comment on potential changes to the Cellular Radio Telephone Service power limits.

Comments

Ericsson filed comments reiterating its support to change power limits in the PCS and AWS services but make no change in the cellular service. This issue is being considered in the Streamlining and Harmonization proceeding discussed above.

Recommendation

The Part 22 rules establish general operating and technical requirements applicable to our many Part 22 licensees as well as licensees in adjacent services. We note that the Part 22 rules are under consideration in several proceedings outlined above. We recommend that the Commission determine in those proceedings whether the Part 22 rules are necessary in the public interest and, if they are not, to repeal or modify any rule so that it is in the public interest. Pursuant to our Section 11 biennial review, to the extent that the Part 22 rules are not under consideration in pending proceedings, 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." However, we will continue to be receptive to further careful examination of these rules for potential repeal or modification in the future.

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Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Report and Order and Notice of Proposed Rule Making*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 4403 (2005).

[160] Amendment of the Commission's Rules to Facilitate the Use of Cellular Telephones and other Wireless Devices Aboard Airborne Aircraft, *Notice of Proposed Rule Making*, WT Docket No. 04-435, 20 FCC Rcd 3753 (2005).

[161] Biennial Regulatory Review -- Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 03-264, 20 FCC Rcd 13900 (2005).

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).[162] 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.[163] The allocations covered by subpart E have historically been used for common carrier telecommunications services, most recently tone, voice, numeric, and alphanumeric paging services. Some of these paging services continue. Increasingly, however, as paging has declined in the last decade, licensees are also finding new uses for these paired allocations, including two-way voice and data distribution and augmentation to public safety systems.

In general, the rules in this subpart: (1) specify the frequency bands allocated to PARS; (2) set forth methods for providing interference protection to grandfathered individually-licensed stations; (3) establish certain operating requirements for licensees; and (4) define technical limits on operation (*e.g.*, transmitter power).

The PARS rules have evolved significantly over the years. The PARS rules were originally designed for radiotelephone and paging, as the name implies, but have been modified over the years to be much more flexible. Consequently, the rules currently allow any type of mobile or fixed service to be provided, using any type of technology that is technically feasible in the bandwidth available, and allow the aggregation of channels and partitioning of area as well. There are also some rules pertaining to the operation of internal point-to-point and point-to-multipoint fixed links that support telecommunications systems.

Part 22, subpart E is currently organized into six groups of rules. The first group of rules applies to all PARS stations.[164] 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 these types (*e.g.*, trunked) are obsolescent and the associated rules have been greatly simplified accordingly. Some of the PARS 454-459 MHz channels are shared with several remaining basic exchange telephone radio systems (providing Rural Radiotelephone Service).

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

[162] 47 C.F.R Part 22, subpart E.

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

[164] 47 C.F.R. §§ 22.501-22.529.

public at reasonable rates by: (1) utilizing a competitive bidding process to issue initial geographic area based licenses where there are mutually exclusive applications; (2) encouraging competition among 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

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 *Eleventh CMRS Competition Report* notes that paging carriers continue to experience a decline in overall subscribers with a total of 8.3 million paging units in service as of the end of 2005, down from 11.2 million units at the end of 2003 (*e.g., the 2004 Biennial Review Staff Report*).[165]

Advantages

Part 22, subpart E rules provide an efficient structure for the assignment of allocated channels to PARS stations. Geographic area licensing has minimized the amount of on-going paperwork in maintaining the license data in this service. Minimal and flexible technical standards are facilitating the introduction of new uses for the PARS allocation.

Disadvantages

The PARS rules impose some burdens related to compliance with the few remaining 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*.

The Commission has sought comment on a Petition for Rulemaking filed by Icom, Inc. to re-designate Part 22 150 MHz paging channels for public safety operations.[166]

[165] See *Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 166.

[166] *Public Notice*, Report No. 2755, released January 27, 2006, 2006 WL 213804 (F.C.C.)

Comments

No comments were filed with respect to this subpart.

Recommendation

The various Part 22, subpart E rules are 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. 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." The staff therefore recommends that neither modification nor repeal of these rules is warranted. However, we will continue to be receptive to further careful examination of these rules for potential repeal or modification in the future.

PART 22, SUBPART F – RURAL RADIOTELEPHONE SERVICE

Description

Part 22, subpart F[167] contains technical and operational rules for the Rural Radiotelephone Service. The rules contain provisions governing eligibility, assignment of channels, and management of interference.

The Rural Radiotelephone service is the only service regulated under Part 22 that is solely a fixed service. Rural Radiotelephone service was established as an alternative method for making 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 Radiotelephone 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 Radiotelephone service – conventional stations and basic exchange telephone radio systems (BETRS). Conventional Rural Radiotelephone stations may be licensed to any applicant. 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 Radiotelephone 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 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 Radiotelephone 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 Radiotelephone service is now used only as a legacy last resort in the most remote rural areas, where wireline telephone service is infeasible or not cost-effective. While historically, Rural Radiotelephone customers have had few if any competitive

[167] 47 C.F.R. Part 22, subpart F.

alternatives for provision of telephony due to their geographic isolation, other wireless services, such as cellular and PCS, have expanded into these areas, and availability of competitive alternatives is likely to increase in the future, especially with the implementation of the *Rural Report and Order*. It should be noted that there are no longer any manufacturers of BETRS equipment for this band, so all remaining usage in this service is from installed facilities.

Advantages

The rules in Part 22, subpart F provide for the continued assignment of allocated channels to Rural Radiotelephone stations for as long as such may be needed.

Disadvantages

None.

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 technical and operational in nature. However, the need for the type of facilities governed by these rules will be considerably impacted as superior alternatives (WiMAX, VoIP, etc.) become more available in rural areas. At this time, the need for these rules is not directly affected by competitive developments that guide our Section 11 analysis. Accordingly, we do not find that these Part 22 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service." We will continue to monitor the displacement of this service by alternative rural basic telephone technologies with an eye toward recommending eliminating this subpart when the need for it is gone.

PART 22, SUBPART G – AIR-GROUND RADIOTELEPHONE SERVICE

Description

Part 22, subpart G[168] contains licensing, technical, and operational rules for the Air-Ground Radiotelephone Service (AGS). In the past, the AGS provided commercial telephone service to persons in airborne aircraft, using telephone instruments that are permanently mounted in the aircraft. As explained below, the 800 MHz AGS has been restructured to expand the capability of the licensees to provide other services, such as internet and data services.

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

Currently, Verizon Airfone holds the single remaining incumbent license in the Commercial Aviation band. As a result of Auction No. 65 that concluded on June 2, 2006, however, the Commission named two winning bidders (ACBidCo and LiveTV) who have applied to obtain competing licenses in the band. Verizon Airfone, in

[168] 47 C.F.R. Part 22, subpart G.

consideration of these developments, has announced that it plans to discontinue this service by the end of 2006.

Advantages

The newly adopted AGS rules provide for the efficient assignment and use of the air-ground spectrum allocations by competing service providers.

Disadvantages

None.

Recent Efforts

On December 15, 2004, the Commission adopted a *Report and Order* that substantially revised the rules governing the Air-Ground Radiotelephone Service.[169] Among other things, 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. In December 2005, in response to petitions for reconsideration of the 2004 *Report and Order*, the Commission adopted a *Reconsideration Order and Report and Order* clarifying that stratospheric platforms, such as high-altitude balloons, may be used to provide air-ground services.[170] The Commission also adopted final competitive bidding rules for the 800 MHz commercial and 400 MHz general aviation air-ground services and defined small businesses eligible for bidding credits. The Commission also eliminated the requirement that general aviation stations use only AGRAS (an aging technology), which will allow those licensees to try new technologies and take advantage of technical advances.

An 800 MHz Air-Ground (commercial aviation) auction (Auction No. 65) concluded on June 2, 2006, after two bidders placed winning bids on two licenses.[171] The Commission

[169] *See* 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Report and Order and Notice of Proposed Rule Making*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 4403 (2005).

[170] *See* 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, *Order on Reconsideration and Report and Order*, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 19663 (2005).

[171] "Auction of 800 MHz Air-Ground Radiotelephone Service Licenses Closes; Winning Bidders Announced for Auction No. 65," *Public Notice*, DA 06-1197 (rel. June 7, 2006).

granted licenses to the winning bidders on October 31, 2006 under call signs WQFX728 and WQFX729.[172]

Comments

No comments were filed with respect to this subpart.

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.[173] In addition, also as noted above, the Commission adopted a *Reconsideration Order and Report and Order* on December 9, 2005, which clarifies certain issues adopted in the *Report and Order* and adopts competitive bidding procedures.[174] Given the recent changes to the air-ground service rules and the absence of significant changes in the competitive landscape since the changes were made, 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." However, we will continue to be receptive to further careful examination of these rules for potential repeal or modification in the future.

[172] *See* FCC File Nos. 0002653156 and 0002658043.

[173] 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, Report and Order and Notice of Proposed Rule Making, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 4403 (2005).

[174] 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; Amendment of Parts 1 and 22 of the Commission's Rules To Adopt Competitive Bidding Rules for Commercial and General Aviation Air-Ground Radiotelephone Service; Application of Verizon Airfone Inc. for Renewal of 800 MHz Air-Ground Radiotelephone License, Call Sign KNKG804, Order on Reconsideration and Report and Order, WT Docket Nos. 03-103, 05-42, 20 FCC Rcd 19663 (2005).

PART 22, SUBPART H – CELLULAR RADIOTELEPHONE SERVICE

Description

Part 22, subpart H[175] 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, by: (1) utilizing a competitive bidding process to issue licenses; (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 *Eleventh 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.[176] As several of the largest providers of mobile telephony in the country have combined cellular service and PCS into single networks, it is no longer accurate to view cellular telephone service as separate and

[175] 47 C.F.R. Part 22, subpart H.

[176] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶¶ 149-188.

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.

Advantages

The rules provide a structure for the assignment and use of cellular spectrum. The rules provide for accepting applications for any remaining unserved areas and, in the case of mutually exclusive applications, selecting the licensee by means of competitive bidding. In addition, the rules contain minimal and flexible technical standards that facilitate the introduction of multiple technologies for digital service, data service and new features.

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 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.[177]

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.[178]

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. 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. 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." However, we will continue to be receptive to further careful examination of these rules for potential repeal or modification in the future.

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

[178] Amendment of the Commission's Rules to Facilitate the Use of Cellular Telephone and other Wireless Devices Aboard Airborne Aircraft, Notice of Proposed Rulemaking, WT Docket No. 04-435, 20 FCC Rcd. 3753 (2005).

PART 22, SUBPART I – OFFSHORE RADIOTELEPHONE SERVICE

Description

Part 22, subpart I[179] governs the licensing and operation of offshore radiotelephone stations. The Offshore Radiotelephone Service allows licensees 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. [180]

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.

[179] 47 C.F.R. Part 22, subpart I.

[180] 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 govern licensing procedures, set technical and operational standards, and protect against interference among Part 22 offshore radiotelephone licensees as well licensees in adjacent services. 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." The staff 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 future.

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.[181] Part 22, subpart J[182] 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.[183] These rules were adopted in 1999.[184] The Commission has adopted parallel requirements and standards for broadband PCS licensees in Part 24, subpart J[185] and for wireline telecommunications carriers in Part 64, subpart W.[186]

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 and Recommendation

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 outside the scope of the Commission's Section 11 biennial review.[187]

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[181] 47 U.S.C. § 1002.

[182] 47 C.F.R. Part 22, subpart J.

[183] *Id.*

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

[185] 47 C.F.R. Part 24, subpart J.

[186] 64 C.F.R. Part 64, subpart W.

[187] 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).[188] 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).[189] 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,[190] and were modified on reconsideration in 1994.[191] In 2000, the Commission issued an order further revising certain aspects of

[188] 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.

[189] *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.

[190] *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).

[191] *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.[192] The CALEA rules were adopted in a separate proceeding.[193]

Purpose

The purposes of the Part 24 rules are to establish basic ground rules for assignment of PCS spectrum, ensure efficient spectrum use by PCS licensees, and prevent interference. In addition, Part 24 contains rules that define eligibility for the PCS entrepreneurs' blocks and for "designated entity" (*i.e.*, small business) status within these blocks. The purpose of these provisions is to implement the objectives of section 309(j)(3) of the Communications Act 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. [194]

Analysis

Status of Competition

Broadband PCS providers offer mobile voice and data services in competition with cellular and some SMR services. PCS, cellular, and digital SMR networks use the same basic design.[195] The Commission estimates that as of December 2005, there were 213 million mobile telephone subscribers, up from 184.7 million at the end of 2004, which translates into a nationwide penetration rate of 71 percent.[196] The addition of 28.3 million subscribers was a 51 percent increase over the 18.8 million added in 2003. The *Eleventh CMRS Competition Report* cites analysts' reports that postulate that the higher subscriber growth is attributable to the attractiveness of innovative service models such as prepaid and family plans, which target previously underserved markets such as youth

(...continued from previous page)
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).

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

[193] *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).

[194] 47 U.S.C. § 309(j)(3).

[195] 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 97 percent of all wireless subscribers using digital service. *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 105.

[196] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 158.

and the credit-challenged as well as wireless substitution.[197] Digital subscribers made up more than 98 percent of all wireless subscribers at the end of 2005, up from 91 percent at the end of 2003.[198] Approximately 3.2 million analog-only mobile telephone subscribers remain.[199]

Non-voice services continue to play an increasingly important role in the CMRS industry. The *Eleventh CMRS Competition Report* cites an estimate by one analyst, that based on consumer billing records, mobile data usage reached approximately 50 percent of U.S. mobile subscribers in the fourth quarter of 2005.[200] This compares with an earlier estimate of mobile data use of 25 percent of U.S. mobile subscribers as of early 2004.[201]

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.

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 July 8, 2004, the Commission adopted the *Rural R&O and FNPRM*, adopting measures to facilitate the deployment of wireless services in rural areas including 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.[202]

On July 22, 2005, the Commission adopted a *Report and Order and Further Notice of Proposed Rule Making* that streamlines and harmonizes the Part 1, 22, 24, 27, and 90

[197] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 160.

[198] *See Eleventh CMRS Competition Report,* FCC 06-142 at ¶ 161; *Ninth CMRS Competition Report*, FCC 04-216 at ¶ 176.

[199] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 161.

[200] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 162.

[201] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 162, citing *Ninth Report*, at 20670; *Tenth Report*, at 15969.

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

rules to clarify spectrum rights and obligations and optimize flexibility for wireless service licensees.[203] For example, the Commission eliminated the transmitter output power limits under Part 24 and removed or modified several additional licensing provisions. In the *Further Notice*, the Commission sought comment on potential changes to the broadband PCS radiated power limits.

A broadband PCS auction (Auction No. 58) concluded on February 15, 2005, after twenty-four bidders placed winning bids on 217 licenses.[204]

The Part 24 rules governing microwave relocation from the 1850 – 1990 MHz band (2 GHz band) sunset on April 4, 2005.[205] These rules established a mechanism whereby PCS licensees that incurred costs to relocate microwave links received reimbursement for a portion of those costs and served to help expedite the clearing of the 2 GHz band in an equitable and efficient manner.[206]

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 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.[207]

[203] Biennial Regulatory Review -- Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 03-264, 20 FCC Rcd 13900 (2005).

[204] "Broadband PCS Spectrum Auction Closes; Winning Bidders Announced for Auction No. 58," *Public Notice*, DA 05-459 (rel. February 18, 2005).

[205] "Broadband PCS Entities and Fixed Microwave Services Licensees Reminded of April 4, 2005 Sunset of Relocation Cost Compensation and Microwave Cost Sharing Rules," *Public Notice*, DA 05-612 (rel. March 8, 2005). 47 C.F.R. §§ 24.239 – 24.253 (2005).

[206] Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, *First Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 95-157, 11 FCC Rcd. 8825, 8827 (1996).

[207] Ericsson Comments at 2.

Recommendation

Because the PCS/microwave cost-sharing rules[208] found in Part 24 sunset and are no longer in effect, the staff recommends that these rules be deleted from the Code of Federal Regulations. We also note that certain issues related to Part 24 rules are under consideration in the proceedings outlined above, including the power rule changes recommended by Ericsson. We recommend that the Commission determine in those proceedings whether the Part 24 rules are necessary in the public interest and, if they are not, to repeal or modify any rule so that it is in the public interest. To the extent that the Part 24 rules remain in effect and are not subject to a pending proceeding, we find that the Part 24 rules remain necessary in the public interest.

[208] 47 C.F.R. §§ 24.239 – 24.253.

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

Description

Part 27[209] 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;[210] (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 13 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 – Reserved
L – 1710–1755 MHz, 2110–2155 MHz, 2160–2180 MHz Bands
M – Broadband Radio Service and Educational Broadband Service

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

[209] 47 C.F.R. Part 27.

[210] 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.*

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 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 BRS/EBS 2.5 GHz Band, and the 1.7/2.1 GHz Band (AWS-1).

BRS/EBS. Under the new band plan and transition mechanism established by the Commission for the 194 megahertz of spectrum in the 2.5 GHz Band, BRS and EBS licensees are focusing on providing low power operations, such as two-way fixed and mobile broadband applications, in addition to high power operations, such as one-way video transmission.

700 MHz Band. Seventy-eight megahertz of the total 108 megahertz of Upper and Lower 700 MHz spectrum will generally be open to a broad range of flexible uses.[211] These bands have many permissible uses: new licensees may use the spectrum for fixed, mobile

[211] *See* Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), GN Docket No. 01-74, *Report and Order*, 17 FCC Rcd 1022 (2002) ("*Lower 700 MHz Report and Order*"); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Third Report and Order*, 16 FCC Rcd 2703 (2001); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Memorandum Opinion and Order*, 16 FCC Rcd 1239 (2001); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 20845 (2000); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, *Second Report and Order*, 15 FCC Rcd 5299 (2000) ("*Upper 700 MHz Second Report and Order*").

(including mobile wireless commercial services), and broadcast services.[212] The Commission expects that many of the new technologies to be developed and deployed in this band will support advanced wireless applications.[213] However, portions of the Upper and Lower 700 MHz spectrum are currently encumbered by television broadcasters, and may remain so until the end of the period when broadcasters convert from analog to digital transmission systems.[214] The Digital Television and Public Safety Act of 2005 ("DTV Act of 2005") established February 17, 2009 as the end of the DTV transition, and requires the Commission to commence the auction of the remaining spectrum recovered from analog broadcasting no later than January 28, 2008.[215] The Commission already has auctioned and issued licenses for a total of 18 megahertz of spectrum in the Lower 700 MHz Band.[216]

With respect to the 6 MHz of Guard Band spectrum in the 700 MHz Band, the Commission recently adopted a *Notice of Proposed Rule Making* that seeks comment on several service rule changes that may provide greater flexibility to 700 MHz Guard Bands licensees, while maintaining adequate interference protection for public safety licensees.[217]

AWS. The Commission recently auctioned and is currently licensing the 90 megahertz of AWS-1 spectrum to be used for any wireless service that is consistent with the spectrum's fixed and mobile allocations and to be licensed under the Commission's flexible, market-oriented Part 27 rules. To date, the Commission has issued 942 licenses (out of a total of 1,087) to the winning bidders at the AWS auction.

WCS. 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 unlicensed spectrum bands, 24 GHz, Local Multipoint Distribution Service (LMDS), and 39 GHz.

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[212] *Id.*

[213] *Lower 700 MHz Report and Order*, at 1032.

[214] *Id.*, at 1028.

[215] *See* Deficit Reduction Act of 2005, Pub. L. No. 109-171, 120 Stat. 4 (2006) ("DRA") (amending Section 309(j)(14) and Section 337(e) of the Communications Act, as amended). Title III of the DRA is the DTV Act.

[216] *See* Lower 700 MHz Band Auction Closes, *Public Notice*, DA 02-2323 (rel. Sept. 20, 2002). *See also* Lower 700 MHz Band Auction Closes, *Public Notice*, DA 03-1978 (rel. June 18, 2003); Auction of Lower 700 MHz Band Licenses Closes, *Public Notice*, DA 05-2239 (rel. Aug. 5, 2005).

[217] Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission s Rules Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Notice of Proposed Rule Making*, FCC 06-133, WT Docket Nos. 06-169, 96-86 (rel. Sept. 8, 2006).

1.4 GHz Band. 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 Part 27 rules provide an 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 or use of this spectrum and, therefore, can offer a mix of services and technologies to their customers.

Disadvantages

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

Recent Efforts

On 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.[218] To better reflect the revised service rules, the Commission renamed MDS the Broadband Radio Service (BRS) and ITFS the Educational Broadband Service (EBS). The Commission created a new band plan for 2495-2690 MHz that eliminates the use of interleaved channels by BRS and EBS licensees and creates distinct band segments for high power operations, such as one-way video transmission, and low power operations, such as two-way fixed and mobile broadband applications. The Commission also established a mechanism for transition from the existing band configuration to the new band plan. BRS and EBS providers will have a three-year period during which they may propose transition plans for relocating existing facilities of all other licensees within the same Major Economic Area (MEA) to new spectrum assignments in the revised band plan. 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. On April 27, 2006, the Commission released a *Third Memorandum Opinion and Order and Second Report and Order* in this proceeding.[219] Among other things, the Commission

[218] *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).

[219] 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, *Third Memorandum Opinion and Order and Second Report and Order,* WT Docket No. 03-66, 21 FCC Rcd. 5606 (2006) (*BRS/EBS 3rd MO&O)*.

changed the transition size area from MEA to Basic Trading Area, and decided to permit licensees to self-transition if a proponent has not come forward by 30 months after the effective date of the amended rules.

In 2004 through 2006, the Commission took several steps to build on its establishment of a flexible-use licensing framework under Part 27 for the first 90 megahertz of Advanced Wireless Service spectrum ("AWS-1"), consisting of 1710-1755 and 2110-2155 MHz.[220] In 2004, the Commission allocated spectrum in the 1915-1920 MHz, 1995-2000 MHz, 2020-2025 MHz and 2175-2180 MHz bands for fixed and mobile use and designated it for AWS ("AWS-2"), and proposed service rules for this 20 megahertz of additional AWS spectrum under the Part 27 flexible use regime.[221] In 2005, the Commission allocated an additional 20 MHz of spectrum at 2155-2175 MHz ("AWS-3") suitable for AWS uses, and modified its rules for the AWS-1 band to provide additional opportunities for smaller and rural wireless carriers to access this spectrum.[222] In 2006, the Commission established procedures by which new AWS licensees may relocate incumbent BRS and Fixed Microwave Service (FS) operations in spectrum that has been allocated for AWS, and established cost sharing obligations for AWS and Mobile Satellite Service (MSS) entrants that benefit from the relocation of FS and BRS operations in these bands.[223] In addition, on September 18, 2006, the Commission completed the auction of AWS-1 licenses in the 1710-1755 MHz and 2110-2155 MHz bands (Auction No. 66), in which 104 winning bidders won a total of 1,087 licenses.[224] The Commission has granted over two-thirds of the applications submitted by winners in

[220] *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); *modified by Order on Reconsideration*, 20 FCC Rcd 14058 (2005) (codified at 47 C.F.R. Part 27, Subpart L).

[221] *See* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, ET Docket No. 00-258, *Sixth Report and Order, Third Memorandum Opinion and Order, and Fifth Memorandum Opinion and Order*, 19 FCC Rcd 20720 (2004);.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).

[222] *See* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, *Eighth Report and Order, Fifth Notice of Proposed Rulemaking and Order*, 20 FCC Rcd 15866 (2005) ("*AWS Eighth Report and Order*" and "*AWS Fifth Notice*"); Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Order on Reconsideration*, 20 FCC Rcd 14058 (2005).

[223] *See* Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Service to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, ET Docket No. 00-258, Service Rules for Advances Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Ninth Report and Order and Order*, 21 FCC Rcd 4473 (2006) (*recon. pending*) (*AWS Relocation and Cost Sharing Report and Order*).

[224] *See* Auction of Advanced Wireless Services Closes, *Public Notice*, DA 06-1882 (rel. Sept. 20, 2006). *See also* FCC web site,http://wireless.fcc.gov/auctions/default.htm?job=auction_summary&id=66, for additional information.

Auction No. 66, issuing 942 licenses,[225] and is currently reviewing the remaining applications.

On August 12, 2004, the Wireless Telecommunications Bureau issued a *Memorandum Opinion and Order*[226] granting Access Spectrum LLC, a 700 MHz "A Block" Guard Band licensee, a waiver of section 27.60 of the Commission's rules[227] 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 February 18, 2005, the Wireless Telecommunications Bureau granted Aloha Partners, L.P. (Aloha), a C Block licensee in the Lower 700 MHz Band, a waiver of section 27.60 of the Commission's rules to permit operation within the "Grade B" contour of an incumbent broadcaster in Tucson, Arizona.[228] After the Bureau's grant of waiver to Aloha, the Association for Maximum Service Television and Tucson Communications (affected licensee), which originally opposed Aloha's petition for waiver, filed an Application for Review of the Bureau's decision. Separately, Paxson Communications also filed an Application for Review.

A Lower 700 MHz auction (Auction No. 60) concluded on July 26, 2005, after three bidders placed winning bids on five licenses.[229]

On August 10, 2006, the Commission released a *Notice of Proposed Rulemaking* in Docket 06-150, seeking comment on possible changes to the Part 27 service rules governing wireless licenses in the 698-746, 747-762, and 777-792 MHz bands (i.e., the non-public safety and non-guard band portions of the Upper and Lower 700 MHz bands) in preparation for the auction of the remaining unauctioned bands. The Commission sought comment on a wide range of service and licensing issues, including the size of geographic service areas, the size of spectrum blocks, performance requirements, renewal requirements, license terms, and power limits. Comments were filed on September 29, 2006 and reply comments were filed on October 20, 2006. In the same notice, the commission requested comments on whether existing rules relating to enhanced 911 services and hearing aid compatibility were still necessary for licenses in these newly available bands.

On October 12, 2006, the Commission granted in part and denied in part a Petition for Declaratory Ruling filed by Qualcomm Incorporated seeking clarification of certain rules

[225] *See* Wireless Telecommunications Bureau Grants Advanced Wireless Service Licenses, *Public Notices*, DA 06-2408 (WTB rel. Nov. 29, 2006) and DA 06-2179 (WTB rel. Dec. 18, 2006).

[226] 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).

[227] 47 C.F.R. § 27.60.

[228] Aloha Partners, L.P. Request for Waiver of Section 27.60, *Memorandum Opinion and Order*, 20 FCC Rcd 3744 (2005) (Application for Review pending).

[229] "Auction of Lower 700 MHz Band Licenses Closes; Winning Bidders Announced for Auction No. 60," *Public Notice*, DA 05-2239 (rel. August 5, 2005).

and the establishment of a streamlined review process in order to accelerate the deployment of new services in the 700 MHz Band before the end of the digital television (DTV) transition.[230]

On September 6, 2006, the Commission adopted a *Notice of Proposed Rule Making* that seeks comment on several service rule changes that may provide greater flexibility to 700 MHz Guard Bands licensees, while maintaining adequate interference protection for public safety licensees.[231]

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 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.[232]

Comments

Ericsson notes that the Commission is considering CTIA's proposed industry-consensus changes to the Part 24 power limits rules and that CTIA has proposed therein that the Commission should mirror these proposed changes in Part 27 rules to ensure technological neutrality and fair treatment of competing wireless carriers in the marketplace.[233] Ericsson states that it supports mirroring these proposed changes to Part 24 in the Part 27 rules for AWS.[234]

Recommendation

Staff notes that issues concerning Part 27 are within the scope of the pending proceedings described above. In particular, the staff notes that Ericsson's suggestion to mirror any changes to Part 24 in the Part 27 AWS rules to ensure fair treatment of competing wireless carriers is pending before the Commission in WT Docket No. 03-264.[235]

As a general matter, the need and purposes for the Part 27 rules concerned with licensing procedures and technical and operational standards, which protect against interference among Part 27 licensees as well licensees in adjacent services, are not directly affected by

[230] Qualcomm Incorporated Petition for Declaratory Ruling, WT Docket 05-7, *Order*, FCC 06-155 (rel. Oct. 12, 2006).

[231] Former Nextel Communications, Inc. Upper 700 MHz Guard Band Licenses and Revisions to Part 27 of the Commission s Rules Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Communications Requirements Through the Year 2010, *Notice of Proposed Rule Making*, FCC 06-133, WT Docket Nos. 06-169, 96-86 (rel. Sept. 8, 2006).

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

[233] Ericsson Comments at 1-2.

[234] Id. at 2, n.5.

[235] *See* Biennial Regulatory Review – Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, Report and Order and Further Notice of Proposed Rule Making, WT Docket No. 03-264, 20 FCC Rcd 16,293, 16318 ¶ 54 (seeking comment on CTIA's request that the proposed changes to Part 24 be mirrored in the Part 27 rules governing AWS).

competitive developments in the services that guide our Section 11 analysis. Accordingly, we do not find that these Part 27 rules are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service."

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.[236] 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.

Review of Part 80 in this report focuses on the rules affecting public coast stations (subparts J and Y in particular[237]). 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 KHz band), middle frequency (405-525 KHz 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 between the public coast services. VPC and AMTS stations, which generally serve ports, coastal areas, and inland waterways, have lost significant market

[236] 47 C.F.R. Part 80.

[237] 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.

share to other CMRS services (*e.g.*, cellular and PCS) that have coverage in those areas and offer service at much lower cost. In addition, high seas public coast stations have lost business to 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

On July 8, 2004, the Commission adopted a *Notice of Proposed Rule Making,* proposing to afford VPC and AMTS licensees additional flexibility in providing service to units on land.[238]

On July 20, 2006, the Commission adopted the *Marine AIS Report and Order and Further Notice of Proposed Rule Making*, adopting rules to designate VHF maritime channels 87B (161.975 MHz) and 88B (162.025 MHz) for maritime Automatic Identification Systems (AIS).[239] This takes an important step toward ensuring the

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

[239] Amendment of the Commission Rules Regarding Maritime Automatic Identification Systems, Report *and Order and Further Notice of Proposed Rule Making and Fourth Memorandum Opinion and Order,* WT Docket No. 04-344, 21 FCC Rcd 8892 (2006).

policies of the United States are consistent with establishment of a seamless global AIS framework, and will facilitate the broad, efficient and effective implementation of AIS in U.S. territorial waters. It is a critical component of our Nation's homeland security, as well as an important tool for enhancing maritime safety.

On August 29, 2006, the Commission adopted a *Third Report and Order and Third Further Notice of Proposed Rule Making*, which 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.[240]

The initial AMTS auction (Auction No. 57) concluded on September 15, 2004, after four bidders placed winning bids on ten licenses.[241] On August 17, 2005, the Commission completed a second auction of AMTS licenses (Auction No. 61). In this auction, four winning bidders won a total of ten licenses.[242]

Comments

No comments were filed with respect to this rule part.

Recommendation

Pursuant to our Section 11 biennial review, staff does not find that these rule subpart are "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service." The staff 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 future.

[240] Amendment of Parts 13 and 80 of the Commission's Rules Concerning Maritime Communications, *Memorandum Opiniont and Order, Third Report and Order and Third Further Notice of Proposed Rulemaking*, FCC 06-129, WT Docket No. 00-48 (rel. Sept 8, 2006).

[241] *See* Automated Maritime Telecommunications System Spectrum Auction Closes; Winning Bidders Announced, *Public Notice*, 19 FCC Rcd 18252 (2004).

[242] *See* Automated Maritime Telecommunications System Spectrum Auction Closes; Winning Bidders Announced, *Public Notice*, 20 FCC Rcd 13747 (2005).

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).[243] 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),[244] Congress reclassified some PLMRS (*e.g.*, 800 MHz and 900 MHz SMR, PCP, and some 220 MHz and Business Radio services) as CMRS (depending on the nature of the service being provided) and required CMRS providers to be regulated as common carriers.[245] 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.[246] 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,[247] although the Commission eliminated many of the service-specific licensing rules in Part 90 as part of its consolidation of all wireless licensing rules into Part 1 in the *Universal Licensing* proceeding.[248]

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[243] 47 C.F.R. Part 90.

[244] 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).

[245] 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*).

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

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

[248] 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 *Eleventh CMRS Competition Report*, CMRS providers, including those licensed under Part 90, operate in an environment that is marked by increased competition, innovation, lower prices for consumers, and increased diversity of service offerings.[249]

Advantages

The Part 90 rules provide an efficient 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 parties needing to cover geographic areas. In other bands, site-specific licensing and frequency coordination are used to promote efficient spectrum use in specific areas.

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.

[249] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶¶ 149-188.

Recent Efforts

In February 2003, the Commission adopted rules to encourage spectral efficiency in the 150-174 MHz and 421-512 MHz bands and in December 2004, it amended the rules to foster a more timely transition to narrowband technology.[250] For various Part 90 operations, this proceeding established a January 1, 2013 deadline for migration to 12.5 kHz technology, or a technology that achieves the narrowband equivalent of one channel per 12.5 kHz of channel bandwidth (voice) or 4800 bits per second per 6.25 kHz (data) if the bandwidth for transmissions specified in the modification application is greater than 12.5 kHz. Further, applications for new operations using 25 kHz channels will be accepted until January 1, 2011. Additionally, applications for modification of operations that expand the authorized contour of an existing station using 25 kHz channels will be accepted until January 1, 2011. Manufacture and importation of any 150-174 MHz and 421-512 MHz band equipment operating on a channel bandwidth up to 25 kHz will be permitted until January 1, 2011. The rules were revised to permit applications for certification of equipment received on or after January 1, 2005 operating with a 25 kHz bandwidth, to the extent that the equipment meets the spectrum efficiency standard of one channel per 6.25 kHz of channel bandwidth (voice) or 4800 bits per second per 6.25 kHz (data). However, these rules were stayed with respect to certification of equipment in the *Order*, pending resolution of the issues raised in the *Third Further Notice*. Finally, Part 90 paging-only frequencies were exempted from the narrow-banding requirements. 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.[251]

In 2005, the Commission adopted technical and procedural measures to address the problem of interference to public safety communications in the 800 MHz band.[252] On July 22, 2005, the Commission adopted a *Report and Order and Further Notice of Proposed Rule Making* that streamlines and harmonizes the Part 1, 22, 24, 27, and 90 rules to clarify spectrum rights and obligations and optimize flexibility for wireless

[250] *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, *Third Memorandum Opinion and Order, Order, and Third Further Notice of Proposed Rule Making,* WT Docket No. 99-87, RM-9332, 19 FCC Rcd 25045 (2004).

[251] *Id*.

[252] *See* Improving Public Safety Communications in the 800 MHz Band, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order,* FCC 04-168, WT Docket No. 02-55, 19 FCC Rcd 14969 (2004), as amended by *Erratum*, 19 FCC Rcd 19651 (2004), and *Erratum*, 19 FCC Rcd 21818 (2004) (*800 MHz R&O*); Improving Public Safety Communications in the 800 MHz Band, *Supplemental Order and Order on Reconsideration*, 19 FCC Rcd 25120 (2004) (*800 MHz Supplemental Order*); and Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order*, 20 FCC Rcd 16015 (2005), as amended by *Erratum*, DA 05-3061 rel. Nov. 25, 2005 (*800 MHz MO&O*).

service licensees.[253] For example, the Commission relaxed the rules to classify the deletion of frequencies and transmitter sites from a multi-site authorization under Part 90 as a minor modification. It also eliminated the transmitter output power limits under Part 24 and removed or modified several additional licensing provisions. In the *Further Notice*, the Commission sought comment on potential changes to the broadband PCS radiated power limits.

In February 2005, the Commission proposed auction of Business and Industrial Land Transportation service (B/ILT) area licenses as overlays to the incumbent site-based licenses in the 900 MHz band.[254]

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.

[253] Biennial Regulatory Review -- Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 03-264, 20 FCC Rcd 13900 (2005).

[254] *See* Amendment of Part 90 of the Commission's Rules to Provide for Flexible Use of the 896-901 MHz and 935-940 MHz Bands Allotted to the Business and Industrial Land Transportation Pool, *Notice of Proposed Rulemaking and Memorandum Opinion and Order*, WT Docket No. 05-62, 20 FCC Rcd 3814 (2005).

PART 90, SUBPART C – INDUSTRIAL/BUSINESS RADIO POOL

Description

Part 90, subpart C[255] 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

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

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff therefore recommends that neither modification nor repeal of these rules is warranted. However, it

[255] 47 C.F.R. Part 90, subpart R.

will continue to be receptive to further careful examination of these rules for potential repeal or modification in the future.

PART 90, SUBPART G – APPLICATIONS AND AUTHORIZATIONS

Description

Part 90, subpart G[256] 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.

[256] 47 C.F.R. Part 90, subpart G.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff 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 future.

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.[257]

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.

Recent Efforts

On July 22, 2005, the Commission adopted a *Report and Order and Further Notice of Proposed Rule Making* that streamlines and harmonizes the Part 1, 22, 24, 27, and 90

[257] 47 C.F.R. Part 90, subpart H.

rules to clarify spectrum rights and obligations and optimize flexibility for wireless service licensees.[258] For example, the Commission relaxed the rules to classify the deletion of frequencies and transmitter sites from a multi-site authorization under Part 90 as a minor modification.

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff 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 future.

[258] Biennial Regulatory Review -- Amendment of Parts 1, 22, 24, 27, and 90 to Streamline and Harmonize Various Rules Affecting Wireless Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 03-264, 20 FCC Rcd 13900 (2005).

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.[259] 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 authorized under Part 90.

Analysis

Status of Competition

See Part 90 – Private Land Mobile Radio Services "Status of Competition" 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 Report and Order*,[260] the Commission adopted its proposal 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.

[259] 47 C.F.R. Part 90, subpart G.

[260] *Streamlining and Harmonization Report and Order*, 20 FCC Rcd 13900 at ¶ 27.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff 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 future.

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.[261] This band is shared with television channels 14-20 and certain Part 22 radio services.[262] 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.[263] 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.[264]

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.[265] 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.[266]

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[261] 47 C.F.R. Part 90, subpart L.

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

[263] *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.

[264] 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.

[265] 47 C.F.R. § 90.311.

[266] *Id*.

The rules in this subpart also specify the minimum allowable distance between co-channel stations.[267] 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.[268] After loading a channel to full capacity, a licensee may apply for another channel.[269] 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.

[267] 47 C.F.R. § 90.307.

[268] 47 C.F.R. § 90.313(a).

[269] 47 C.F.R. § 90.313(c).

Recent Efforts

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

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, we do not find that, other than consideration of further narrowbanding already pending in WT Docket No. 99-87, this rule subpart is "no longer necessary in the public interest as the result of meaningful economic competition between providers of such [telecommunications] service." We recommend that the Commission determine in WT Docket No. 99-87 whether the rules at issue in that proceeding are necessary in the public interest and to repeal or modify any rule so that it is in the public interest. Other than that, the staff 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 future.

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

Description

Part 90, subpart M of the Commission's rules contains licensing, technical, and operational rules for the Intelligent Transportation Systems (ITS) radio service. ITS radio service consists of two sub-categories: (1) Location and Monitoring Service (LMS) and (2) Dedicated Short Range Communications Service (DSRCS).[270] There are two types of LMS systems: multilateration systems (M-LMS) and non-multilateration systems. Multilateration systems track and locate objects over a wide geographic area (*e.g.*, tracking a bus fleet) by measuring the difference in time of arrival, or difference in phase, of signals transmitted from a unit to a number of fixed points, or from a number of fixed points to the unit that is to be located. The Commission uses exclusive licensing to issue M-LMS licenses on a geographic area basis.[271] Non-multilateration systems transmit data to and from objects passing through particular locations (*e.g.*, automated tolls, monitoring of railway cars). Non-multilateration LMS is licensed on a non-exclusive basis using site-by-site licensing.[272]

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

As indicated below, the M-LMS service is currently subject to a rule making proceeding to explore whether the service can be put to greater use. The majority of the licensees in the band have requested and been granted extensions of time to meet performance requirement due to equipment challenges in the band. Regarding DSRCS operations, the Commission began accepting applications to provide DSRCS service on October 1, 2004. Upon authorization by the Commission, service may commence immediately.

[270] *See* 47 C.F.R. Part 90, subpart M ; 47 C.F.R. §§ 90.149-157.

[271] 47 C.F.R. § 90.353(d).

[272] Municipalities or other governmental operatives may file for a non-multilateration license covering an Economic Area. 47 C.F.R. § 90.353(i).

Advantages

A re-examination of the Part 90 rules for M-LMS is now in process through WT Docket No. 06-49.

Disadvantages

A re-examination of the Part 90 rules for M-LMS is now in process through WT Docket No. 06-49.

Recent Efforts

On March 1, 2006, the Commission adopted a *Notice of Proposed Rulemaking* as part of its reexamination of the regulations governing the licensing and use of the 14 megahertz of M-LMS spectrum (*i.e.*, 904-909.75 MHz and 919.75-928 MHz) in the 902-928 MHz Band that is shared with users of Part 15 unlicensed devices. The purpose of its reexamination of M-LMS is to determine whether new approaches could produce more efficient and effective use of the 904-909.75 MHz and 919.75-928 MHz spectrum band by M-LMS licensees while ensuring that any changes would continue to protect federal and other licensed users, and also avoid any significant increase in interference to unlicensed users in this band. The record in the M-LMS proceeding (WT Docket No. 06-49) has closed. Comments were filed on May 30, 2006, and reply comments were filed on June 30, 2006.

In July 2006, the Commission adopted a *Memorandum Opinion and Order* to address reconsideration petitions to the *Report and Order*.[273] In this action, the Commission designated Channel 172 (frequencies 5.855-5.865 GHz) exclusively for vehicle-to-vehicle safety communications for accident avoidance and mitigation, and safety of life and property applications; and designated Channel 184 (frequencies 5.915-5.925 GHz) exclusively for high-power, longer-distance communications to be used for public safety applications involving safety of life and property, including road intersection collision mitigation. Further, the rules were amended to require licensees to file a notice of construction with the Commission for each site registered and to clarify that site priority attaches to prior registered sites that have been fully constructed within the requisite twelve-month construction period. Additionally, the power reduction rule was amended to apply only to DSRC Roadside Unit antenna heights between eight and fifteen meters, thereby providing increased flexibility and reduced implementation costs.

Comments

No comments were filed with respect to this subpart.

[273] 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, *Memorandum Opinion and Order,* 21 FCC Rcd. 8961 (2006) (*DSRCS MO&O*).

Recommendation

A re-examination of the rules for the M-LMS service is now in progress through WT Docket No. 06-49. We recommend that the Commission determine in that proceeding whether the rules are necessary in the public interest and, if they are not, to repeal or modify any rule so that it is in the public interest. The staff does not recommend any change regarding the rules for DSCRS operations because these rules were only recently promulgated and they remain necessary in the public interest.

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

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

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff therefore recommends that neither modification nor repeal of these rules is warranted. However, it

[274] 47 C.F.R. Part 90, subpart R.

will continue to be receptive to further careful examination of these rules for potential repeal or modification in the future.

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.[275] 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.[276] 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.[277] The Commission auctioned geographic licenses for the exclusive channels in the 929 MHz band.[278] Furthermore, the Part 22 Rules regarding paging now apply to all 929 MHz licensees on exclusive channels and, in 1999, the application filing rules were moved from this subpart to Part 1 in connection with implementation of electronic filing procedures and the Universal Licensing System.

Purpose

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

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

[276] *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*).

[277] *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*).

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

Analysis

Status of Competition

PCP stations governed by subpart C compete directly with Part 22 commercial paging services and with Part 24 narrowband PCS, and they compete indirectly with other CMRS. The *Eleventh CMRS Competition Report* notes that paging carriers continue to experience a decline in overall subscribers with a total of 8.3 million paging units in service as of the end of 2005, down from 11.2 million units at the end of 2003 (*e.g., the 2004 Biennial Review Staff Report*).[279]

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

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 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. 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."

[279] See *Eleventh CMRS Competition Report*, FCC 06-142 at ¶ 166.

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.[280] With the passage of the Omnibus Budget Reconciliation Act (OBRA), Congress reclassified certain 800 MHz and 900 MHz SMR services as CMRS, and required all CMRS providers to be regulated as common carriers.[281]

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

Subparts U and V[282] 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.

[280] 47 C.F.R. Part 90, subpart S.

[281] 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).

[282] 47 C.F.R. Part 90, subparts U and V.

Analysis

Status of Competition

As detailed in the *Eleventh CMRS Competition Report*, CMRS providers, including Part 90 SMR providers, operate in an environment that is marked by increased competition, innovation, lower prices for consumers, and increased diversity of service offerings.[283] 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

The Commission adopted technical and procedural measures to address the problem of interference to public safety communications in the 800 MHz band.[284]

On July 22, 2005, the Commission adopted rules in the *Streamlining and Harmonization Report and Order*[285] that: eliminated the Section 90.607(a) requirement to file certain

[283] *See Eleventh CMRS Competition Report*, FCC 06-142 at ¶¶ 149-188.

[284] *See* Improving Public Safety Communications in the 800 MHz Band, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order,* 19 FCC Rcd 14969, 15021-45, 15069 ¶¶ 88-141, 189 (2004) as amended by Erratum, 19 FCC Rcd 19651 (2004), and Erratum, 19 FCC Rcd 21818 (2004) (*800 MHz R&O*); Improving Public Safety Communications in the 800 MHz Band, *Supplemental Order and Order on Reconsideration*, 19 FCC Rcd 25120 (2004) (*800 MHz Supplemental Order*); and Improving Public Safety Communications in the 800 MHz Band, *Memorandum Opinion and Order*, 20 FCC Rcd 16015 (2005) as amended by Erratum, DA 05-3061 rel. Nov. 25, 2005 (*800 MHz MO&O*).

[285] *See generally Streamlining and Harmonization Report and Order*, 20 FCC Rcd at 13900.

outdated supplemental information; eliminated the loading requirement and references to the "waiting list" in Section 90.631(d) of the rules; eliminated Section 90.631(i); modified 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 eliminated the power limitations on systems with operational radius of less than 32 kilometers.

The 900 MHz SMR auction (Auction No. 55) concluded on February 25, 2004, after five applicants placed winning bids on 55 900 MHz licenses.[286]

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 and 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. 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."

[286] "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.[287] 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 to prevent interference.

Part 90, subpart W contains competitive bidding rules and procedures for commercial licenses in the 220 MHz service.[288] 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.[289] 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.[290] 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.[291] The Commission concluded that mandating technical standards was unnecessary because

[287] 47 C.F.R. Part 90, subpart T.

[288] 47 C.F.R. Part 90, subpart W.

[289] *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*).

[290] *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).

[291] *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.[292]

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. 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. Many 220 MHz licensees have begun to deploy their networks for a variety of applications including telemetry and power utility applications.

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.

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 22, 2005, the Commission adopted its *Streamlining and Harmonization Report and Order* that eliminated section 90.737, which required the filing of supplemental progress reports for 220 MHz Phase I licensees.[293]

[292] *Id.*

[293] *See Streamlining and Harmonization Report and Order*, 20 FCC Rcd 13900 at ¶ 46.

Comments

No comments were filed with respect to this subpart.

Recommendation

The Part 90, subpart T rules 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. 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 Z – WIRELESS BROADBAND SERVICES IN THE 3650-3700 MHZ BAND

Description

Part 90, subpart Z sets out the regulations governing wireless operations in the 3650-3700 MHz band. It includes licensing requirements, and specific operational and technical standards for wireless operations in the band. The rules in this subpart are to be read in conjunction with the applicable requirements contained elsewhere in the Commission's rules; however, in case of conflict, the provisions of this subpart shall govern with respect to licensing and operation in this band.

Purpose

The purpose of the subpart Z rules is to provide a streamlined licensing mechanism for the 3650-3700 MHz band that will encourage multiple new entrants and stimulate the rapid expansion of wireless broadband services -- especially in rural America. The Commission's rules for this band also provided an opportunity for the introduction of a variety of new wireless broadband technologies into the band.

Analysis

Status of Competition

While the Commission has adopted licensing and operating rules for terrestrial operations in this band, the Part 90, subpart Z licensing issuance process has not started. Under the licensing provisions that the Commission adopted, there is no limit on the number of licenses that can be granted, and each licensee is authorized to operate on a shared basis with other licensees on all 50 megahertz of the band, subject to certain restrictions to protect grandfathered operations in the band. All stations operating in this band must employ a contention based protocol (as defined in § 90.7). Licensees are required to register all fixed and base stations electronically with the Commission.

Advantages

The subpart Z rules provide a clear structure for acquiring a license to provide terrestrial services in the 3650-3700 MHz band and the subpart contains only minimal regulatory requirements. There are no eligibility restrictions (other than the statutory foreign ownership restrictions) and no in-band or out-of-band spectrum aggregation limits. In addition, there is no limit on the number of licenses that can be granted. Petitions for reconsideration of the rules adopted in WT Docket No. 05-96 are pending.

Disadvantages

The subpart Z rules impose limited administrative and technical burdens that are inherent to the licensing process and necessary for compliance with technical and operational rules to facilitate non-exclusive use of the 3650-3700 MHz band. Petitions for reconsideration of the rules adopted in WT Docket No. 05-96 are pending.

Recent Efforts

In March 2005, the Commission adopted a *Report and Order* that set forth licensing and service provisions for terrestrial operations in the 3650-3700 MHz band. Specifically, the Commission adopted rules for non-exclusive, nationwide licensing of terrestrial operations utilizing contention-based technologies in the band.[294]

Comments

No comments were filed with respect to this subpart.

Recommendation

Petitions for reconsideration of the rules adopted in the *Report and Order* are pending before the Commission. We recommend that the Commission determine as part of its reconsideration proceeding whether the rules are necessary in the public interest and, if they are not, to repeal or modify any rule so that it is in the public interest. To the extent that the rules are not the subject of reconsideration petitions, the Bureau finds that these rules remain necessary in the public interest.

[294] *See* Wireless Operations in the 3650-3700 MHz Band, ET Docket No. 04-151, WT Docket No. 05-96, *Report and Order and Memorandum Opinion and Order*, 20 FCC Rcd 6502 (2005).

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 is subject to the Commission's competitive bidding procedures. Part 95[295] 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.[296] 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.[297]

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.

[295] 47 C.F.R. Part 95.

[296] 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).

[297] 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. 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 many private and common carrier 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.[298] Most Part 101 application processing rules, technical standards, and operational requirements apply to all Part 101 services, but others apply only to specific services,[299] or to common carrier services, but not to private services (or vice versa).[300]

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.[301]

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

[298] 47 C.F.R. Part 101.

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

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

[301] 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.[302]

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 4 GHz and 6 GHz bands due to the propagation characteristics of these bands. These bands are licensed on a case by case basis. The 24 GHz, 28 GHz (LMDS), and 39 GHz bands were primarily licensed by auction. 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.[303]

Advantages

The Part 101 rules provide for a unified regulatory approach for the microwave services, and eliminate many of 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 harmful interference, and aid 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

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

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

more likely to get spectrum to entities that value it the most. Through these rules, the Commission has recovered a portion of the value of the public spectrum.

Disadvantages

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

Recent Efforts

In 2006, the Commission provided for additional sizes of channels in the 17.7-19.7 GHz band in order to increase spectrum use and to accommodate licensees who need to relocate facilities from the 18.3-19.3 GHz band.[304]

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.[305] 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.[306] 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*.[307] 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.[308] Additional recent efforts are discussed under the relevant subpart, *infra*.

[304] *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, *Report and Order*, FCC 06-141 (rel. Sept. 29, 2006). *See also*, WT Docket No. 04-143, *Notice of Proposed Rulemaking*, 19 FCC Rcd 11658 (2004).

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

[306] *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).

[307] *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).

[308] *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 24 GHz auction (Auction No. 56) concluded on July 28, 2004, after three applicants placed winning bids on seven 24 GHz licenses.[309]

The Commission concluded the second MVDDS auction (Auction No. 63) on December 7, 2005 after 3 bidders won 22 licenses.[310]

Comments

No comments were received with respect to this rule part.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff 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 future.

As a general matter, the need and purposes for the Part 101 rules concerned with licensing procedures and technical and operational standards, which protect against interference among Part 101 licensees as well as licensees in adjacent services, are not directly affected by competitive developments in the services 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."

[309] "24 GHz Service Spectrum Auction Closes; Winning Bidders Announced," *Public Notice*, DA 04-2429 (rel. Aug. 2, 2004).

[310] "Auction of Multichannel Video Distribution and Data Service Licenses Closes, Winning Bidders Announced for Auction No. 63," *Public Notice*, DA 05-3164 (rel. Dec. 14, 2005).

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 including competitive bidding procedures. The 24 GHz Service is 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 harmful interference.

Analysis

Status of Competition

Entities hold incumbent site-based licenses that were relocated from the 18 GHz band. In addition, the Commission in 2004 offered 800 geographic licenses at auction, and three bidders won seven licenses.

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 an auction and issued 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.[311] On May 28, 2004, the Commission made corrections to subpart G to clarify the service areas of 24 GHz licenses.[312]

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff 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 future.

As a general matter, the need and purposes for the Part 101, subpart G rules concerned with licensing procedures and technical and operational standards, which protect against interference among Part 101 licensees as well as licensees in adjacent services, are not directly affected by competitive developments in the services 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."

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

[312] 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.[313] LMDS licensees may provide a variety of services, including high-speed data and Internet services and multi-channel video programming distribution.[314]

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; (4) specify the frequencies available to LMDS licensees; (5) establish license terms; (6) establish the minimum construction or coverage requirements for LMDS licensees; and (7) 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.

[313] 47 C.F.R. Part 101.

[314] 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.[315] LMDS will most likely compete with wireless and wireline broadband service providers targeting small and medium-sized businesses.[316]

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;[317] 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.[318]

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

Disadvantages

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

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[315] *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*).

[316] *See id.*

[317] *Id.*

[318] *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 are significantly less than the cost of a comparative hearing.[319] 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

None applicable.

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff 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 future.

As a general matter, the need and purposes for 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."

[319] *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).

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

Description

Part 101 contains licensing, technical, and operational rules for the fixed microwave radio services.[320] 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, licensed on other spectrum, 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, thereby fostering economic growth. In contrast to other licensing mechanisms such as lotteries and comparative hearings, auctions are faster, more

[320] 47 C.F.R. Part 101.

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 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.[321] 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 completed an auction (Auction No. 59) of MAS on May 18, 2005 in which 26 bidders won 2,223 licenses. Channels in the 928/959 MHz and 932/941 MHz bands not already assigned in Auction 42 were auctioned based on Economic Areas.

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff 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 future.

As a general matter, the need and purposes for 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

[321] *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).

of meaningful economic competition between providers of such [telecommunications] service."

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.[322] 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.[323] 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 the 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.[324] 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,

[322] 47 C.F.R. Part 101.

[323] 47 C.F.R. §§ 101.1401-101.1440.

[324] 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*).

which the Commission issued later in 2004.[325] As of the third quarter 2006, 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, 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

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.[326] On December 7, 2005, the Commission completed an auction (auction No. 63) in which bidders won the 22 remaining MVDDS licenses.

Comments

No comments were filed with respect to this subpart.

Recommendation

Pursuant to our Section 11 biennial review, staff does 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." The staff therefore

[325] *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).

[326] *See* note 325, *supra.*

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 future.

As a general matter, the need and purposes for the Part 101, subpart P rules concern licensing, technical, and operational rules, such as technical and operational standards and interference-related issues among MVDDS licensees as well as licensees in other services. In addition, the Part 101, subpart P rules contain competitive bidding procedures for the MVDDS 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."

PART 101, SUBPART Q – SERVICE AND TECHNICAL RULES FOR THE 70/80/0 GHZ BANDS

Description

Part 101 contains licensing, technical, and operational rules for the fixed microwave radio services.[327] 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

The licensing scheme for the 70/80/90 GHz service allows an unlimited number of non-exclusive licenses with a requirement to register individual links which are protected on a first-in-time basis. Since June 21, 2004 when the Commission began issuing licenses in the service, there have been twelve non-exclusive nationwide licenses issued. Those licensees have registered approximately 70 point-to-point links.

[327] 47 C.F.R. Part 101.

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 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 bands[328] on a shared basis with Federal Government operations.[329]

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.[330]

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.[331]

On February 24, 2005 the Commission adopted a *Memorandum Opinion and Order,*[332] which addressed a petition for reconsideration filed by the Wireless Communications

[328] *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*) .

[329] *Id*. at 23319 n.3.

[330] *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).

[331] *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).

Association, Inc (WCA) requesting changes to some of the technical rules adopted in the original *Report and Order*.

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, 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."

(...continued from previous page)

[332] *See* Allocations and Service Rules for the 71-76 GHz, 81-86 GHz and 92-95 GHz Bands, WT Docket No. 02-146, *Memorandum Opinion and Order*, 20 FCC Rcd 4889 (2005).